

**M E T R O P O L I T A N E M E R G E N C Y
S E R V I C E S B O A R D**

RADIO TECHNICAL OPERATIONS COMMITTEE

*****TENTATIVE AGENDA*****

Board Room, Metro Counties Government Center

April 22, 2015

1:00 – 3:00 p.m.

MEMBERS:

Ulrie Seal, Chair
MN Fire Chiefs Association

Ron Jansen, Vice Chair
Dakota County

Jeff Bjorklund
Metropolitan Airports
Commission

Susan Bowler
Carver County

Chris Caulk
Isanti County

Jon Eckel
Chisago County

Cliff Giese
Metro Region EMS

John Gundersen
Hennepin County

Chad LeVasseur
Metropolitan Council

Rod Olson
City of Minneapolis

Chuck Steier
At-large member, U of M
Police

Jake Thompson
Anoka County

Dean Tilley
Washington County

Chris Weldon
Scott County

Scott Williams
Ramsey County

Open
MN Chiefs of Police
Association

1. Call to Order
2. Approval of March 25, 2015 Minutes
3. Agenda Items
 - a. St. Louis Park Console Upgrade to MCC 7500s – Jeff Nelson
 - b. Discussion: Regional Standard for Roaming/Requested Sites for Metro? – Jill Rohret
4. Moves, Additions & Changes to the System
 - a. Existing/Other Systems
 - b. Update on Removal of Voting from Interoperability System
5. Committee Reports
 - a. Metro Mobility System Usage Update—Chad LeVasseur/Dana Rude
 - b. SMG Update
 - c. Reports from SECB Committees—Jill Rohret
 - i. Regional Funding Priorities FY2016-2017
6. Other Business
 - a. Regional Talkgroup Permissions Update – None
7. Adjourn

Ulrie Seal, Chair

**Metropolitan Emergency Services Board
Radio Technical Operations Committee
Meeting Notes
March 25, 2015**

Members Present: Ulie Seal, Chair; Susan Bowler; Jon Eckel; Clif Giese; John Gundersen; Ron Jansen; Chad LeVasseur; Rod Olson; Chuck Steier; Jake Thompson; Dean Tilley; and Chris Weldon.

Guests Present: Jill Rohret, MESB; Martin Moody, MESB; Dana Rude, Metro Mobility; Mark VandenBerghe, Eden Prairie Fire Department; Shelley Petersen, Minnetonka Police Department; Tim Walsh, Carver County Sheriff's Office; Steve Pott, PSC Alliance; Bill Burton, Motorola Solutions; Mike Fink, Motorola Solutions; Victor Wanchena, MN Department of Corrections; Melissa Nelson, East MRCC; Dave Waltz, Regions Hospital EMS; and Jeff Nelson, PSC Alliance.

Call to Order: Ulie Seal called the meeting to order at 1:00 p.m.

Minutes of the February 25, 2015 Meeting:

M/S/C – Ron Jansen moved to approve the February 25, 2015 meeting minutes. Dean Tilley seconded. The motion carried.

City of Eden Prairie Sponsorship of Towing Radio: Mark VandenBerghe said that Eden Prairie has given a radio to Matt's Towing for the last 20 years to communicate when they assist during snow emergencies or other big events. It helps dispatchers to know they have radios. They don't talk much, but can hear what is happening and get there sooner because of it.

Jon Eckel said that interoperability talkgroups should not be in that radios.

Jill Rohret said that those talkgroups are not in the fleetmap and these radios are eligible for an exception to the state standard requiring interoperability talkgroups to be in radios.

M/S/C – John Gundersen moved to recommend approval of the City of Eden Prairie sponsorship for two radios for Matt's Towing. Clif Giese seconded.

Ron Jansen said that this is a slippery slope; more tow companies may want to have ARMER radios.

Rohret noted that the metro standard is written so that subsystem administrators must give approval in order to even qualify for sponsorship. If a subsystem administrator says no, then that tow company cannot be sponsored for a radio.

