MEETING TO DETERMINE
NEBRASKA REGIONAL INTEROPERABILITY NETWORK (NRIN)
MANAGEMENT AND COORDINATION

NEBRASKA COUNCIL OF REGIONS TECHNICAL COMMITTEE

Holiday Inn - Midtown
2503 S Locust St · Grand Island

January 20, 2011; 9:30 – 4:00

MEETING MINUTES

Attendees: Tim Hofbauer, Mark Conrey, Pat Gerdes, Al Berndt, Kyle Kramer, Mark Higgins, Lon Renner, Mike Jeffres, Pam Kemper, Luke Bonkiewicz, Mark DeKraai

I.   Discussion of informational needs for NRIN (e.g., Internet Protocol Configuration, Licensing)

The group discussed informational needs for NRIN. CSI indicated they had all the information they needed to get the pilot up and running. The group discussed the need to address duplicate IP addresses. Decisions need to be made about who needs to talk to whom; then decisions can be made about solutions. There was discussion about using more obscure IP addresses to address the issue. Whoever does the management function will need to determine how best to address duplicate IP addresses.

There was discussion about who would hold the license and how frequency coordination would be paid. The Committee decided to recommend to NCOR that the State of Nebraska should hold the licenses. NEMA was examining options to pay for frequency coordination, estimated at about $45,000 for 10 years.

II.   Determine governance and management structures for NRIN

The committee discussed governance structures including the functions of governance, levels of governance, and members of governance. The recommended structure is included as Attachment A and will be presented to NCOR.

The committee discussed the functions of management and produced a list which can be found in Attachment B.

The committee briefly discussed management options, but did not make any recommendations at this time. Some of the options for management include:
*   Having a single contractor manage the network
*   Having state entities such as NPPD/OCIO manage the network

- Having different entities provide management at different levels (regional/state) different tiers, or different management functions e.g., state/regional levels, identifying who should do what for specific issues such as a tower site going down.

III. Develop Approach to monitoring and maintenance

The committee conducted some initial brainstorming about monitoring and maintenance:
- The committee needs to determine what monitoring is needed, the options for monitoring devices and software, the costs of each option, the pros and cons of each option, and make a recommendation for the most cost effective approach.
- Need to determine the performance expectations for monitoring
- Need to decide how the monitoring function will accommodate Interop Solutions monitoring of Paraclete
- Options for monitoring include a third party vendor or state entities (e.g., NPPD/OCIO)
- Who does maintenance and at what level will also need to be determined. For example, who should do maintenance at the site.
- Need to address how maintenance decisions will be made – by governance, by management, at the regional level, etc.
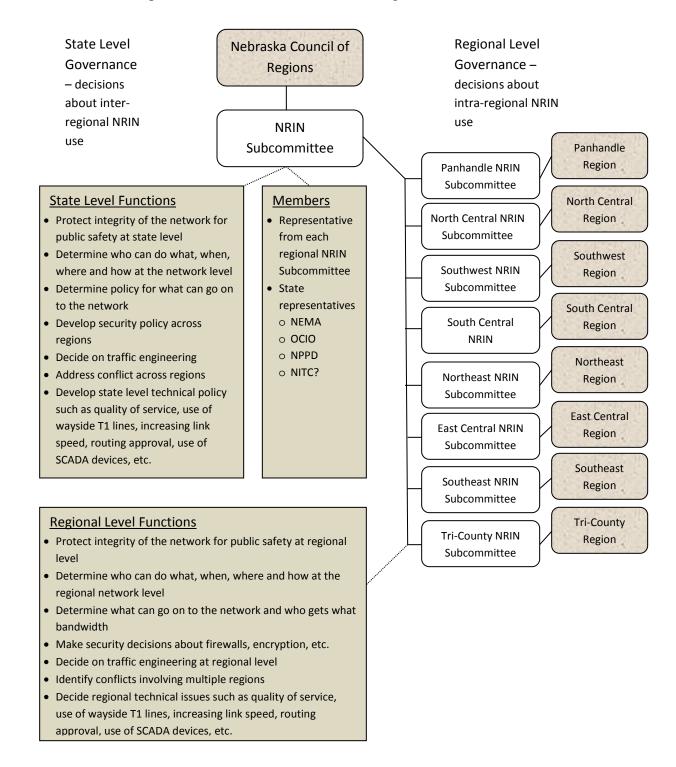
IV. Technical Issues

The committee briefly discussed technical issues that included the following:
- Voice is the number one priority
- Quality of services needs to be addressed, but the committee will need to examine uses of the network before quality of service can be determined
- The State of Nebraska may use NRIN, but this use will need to be determined
- Overall, the subcommittee needs to determine potential uses before many of the technical issues can be decided.

V. Next Steps

- The PPC will compile meeting minutes
- The subcommittee will report back on the results of this meeting to NCOR
- The subcommittee will recommend to NCOR that the State hold the licenses for NRIN
- The subcommittee will recommend to NCOR a structure for governance
- The PPC will develop a one page description of governance for presentation at NCOR
- The subcommittee will present recommendations for management functions to NCOR
- The PPC will develop a one page listing of management functions for presentation at NCOR

Attachment A
Proposed Governance at the State and Regional Levels

State Level Governance – decisions about inter-regional NRIN use

Nebraska Council of Regions

NRIN Subcommittee

Regional Level Governance – decisions about intra-regional NRIN use

Panhandle NRIN Subcommittee — Panhandle Region

North Central NRIN Subcommittee — North Central Region

Southwest NRIN Subcommittee — Southwest Region

South Central NRIN — South Central Region

Northeast NRIN Subcommittee — Northeast Region

East Central NRIN Subcommittee — East Central Region

Southeast NRIN Subcommittee — Southeast Region

Tri-County NRIN Subcommittee — Tri-County Region

State Level Functions
- Protect integrity of the network for public safety at state level
- Determine who can do what, when, where and how at the network level
- Determine policy for what can go on to the network
- Develop security policy across regions
- Decide on traffic engineering
- Address conflict across regions
- Develop state level technical policy such as quality of service, use of wayside T1 lines, increasing link speed, routing approval, use of SCADA devices, etc.

Members
- Representative from each regional NRIN Subcommittee
- State representatives
  - NEMA
  - OCIO
  - NPPD
  - NITC?

Regional Level Functions
- Protect integrity of the network for public safety at regional level
- Determine who can do what, when, where and how at the regional network level
- Determine what can go on to the network and who gets what bandwidth
- Make security decisions about firewalls, encryption, etc.
- Decide on traffic engineering at regional level
- Identify conflicts involving multiple regions
- Decide regional technical issues such as quality of service, use of wayside T1 lines, increasing link speed, routing approval, use of SCADA devices, etc.

Attachment B
NRIN Management Functions

1. Follow and implement decisions of NRIN governance
2. Problem management
3. Change management
4. Proactive monitoring
5. Disaster recovery
6. Coordinate local networks
7. Preventive maintenance
8. Creating Routes
9. Recommendations concerning traffic engineering
10. Configure and implement circuits
11. Monitor network usage and failure
12. Take corrective action due to failures
13. Testing to determine problems
14. Problem resolution
15. Manage connections to customers
16. Update software and firmware as needed including version control
17. Implement security policies
18. Documentation of the system
19. Manage implementation (do it directly or direct it to be done)
20. Oversight of maintenance
21. Recommendations on monitoring software or devices
22. Recommend standards, practices, policies to governance and provide technical advice