

# Nevada Department of Transportation Traffic Operations (TO)



### **Document B**

Nevada Shared Radio System (NSRS)

Radio System Service Level Agreement (SLA)

For the Integrated Land Mobile Radio System

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Nevada Department of Transportation 1263 South Stewart Street Carson City, NV 89712-0001





### **Table of Contents**

1.	Overview	. 4
2.	General Requirements	. 4
	Access Authorization	
4.	Maintenance Service Level	. 5
5.	System Maintenance	. 5
6.	Reporting Requirements	
	Service Requests	
	Outages	

### **List of Tables**

 Table 1: List of Commonly Used Abbreviations, Acronyms, and Definitions
 3





Table 1: List of Commonly Used Abbreviations, Acronyms, and Definitions

Item	Description
Board	Governance Board
NDOT	Nevada Department of Transportation
NVE	NV Energy
WC	Washoe County
LMR	Land Mobile Radio
NSRS	Nevada Shared Radio System
SA	System Administrator is appointed by the governing board
SIO	System Infrastructure Owner is a party to the NSRS Contract and a member of the NSRS that has significant infrastructure
SLA	Service Level Agreement
SSA	Sub-System Administrator acts on behalf of each SIO to approve and implement changes within its system
TAC	Technical Advisory Committee
UG	User Group





### SERVICE LEVEL AGEEMENT (SLA)

#### 1. **OVERVIEW**

The purpose of this document is to establish a minimum level of quality, response times, service, and access required to maintain the statewide Land Mobile Radio (LMR) system. The System Infrastructure Owners (SIOs) for the Nevada Shared Radio System (NSRS) are Washoe County (WC), NV Energy (NVE), and Nevada Department of Transportation (NDOT) (individually, each a SIO). The NSRS is a statewide Public Safety radio system utilized by agencies throughout the State of Nevada. The NSRS Governance Board (GB) establishes and maintains system policies and procedures to ensure successful operation of the NSRS.

Each SIO will perform radio system maintenance and repairs of NSRS components that consist of electronic equipment, civil infrastructure, communications backhaul, licensing, permits, and all ancillary devices and equipment (hereinafter referred to as the "SYSTEM") to provide a robust, sustainable, and fully functional radio system.

Each SIO is required to provide oversight and accountability for their respective part of the NSRS. Service levels for the SYSTEM include annual inspections and preventative maintenance of system core and mountaintop radio sites, on-call maintenance, emergency maintenance, scheduled repair of equipment, repair of sites due to weather damage, equipment failure, and or other circumstances and any other maintenance deemed necessary by the SIO.

This Service Level Agreement ("SLA" or "Agreement") ensures the proper elements and commitments are in place to provide timely and consistent NSRS service support for a reliable communications system for first responders and public safety personnel.

### 2. **GENERAL REQUIREMENTS**

- 2.1. The SIOs will perform radio SYSTEM maintenance and repairs of NSRS components that consist of electronic equipment, civil infrastructure, communications backhaul, licensing, permits, and all ancillary devices and equipment to provide a robust, sustainable, and fully functional radio system.
- 2.2. Each SIO shall be staffed to maintain the SYSTEM in a manner that supports a robust Public Safety radio system.
- 2.3. Each SIO shall provide 24/7 response to emergency outages to the SYSTEM.
  - 2.3.1. An emergency outage is defined as an unscheduled outage that significantly reduces SYSTEM performance within a geographical area.
- 2.4. All scheduled maintenance and upgrades that require an outage at a site or system level shall be coordinated with the SA and meet the requirements of **Section 8** herein.
- 2.5. Each SIO will maintain, repair or install a LMR system that complies with all current Federal and State of Nevada Regulations and Safety Standards.





- 2.6. The SYSTEM components used shall be compatible with the NSRS equipment and conform to the manufacturer's specifications.
- 2.7. Each SIO shall assist third-party providers in the restoration of SYSTEM services.
- 2.8. All SYSTEM software and firmware updates shall be approved by the TAC before inclusion.
- 2.9. Each SIO shall employ staff or consultants able to determine a technical approach and possess the proper Qualifications, Professional Certifications, Equipment, and Experience necessary to maintain the SYSTEM.

#### 3. ACCESS AUTHORIZATION

- 3.1. Each SIO shall provide and implement a reasonable policy that will allow escorted and unescorted access to its NSRS facilities and locations by the other SIOs.
  - 3.1.1. Such policy shall be approved by the Board.