Rod Olson said that these radios could access non-Hennepin sites.

Rohret asked if individual radios can be restricted for site access. The group said yes, and VandenBerghe said that he would restrict the sites these radios can access.

The motion carried.

City of Minnetonka Sponsorship of Towing Radio: Captain Shelley Petersen stated the Minnetonka sponsorship was the same as Eden Prairie's, though Minnetonka has only provided one radio and only two talkgroups. She noted that in 24 years, Matt's Towing has maybe talked on the radio twice.

M/S/C – John Gundersen moved to recommend approval of the City of Minnetonka sponsorship of one radio for Matt's Towing. Clif Giese seconded. The motion carried.

City of Bloomington Sponsorship of MOA Radios: Ulie Seal said that Bloomington has provided a console to be used in the Mall of America dispatch center for interoperability with Bloomington Police, which has a substation in the mall.

Rohret said that this radio should not have ME TAC 1-4, since they are not public safety.

Ron Jansen agreed and noted they should also not have the L-TACs.

Seal said he would tell them those resources must be removed.

M/S/C – John Gundersen moved to recommend approval of Bloomington’s sponsorship of a Mall of America security radio with the deletion of ME TAC 1-4 and LTAC 1-4 from the fleetmap. Ron Jansen seconded. The motion carried.

COMT Certification for John Sheehan: Rohret said that John Sheehan is a special deputy with Hennepin County Sheriff’s Office, which is sponsoring him for certification. He used the COMMEX at the 2014 Interoperability Conference as his certifying event and has met all requirements.

M/S/C – Jake Thompson moved to approve the COMT Certification for John Sheehan. Clif Giese seconded. The motion carried.

Carver County Console Upgrade to MCC 7500s: Jeff Nelson introduced Tim Walsh, who is the new Communications Manager for Carver County. Carver County is an original ARMER user, having used Gold Elite consoles since 2001-2002. They would like to upgrade to the MCC 7500 console ahead of the 7.15 upgrade. They will do a one-for-one console replacement of seven positions, plus a patching console. They will use 16 ports on two CCGWs. Their current connection to ARMER is via spur link from Shakopee to Chaska. They will retain that link, but they would like to add route diversity and use fiber as a redundant path from the PSAP to the Norwood Young America site. They have secured funding for an AIS server for logging; they intend to upgrade their logging in 2016. They plan to upgrade the consoles in second quarter 2015 and will return 500 IDs. They will relinquish their CEBs in early 2016.

M/S/C – Ron Jansen moved to recommend approval of the Carver County console upgrade to MCC 7500s. Clif Giese seconded. The motion carried.

Regions Hospital Console Upgrade to MCC 7500s: Steve Pott stated Regions Hospital currently as two Gold Elite consoles. They would like to increase their console count to four positions at the hospital, and add two positions at their backup center in Mendota Heights. They are currently a slave off of the Ramsey CEB. They would like to replace that with 11 GHz microwave to the MnDOT John Ireland Building and connect to Zone 1 via fiber. They are currently a Zone 2 user; MnDOT has approved the change. They will use nine ports on three 4-port CCGWs and eight backup consolettes; they will keep their VMED28 control station. The backup center will connect via single T1, have two consoles and consolettes. It will not have any CCGWs.

Rohret asked for confirmation that the request would be to upgrade their current two consoles, add four additional consoles and return 140 IDs.

Pott responded yes.

Eckel asked if they will record any statewide talkgroups and have any consolette sitting on a statewide resource, as that will drag a lot of traffic. He would request that control stations do not sit on statewide talkgroups, particularly at the backup center.

Dave Waltz noted that Ramsey County records the statewide interoperability talkgroups and is willing to get recordings for Regions if needed. Generally Regions records the talkgroups which affect them, but they do not have to record statewide interoperability talkgroups.

M/S/C – Dean Tilley moved to recommend approval of the Regions Hospital console upgrade and addition. Chris Weldon seconded. The motion carried.

