Nebraska Council of Regions (NCOR)
2010 Annual Report

February 2011

2010 NCOR Members

Harold "Pete" Peterson – North Central (Chair)
Mark Conrey – Tri-County
Patrick Foust – Northeast
Pat Gerdes – Southwest
Jim Gerweck – Southeast
Tim Hofbauer – East Central
Darrin Lewis – South Central
Ray Richards – Panhandle
Thomas Schwarten – N-WIN (NSP)
Dave Webb – N-WIN (NPPD)

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Executive Order No. 08-04 (December 17, 2008) established the Nebraska Council of Regions (NCOR), its membership, and key activities. NCOR was created to provide oversight and integration for the eight local public safety communications regions of Nebraska and to coordinate with the Nebraska Wireless Interoperable Network (N-WIN) Council.The Executive Order charged NCOR with providing an annual report containing a current assessment of the Nebraska regional wireless communication network that includes recommendations for further development and operation of the system. This report fulfills that requirement.

Background

The 10-member NCOR board consists of one appointee each from the eight local communications regions, the Nebraska Public Power District (NPPD), and the N-WIN Council. Meetings are also regularly attended by representatives of the state agencies charged with providing support to the group – Nebraska Emergency Management Agency, Nebraska State Patrol, and the Office of the Chief Information Officer.
The primary purpose of NCOR is to complete the charges listed in Executive Order No. 08-04. Accordingly, the Nebraska Council of Regions will:

- Provide policy-level direction and coordination related to the planning and decisions regarding regional integration with the Nebraska Wireless Interoperable Network (N-WIN).
- Adopt bylaws for the operation of the NCOR.
- Develop strategies and recommendations to improve operations of the Nebraska wireless communication network, including the use of new technology as it becomes available.
- Promote interoperability for public safety communications within Nebraska.
- Provide for the development of protocols, standard operating procedures, and guidelines for use of the local Nebraska wireless communication network.
- Establish the terms of agreements and enter into agreements for public safety entities to operate with the Nebraska Wireless Interoperability Network (N-WIN), in conjunction with the Office of Chief Information Officer (OCIO), when such arrangements are practical and in the best interests of the State and the regions.

The NCOR Board held 10 meetings in 2010. Meeting minutes can be found at:
http://www.homelandplanning.nebraska.edu/nebraskacouncil.php

Cooperation with Nebraska Wireless Interoperable Network (N-WIN) Council members was instrumental in the second year of NCOR. In addition to strong N-WIN Council support and participation, three state groups provided support to NCOR in 2010.

The Nebraska Emergency Management Agency (NEMA) provided administrative support to NCOR as needed and served the logistical needs of the group including: 1) arranging for adequate space and a location for meetings and 2) providing copies of meeting materials and sign in sheets. In addition, staff were assigned to assist regions assess technical requirements for the Request for Proposals (RFP). NEMA provides substantial resources for development of the Nebraska Interoperable Communications Network.

The Office of the State Information Officer (OCIO) in conjunction with State Purchasing led the process for securing bids to establish the statewide point-to-point wireless network. Technical support was offered at NCOR meetings through the OCIO's office representatives via regular reporting about the development of interoperable communication infrastructure and implementation of the statewide radio network in coordination with the Nebraska Public Power District (NPPD). OCIO is also responsible for coordinating the statewide interoperability strategy with NEMA, NCOR and regional leadership groups.

The University of Nebraska Public Policy Center provided planning assistance to NCOR over the past year through agenda development, meeting facilitation, developing draft documents, note-taking, and maintaining a website to centralize communication related to NCOR and regional activities (http://www.homelandplanning.nebraska.edu).

2010 Milestones

Nebraska Regional Interoperability Network (NRIN). NRIN is an Internet Protocol (IP) high-speed microwave system on over 200 towers across Nebraska. It is the backbone that ties all of the other systems together. The network provides data connectivity for public safety voice and data interoperability using the towers, and state and regional network. Public safety data will be disseminated to dispatch centers (also referred to as Public Safety Answer Points or PSAP's) located in counties and cities throughout the state. The NRIN system consists of eight regional, ringed networks that join to make up the statewide ring. The system will carry data linking all aspects of emergency communications, including statewide voice, data, wireless and video data, and will be governed by standard operating procedures put together by local and regional representatives.