#### 4. MAINTENANCE SERVICE LEVEL

- 4.1. Each SIO shall assure the SYSTEM operates in compliance with FCC Title 47, Parts 90 & 101, and as specified by its manufacturer.
- 4.2. Each SIO shall perform SYSTEM maintenance and inspections of all SIO-owned equipment as defined in the National Public Safety Telecommunications Council (NPSTC) final report, entitled "Defining Public Safety Grade Systems and Facilities," (latest release which may be reviewed at <a href="http://npstc.org">http://npstc.org</a>).
  - 4.2.1. The reoccurring maintenance schedule can be extended to eighteen (18) months upon approval of the Board.
- 4.3. All equipment not operating within current FCC rules and regulations or manufacturer specifications, shall be repaired, replaced, or removed from service and replaced with equipment necessary to continue the prior level of area coverage and service.
- 4.4. Any non-operating equipment which reduces a site to partial functionality shall be reported to the SA and meet the requirements of **Section 8**.
- 4.5. Equipment removed from service shall be repaired and returned to service at the earliest opportunity.

#### 5. **SYSTEM MAINTENANCE**

- 5.1. Each SIO will furnish, store, and maintain an adequate supply of spare equipment in support of its portion of the SYSTEM.
- 5.2. In the event of a catastrophic failure, each SIO shall have the ability to share SYSTEM equipment with other SIOs. Shared SYSTEM equipment shall be returned to the original SIO within ninety (90) days.





#### 6. **REPORTING REQUIREMENTS**

- 6.1. Each SIO shall maintain a detailed SYSTEM maintenance report on each and every service action as described in operations and maintenance policies and procedures outlined in the NSRS governance structure section 4.1.2.
- 6.2. Each SIO shall send a Monthly SYSTEM maintenance report to the SA.
  - 6.2.1. This information shall be provided in a quarterly report to the TAC for its review.

### 7. <u>Service Requests</u>

- 7.1. Each SIO shall provide business and after hours telephone and email support for its portion of the SYSTEM.
  - 7.1.1. Coverage parameters specific to the service(s) covered in this Agreement are as follows:
    - 7.1.1.1. Business hours support: 8:00 A.M. to 4:00 P.M. Monday Friday
    - 7.1.1.2. Outside of business hours or on holidays will be forwarded to the on-call support staff.
  - 7.1.2. Email support: Monitored 8:00 A.M. to 4:00 P.M. Monday Friday
    - 7.1.2.1. Emails received outside of office hours or on holidays will be addressed the following working day.
- 7.2. In support of services outlined in this Agreement, each SIO will respond to service-related incidents and/or requests submitted by the end user or other SIOs as described in operations and maintenance policies and procedures outlined in the NSRS governance structure section 4.1.2, within the following time frames:
  - 7.2.1. Zero (0) two (2) hours for issues classified as High priority.
  - 7.2.2. Within 24 (24) hours for issues classified as Medium priority.
  - 7.2.3. Within three (3) working days for issues classified as Low priority.
- 7.3. Assistance from other SIOs and end users will be provided in accordance with the above timescales dependent on the priority of the support request.

#### 8. OUTAGES

- 8.1. Scheduled Outages
  - 8.1.1. Each SSA shall request a service outage from the SA.
  - 8.1.2. The SA shall notify all SSAs and Users of an outage a minimum of forty-





eight (48) hours in advance of the scheduled outage.

- 8.1.3. The SSAs and Users shall respond within the next working day to the SA regarding any conflicts with the scheduled outage.
- 8.1.4. Each SSA shall not proceed with the SYSTEM outage without concurrence from the SA.
- 8.1.5. The SSA responsible for a service outage shall notify the SA immediately when the outage extends beyond the scheduled time provided in the notice required under subsection 8.1.2.

#### 8.2. Emergency Outages

- 8.2.1. The SSA shall acknowledge receipt of notice of an emergency outage within two (2) hours as described in operations and maintenance policies and procedures outlined in the NSRS governance structure section 4.1.2.
- 8.2.2. The SSA shall evaluate, assess, and determine a course of action for the emergency outage within six (6) hours of receipt.
- 8.2.3. The SSA shall immediately notify the SA on the status of any emergency outage and provide the SA with timely updates during such outage.
- 8.3. The SSA shall promptly report service restoration to the SA.
- 8.4. The SA shall promptly notify SSAs and Users when service has been restored.