Discussion of 2014 SECB Grant: Rohret stated that in November 2014, the SECB established a \$1 million competitive grant funded out of the SECB's fund allocation. Though meant to be a competitive grant, the first allocation of this grant is not competitive for timing reasons. The funds can only be spent on the submitted regional priorities (metro submitted TICP maintenance; training; and 7.19 equipment replacement). If used for equipment, there is a 50% match requirement. The funds must be encumbered by June 30, 2015 and spent by June 30, 2016. Regions must tell ECN by December 31, 2015 if all the funds will be spent in order to give time for re-allocation if necessary. Given last month's discussion and concern that agencies may not be able to make a match requirement for the 2014 SHSP funds, Rohret wondered if people wanted to accept these funds or turn them back so other regions can use them. The metro's allocation is \$142,857, which is the \$1 million split evenly among the seven regions [on March 26, ECN sent out information regarding the allocation. The correct allocation is \$347,315.92, which is based on 50% based on population and 50% evenly among the regions].

Jansen said that he thinks the grant should be accepted. He knows some agencies can spend the funds.

M/S – Ron Jansen moved to accept the 2014 SECB Grant Funds. Jon Eckel seconded.

Dean Tilley asked if the funds could be used to purchase a temporary tower and site equipment which could be used by system owners who need use during site refurbishing, such as what occurs at water towers. Is software covered?

Rohret said that the 2014 funds would not allow it since it was not a regional priority this year. That could be included as a priority for future grants. IP Simulcast software required in the 7.19 upgrade is covered.

Jake Thompson asked if some of the funds could be used to provide a second GTR training class, since only 12 people can attend a class at a time.

The motion carried.

Jansen said that agencies need to inform Rohret by May 1, 2015 detailing if they can spend any of these funds.

Regional Standard for Roaming/Requested Sites for Metro: Rohret stated she included the amended State Standard 2.9.0 which is going before the SECB at tomorrow's meeting. Given the many discussions this committee has had regarding roaming over the last couple of years, she is wondering if the committee would like to pursue a metro standard. Regional standards can be more stringent than state standards. Rohret had spoken with Jackie Mines asking if the metro established a standard on this subject would non-metro ARMER users who use metro sites have to comply; Mines said yes.

Gundersen noted that the state standard says that issues should be worked out between system owners. Site access is a big deal for Greater Minnesota system managers. Olson said he supports a metro version of this standard.

Jansen added that the other side is state standard 2.11.0 that has conflicting language but there is no appetite to fix it. He would support a regional standard.

Susan Bowler said she supports a metro standard but knows Carver will still need to talk to its neighboring counties.

Rohret said she would unearth the old metro version of the standard and send it out to the committee as a discussion starting point for the next meeting.

Moves, Additions & Changes to the System: Tilley said that one of Washington County's sites on a water tower is being refurbished. Washington County will use Hennepin County's portable tower in the interim. The site will be down for 14 weeks starting May 18.

Chad LeVasseur said that Metro Transit's console project is complete. The CEBs have been shut down and removed.

Jansen said the Sperry tower is being dismantled and will be replaced by a stealth tower.

Removal of voting in the Interoperability System: Jansen said no meeting has yet been scheduled. He hopes to have something for the next meeting.

Metro Mobility Update: Dana Rude said that things are moving both fast and slow. They are running into networking issues with the console system. All RFPs have been decided but not released publicly yet. The changes are not as great as they could have been. The last reports had shown usage edging up; some of that is unavoidable, some due to weather. They had to add radios earlier than planned.

Jansen noted that Metro Mobility is no longer in the top five users on the Dakota subsystem.

SMG Update: Jansen said the meeting was cancelled. SMG is going to meet every other month now.

