NRIN Meeting Minutes

October 1, 2012; 1:00 PM University of Nebraska Public Policy Center 215 Centennial Mall South, Suite 401 Lincoln, NE

Attendees: Mark DeKraai, Pete Peterson, Matt Schnell, Jim Sheets, Patrick Seim, Tim Hofbauer, Pat Foust, Sue Krogman, Kate Speck, Janell Walther

1. Review Service Level Agreement on Network Management

CSI would like to have access to the network so they can periodically check for maintenance. Once a Service Level Agreement is in place and build out is complete, CSI won't need to check the system unless we ask them to during the warranty period. CSI could have an ISP run to a tower now for access if needed through their VPN connection.

The OCIO provided a draft of the Service Level Agreement (SLA) with a list of considerations. What is put in the SLA will inform the Interlocal Agreement. Network management and monitoring should be tied together, blending OCIO and NPPD roles into one SLA. Equipment-level support for NRIN is not expected as spare equipment is on hand in the pilot region and CSI is to provide on-site repair for a two year period following the completion of the entire state build out.

In the SLA, OCIO can:

- 1. Provide unlimited access to the OCIO Help Desk
- 2. Assist in trouble-shooting
- 3. Perform remote diagnostics and problem-analysis resolution
- 4. Maintain the switches (even if the company changes)

In the SLA, OCIO will not:

- 5. Be paid by the Regions to order more equipment.
- 6. Climb towers.
- 7. Manage any hardware or software applications used by NRIN (e.g. PCs)

Each region will need to identify a radio shop with a tower crew capable of training individuals in the shop how to swap out parts as well as an IT support point of contact. A point of contact will need to be identified in each region so assistance can begin at the region rather than OCIO. The SLA should include a flow-chart plan for assistance when needed from the local level on up to OCIO or CSI. OCIO will need to note in the SLA what they can check remotely and how far they can go to check on an issue. OCIO has a terminal server emulation that allows OCIO, if they can get into the IP address, to configure remotely. NPPD has configurations on the network so settings can be easily transferred to new equipment. The SLA will need to address special device boxes and which vendor can handle trouble shooting with these boxes. NPPD can assist OCIO with diagnostics as needed. NEMA also has monitoring boxes, which can monitor turnaround time and data. Equipment will need to be compatible. The SLA should address "damage to equipment due to acts of nature" for everything including wiring. Most of the time, insurance will cover issues like this. It should be noted when to contact the 24/7 Operations Team at OCIO. Full time field support technicians will need to be available. For reliability issues, the SLA should

address loss of power, including environmental power (i.e. if the air conditioner breaks, so the system shuts down from heat).

Tim Hofbauer will make changes to the draft SLA and send to the NRIN Committee and then to Jayne Scofield. Pete Peterson is working the North Central region as a pilot region with the SLA.

2. Review WAN Master Agreement (Interlocal Agreement)

The Interlocal Agreement (ILA) should address governance including quality of service, priority of service, and chopping up bandwidth. Technological changes and maintenance should be referenced through the SLA. The ILA should recognize that 911 traffic is a priority over all other traffic requiring bandwidth on the system. The ILA should avoid being too specific as to not leave out upcoming technical changes. Text should be minimized in the ILA. Counties should feel that they are well-represented in the ILA and future governance group. A policy document, like standard operating procedures, can be created as an attachment to the ILA. To minimize the total number of ILAs, Dave Webb, NPPD, recommended having one ILA for all counties. It is important to consider the total cost per year per dispatch center. We can consider having the ILA with PSAPS rather than counties since connections will be made with the PSAPs — often agreements will ultimately be signed by the county or regional board. PSAPs are where 9-1-1 connectivity exists, and most are close to a state switch or firewall, which helps the state get access to the NRIN system.

Mark DeKraai will make edits to the ILA and send to Tim Hofbauer for review. Then, we will send the ILA to the NRIN Committee.

3. Review Uses of NRIN

4. Develop Process to Communicate NRIN benefits (Review Tim's Brochure)

Tim Hofbauer sent an NRIN brochure out for review. The goal of this brochure is to help representatives talk to counties about the NRIN system when they ask for tower usage and address NRIN issues. The brochure should include potential benefits of the system, but also address the counties and cities are concerned about aesthetics for tower-usage. We will also want an actual picture of what we want to put on a tower. The brochure should be no more than 1.5 pages. Mark and Janell will work with Tim on developing a revised draft of the brochure that includes benefits and better pictures.

NACO or the League of Municipalities can assist in the sharing NRIN information. Pete will continue to work with Larry Dix of NACO on this.

5. Other Issues

a. North Central Region Update - Pete Peterson

2009 grant funds have been spent; 2010 funding is being spent. \$15,000 will be available in unused funds. Kyle Eckert at CSI told Pete that a dedicated connection was needed, but Mark Higgins supported Pete's idea that a sufficient fire wall can be provided through the existing VPN connection. Jim Sheets, OCIO, found that there is an OSPF connection rather than an MPSL connection through the system, so there is no second layer. The RFP required an MPSL network. MPLS is needed to connect an analog device through a converter box to digital audio. An OSPF connection limits the flexibility of the connection. Sue Krogman will meet to discuss this with CSI. The routers may need to be physically replaced to change this connection. The best choice for routing protocol is BGP, which is covered by MPSL. OCIO recommended that CSI remove OSPF and put in BGP with and added MPLS over the top so

fade can be reduced. BGP can move and unstable network topologies. Platte Valley Communications can have a Cat-5 Box going from radio to microwave switch to connect the locations together. NPPD can provide assistance with a T1 from Chadron to Ogallala since the network appears on both of those towers, which allows for future testing. NPPDs connections many serve as part of the SLA.

b. Governance

Regional governance was originally recommended because we thought regional hops should be addressed by the regions hops pass through. However, this seems to be too many layers, particularly when no single ring is contained within each region. Rather, we will ask each region to determine who can serve as a technical representative to the state governance committee. References to regional governance should be removed by from the ILA.

6. Next Steps

The APCO Conference will be held in Omaha and may be a good place for an NRIN presentation. NCOR will tentatively be planned for October 26, 2012. Sue will ask Mark Higgins to send the Lodge Pole configuration to OCIO to Jim Sheets. OCIO (Jim Sheets) and NEMA (Sue Krogman and Al Berndt) will meet to discuss technical specifications.