SECB Committee Reports: Rohret said that the OTC approved some radios that can be used on the system; the State of Wisconsin plan to add 100 radios over the next three years; and Metro Bus' Participation Plan as City of St. Cloud users. The Interoperability Committee did not meet, nor did the Steering Committee. The Legislative Committee met; it is still without a Chair. IPAWS did meet. NG911 did meet and discussed a survey going out to all PSAPs with questions on GIS. The Interoperable Data Committee did meet and they discussed the Governance Assessment and the MN Launch Requirements for FirstNet. Tomorrow the SECB will either approve or accept the Governance Assessment.

Thompson said that last week the Interoperable Data Committee had its first in-person meeting in over a year.

Olson said that they are starting to talk about Phase 2 of the SLIGP project, which would be a more in-depth inventory.

Other Business: Seal said that the metro received a request for regional talkgroups from the Civil Air Patrol. They are requesting all the ME TACs for their eight portables. He is approving for ME TAC 5-8.

Rohret reminded members to let her know if they will be able to spend the SHSP and SECB grant money by May 1. She stated the GTR class is scheduled for July 14-16 at Hennepin County in Plymouth. She will send info on that class out tomorrow.

Adjournment: *M/S/C – Ron Jansen moved to adjourn. Jake Thompson seconded. The motion carried.*

The meeting adjourned at 2:13 p.m.



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Updated Technical Plan

for ARMER

800 MHz Trunked Radio System Participation

by

St. Louis Park Police Department

Submitted to:
Metropolitan Emergency Services Board

May, 2015



Allied Radio Matrix for Emergency Response



This document has been prepared under contract by PSC Alliance Inc. for the benefit of St. Louis Park. Questions concerning content of the plan may be directed to: Jeff Nelson, PSC Alliance Inc. at the address shown above or via email: jeff.nelson@psc Alliance.com.

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Executive Summary & Overview of St. Louis Park's Updated Participation Plan

Below is a high level synopsis of the plan being proposed by the City of St. Louis Park to update their consoles from the existing Gold Elite model to the MCC 7500 series at their Public Safety Answering Point (PSAP). Further narrative is contained later in this document describing the topics which are summarized below. St. Louis Park (SLP) has been a user of the ARMER system since 2006. SLP now seeks approval to replace its Motorola Gold Elite Consoles with three (3) MCC 7500 consoles plus a patch position. This plan update only modifies aspects of previously approved plans relating to dispatch consoles.

The primary PSAP site in at the St. Louis Park Police Department will be equipped with a Conventional Site Controller, two 4 port CCGW's interfaced to existing control stations, a fire paging system, and backup resources in the event of a network failure.

Two (2) DS1 circuits will be needed to support the console connection at the SLP PSAP location. The existing, City provisioned, fiber link now connecting SLP to the Zone 2 master site will continue to be used for one route of connectivity. Via a previously approved (MESB/SECB) alternate connection method, SLP is establishing a redundant connection via Minnetonka's microwave link. The Motorola console architecture would be integrated with the ARMER Zone 2 controller at Golden Valley.

Radio ID loading on the ARMER would significantly decrease based upon efficiencies available from the MCC 7500 console architecture.

The target in-service date for the MCC7500 console equipment is the Fall of 2015.

SECTION 1 - BACKGROUND

Introduction

This document is prepared as the technical plan for SLP's console upgrade initiative for use in conjunction with the Minnesota ARMER 800 MHz trunked radio system. The primary audience for this plan is the Metropolitan Emergency Services Board (MESB) Technical Operations Committee (TOC) and the Statewide Emergency Communications Board Operations and Technical Committee (SECB-OTC).

Project Funding

SLP has identified local funding to accomplish the construction and system upgrade objectives identified in this document.

SECTION 2 – ELEMENTS OF THE TECHNICAL PLAN

SLP PSAP Location & Resources

SLP's PSAP is located in the Police Department located at 8015 Raleigh Ave., St. Louis Park, MN 55xxx. The PSAP is currently equipped with existing Motorola Gold Elite consoles which are connected through a local Central Electronic Bank with LORI/LOMI recording. This plan includes the replacement of the existing consoles with MCC 7500 workstations. Two (2) DS1 ports are requested to connect the center to the Zone 2 controller.

SLP PSAP Connectivity

In 2006 SLP built private fiber which connects it to the Hennepin Sheriff's facility on Naper Street in Golden Valley. Failure of this link interrupts primary console capabilities for SLP and causes local control stations to be used. In a parallel improvement project, SLP and Minnetonka agreed to share their ARMER connection methods to enhance each other's reliability. (See prior plan dated September, 2014) The net port count for primary PSAP ARMER console connectivity does not change under this request. A graphic showing the diverse console connectivity approved in the 4th quarter, 2014 is shown in Figure 1.

St. Louis Park Police Department

Figure 1 – T1 Connectivity

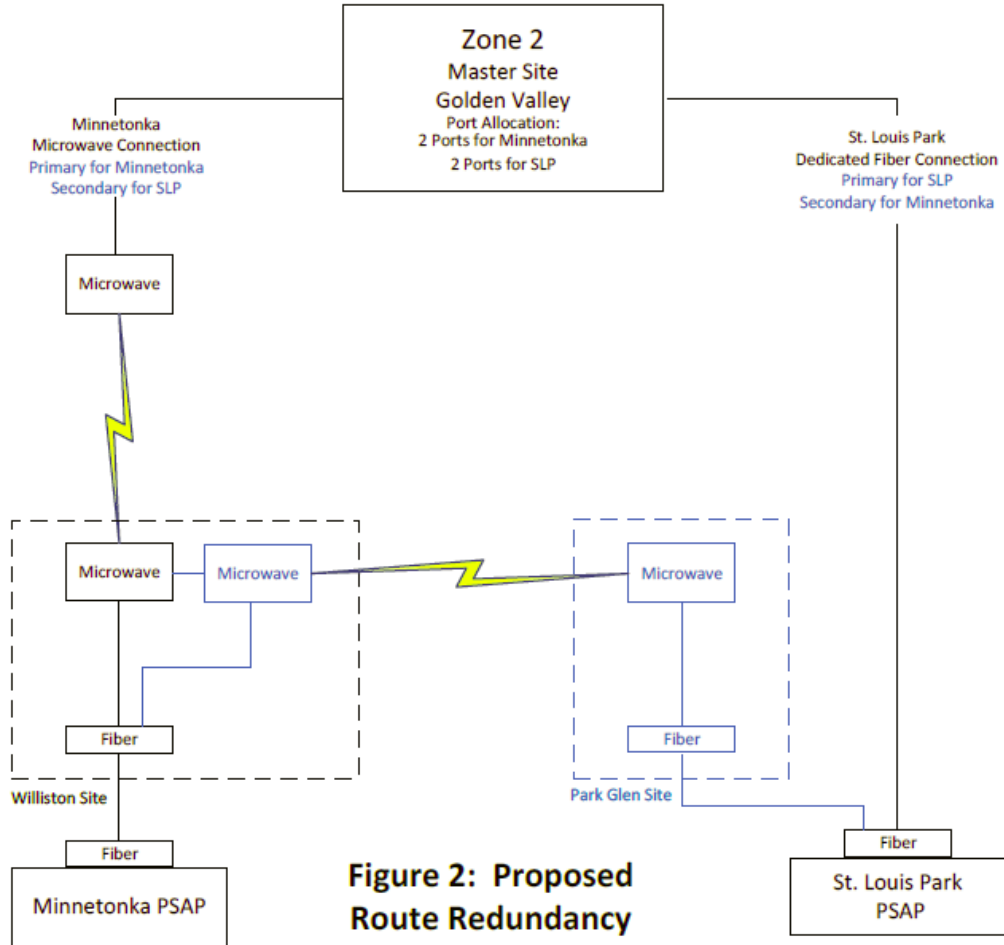


Figure 2: Proposed Route Redundancy

Blue Font = Additions

PSAP Logging

Audio logging at the SLP PSAP is presently accomplished via local LORI/LOMI presentation from the Gold Elite CEB with some talk groups logged via SLP local control stations. Approval of this plan will eliminate the LORI/LOMI logging and all PSAP radio logging will be accomplished over-the-air.

PSAP Backup & Redundancy

Local control stations are already installed at the SLP PSAP and will be interfaced to the new MCC 7500 CCGWs. These backup control stations will permit access to the ARMER system in the event that the dual DS1 links to the Zone 2 controller are lost. Each of the MCC 7500 console positions will have access to the backup control stations.

St. Louis Park Police Department

SLP also maintains a backup PSAP arrangement with Minnetonka. Certain SLP dispatch resources will appear on the Minnetonka consoles in the event that staff need to abandon the PSAP in St. Louis Park.

Subscriber Radio Fleet/Radio ID's

Currently SLP is authorized 216 console IDs due to the inefficiencies of the Gold Elite architecture. Upon conversion to the MCC 7500s only four (4) console IDs will be required resulting in the turn back of 212 IDs from the amount allocated to St. Louis Park.

Interoperability

Primary interoperability will be achieved via shared use of the common 800 MHz digital trunked infrastructure. SLP intends to preserve its VHF paging, backup control stations, and backup radio capability.

Fleet Map

SLP will incorporate statewide, regional and neighboring talk groups in console and subscriber radios consistent with requirements established for use of the ARMER system.

Schedule

SLP seeks to migrate to the MCC 7500 consoles in the third or fourth quarter of 2015 with decommissioning of the existing Central Electronics Bank upon completion of the transition. The City has been working steadily toward that goal for several months.

Training

The SLP staff received initial ARMER training when they went live on the system. The Supervisor and staff strive to remain current on ARMER policies and practices through policy review and informal training.

System Maintenance

SLP intends to coordinate the maintenance and support of the console equipment, link equipment, VHF equipment, and other specialty systems through suitable agreement(s) with a qualified service provider(s).

System Administration

SLP does not operate a network management client but instead relies upon Hennepin County for this service.

SUMMARY

SLP looks forward to approval of this plan with expected preliminary migration to the MCC 7500 consoles in the forthcoming months of 2015.

**800 MHz Trunked Regional Public Safety Radio System
Standards, Protocols, Procedures**

Document Section:	2—Configuration & Allocation	TOC Recommended
Sub-Section:	2.7	Date: January 19, 2001
Procedure Title:	Radio Site Access Permission SUBSYSTEM ROAMING	
Date Established:	1/19/01	MRB Approval - Signature:
Replaces Document Dated:	1/10/01 - Draft	
Date Revised:	9/15/04	Date: 02/02/01

1. Purpose or Objective

The network infrastructure and subscriber units are configured to permit managed access to various “sites” throughout various parts of the system. This managed site access provides the ability for users to achieve wide area coverage where necessary for mission critical operations, enhanced in-building portable coverage and a degree of system level backup in the event of certain types of major network failures. ROAMING FOR NON-ESSENTIAL OPERATIONS IS SUBJECT TO BEING RESTRICTED IN ORDER TO MAINTAIN AN ACCEPTABLE GRADE OF SERVICE FOR MISSION CRITICAL OPERATIONS.

2. Technical Background:

Infrastructure programming settings that control site access for talk/multigroups.

There are settings in the system infrastructure to control the “*Site Access Denial Type*” parameter, which controls how site access is handled for the Radio Users of the system. Radio Users & TalkGroups have independent access lists programmed into the system infrastructure which enables the site access for each respectively, however how the access is permitted depends on the “Site Access Denial Type” settings...

Individual Only: Indicates the radio is rejected if the individual radio user does not have access to the site.

TalkGroup Only: Indicates the radio is rejected if it's current selected talkgroup does not have access to the site.

Both: Indicates the radio is rejected if neither the talkgroup nor the radio has access to the site. “Logical OR”

Either: Indicates the radio is rejected if either the talkgroup or the radio does not have access to the site. “Logical AND”

Infrastructure programming settings that control site access for Interconnect / Private Call.

INTERIM

INTERIM

The site access privileges for Private & Interconnect Calls are based on the site access settings for the “Radio User”, they are not based on the system “Site Access Denial Type” settings, and are independent of talkgroup site access settings.

Radio programming settings that control site access.

The subscribers’ radios themselves contain “Site Preference” selections in the RSS programming. Radios can be programmed with multiple unique personalities, which will allow unique Site Preference Selections for each talkgroup in the radio...

Least Preferred: The site will be avoided unless it is the only usable site for operation.

No Preference: The site is given no preference. If the site is not listed here, the radio automatically assigns it no preference.

*Preferred: The site will be used over all non-preferred sites with similar signal strength.

*Always Preferred: The site will be used over all non-preferred sites with similar signal strength even if the site loses communication with the Zone Controller & enters site trunking.

**Note* Always Preferred & Preferred are operationally identical, if the radio sites have communication with the system and are operating in wide area mode.*

▪ **Constraints**

Using the “Both” site access denial setting to facilitate unique individual needs will allow those individuals full access to all of their talk groups at sites that they have “Radio User” permission for.

Using the “Either” site access denial setting to facilitate unique individual needs may block those individuals from site access, even in emergency conditions.

3. Operational Context:

Normally, only those talk groups in Priority 3 (Mutual Aid) or above will be permitted access at ALL sites.

Talk groups would generally be permitted access at all those sites necessary to support the “normal day to day” business operations of the users of that talkgroup.

If it is necessary that a talkgroup have redundancy protection in the event of a site failure, the attempt shall be made to use 1 adjacent or overlapping Non-Owned site for the talkgroups protection. Factors determining the best protection site include coverage of the site, or even function of the talkgroups per site.

INTERIM

INTERIM

Custom talkgroup site access configuration profiles can be created consistent with this standard.

Dispatchers would be able to use the Wide Area, “Roaming,” “Common” or “Pool” talk groups described in *Infrastructure Configuration* (below) for patching to their local area talk groups to facilitate temporary wide area access for spur of the moment /or temporary events.

4. Recommended Protocol/ Standard:

Subscriber Unit Configuration:

In the Subscriber Radio RSS Programming itself, the radio would normally be enabled for All sites of the system, the operational site access would then be managed at the system level. While there may be some variation due to user operating profiles, the user’s home site will normally be selected as “ALWAYS PREFERRED”. The user’s secondary site(s) will normally be selected as “NO PREFERENCE” as shall be other sites owned by that user (i.e. regional edge sites for regional users, Hennepin West for Hennepin users, etc.) and the regional Dominant Site for non-regional users. All other sites will normally be selected as “LEAST PREFERRED” (i.e. local subsystem sites for regional users, regional edge sites for local users, etc.).

Radios with no site preference tables, or with all sites set to the default “NO PREFERENCE” will not be allowed on the system because they will indiscriminately roam among all sites where the selected talk group is allowed. The System Managers Group shall approve all site preference tables before the radio is activated on the system.

Infrastructure Configuration: Radio User profiles themselves would generally not have special site access permissions granted. Site Access for wide area operations will primarily be managed at the talk group level. System Managers may accomplish this by designating site access throughout the system to a limited number of special Wide Area talk groups. These special talk groups would not be main dispatch or tactical talk groups with high volumes of radio traffic, but may be special Wide Area, “Roaming,” “Common” or “Pool” talk groups.

The "Site Access Denial Type" for the system is set to “TALKGROUP,” meaning that a radio will receive an out of range indicator on a selected talk group at a site if both the talkgroup and the radio user privileges are denied at the site. The use of "Critical User" and "Critical Site" in the system is generally discouraged and must be authorized by the Radio Board.

5. Recommended Procedure:

The defined standard would be implemented & maintained by the Administrators of the system.

6. Management

The System Managers Group is responsible for oversight and ensuring that the standard is followed. (See *Section 1 – Management*.)