A Request for Proposals (RFP) for NRIN, originally released in 2009, was revised, and a new RFP was released February 12, 2010. The OCIO worked closely with NCOR to coordinate development of the RFP to ensure regional and local needs were incorporated. NCOR members were involved in the review and scoring of proposals. Intent to Award was issued on May 20, 2010, and the contract was awarded to Communications Services, Inc. in August 2010. Implementation in 2010 focused on the Panhandle and North Central regions. Work included developing the system design, identifying and assessing tower locations, identifying alternatives when planned towers were not feasible, negotiating rates for usage of towers and other structures, and identifying storage and staging locations for equipment. Each potential installation site

must undergo a review for environmental impact prior to installation of any equipment. NEMA has coordinated this effort across the state to ensure each site is promptly submitted for review. NCOR began developing a process to share lessons learned from the experience of the first two implementation Regions to assist other Regions as the Network develops statewide. NCOR and NEMA also began work to identify potential uses/users of NRIN and to identify governance, management, monitoring, and maintenance structures for the successful operation of NRIN.

Mutual Aid Radio System. The *Nebraska Mutual Aid Radio System* will allow public safety responders to communicate regionally and statewide on an as-needed/on-demand basis using common protocols and radio frequencies. The Nebraska Mutual Aid Radio System is a planned network of analog radio base stations using common, nationally accepted frequencies to provide radio coverage across the state controlled by local/regional system operators. This initiative will involve installation of equipment and connections that will require maintenance and upkeep support from local governments. Nebraska Emergency Management Agency is working closely with the Nebraska Office of the Chief Information Officer and Nebraska's Council of Regions (representatives from each of Nebraska's eight planning, exercise and training regions) to implement this initiative.

NCOR developed specifications for mutual aid and incorporated these into draft Standard Operating Procedures (SOPs). The draft SOPs include terminology and guidelines for use, channels for mutual aid, procedures for use and discontinuation, problem identification and resolution, base frequencies, equipment requirements, procedures for heavy traffic conditions, and controls and measures. It is anticipated that NCOR will approve the SOPs in early 2011.

The mutual aid overlay/base station project has moved forward with the assistance of NEMA technical personnel. Regions and local areas assessed their needs related to upgrading public safety answering point equipment and connections to work with the statewide network for the purpose of achieving interoperability.

Two pilot programs for mutual aid began planning and implementation in 2010 – one in the Tri-County Region and one in the South Central Region. NCOR developed a process to share lessons learned from these two projects which will continue into 2011.

Paraclete. *Paraclete* is a computer software system that enables local, regional, and state emergency responders to communicate with one another using disparate radio systems in the event of a local emergency. Responders coming to the aid of a neighboring community during a local incident may use different radio frequencies. Paraclete provides a mechanism for dispatchers to bring the frequencies together so the responder on scene can communicate as though everyone were on the same frequency. In addition, the Paraclete system contains a sophisticated database that can be customized by local officials with area resources that are needed to handle the various emergency scenarios that may face local and regional public safety agencies. Local officials can pre-determine which frequencies to place in the Paraclete system so

dispatchers using it can quickly connect them. In an emergency every second counts. The quick, clear communication in the field made possible by this system could save lives. The Nebraska Emergency Management Agency purchased the license for Paraclete software for the entire state of Nebraska. Decisions about where Paraclete equipment should be located have been made by local emergency management and communications personnel in consultation with the State personnel working on this initiative.

NCOR produced guidance for Memoranda of Understanding (MOUs) for sharing frequencies in Paraclete. The guidance helps identify who needs to share frequencies, who has authority for frequencies and should be a party to the MOU, the elements of an MOU, and how to update and maintain the MOU.

NCOR began the process of identifying lessons learned from regions which are successfully using Paraclete. NEMA designed a process for resolving technical issues with Paraclete, developing a user manual, and providing training for dispatchers, supervisors, and emergency managers across the state. As the use of Paraclete expands, the ability to share information will be critical in ensuring success of mutual aid.

Tactical Interoperable Communications Plans (TICPs). TICPs detail first responder radio interoperability communications operational plans, jurisdictional agency contact information, radio frequency and infrastructure, interoperability process, network systems and includes information on governance, mutual aid agreements, Memorandum of Understandings (MOU), and other information regarding the region's radio interoperability. NCOR worked with NEMA to revise TICPs for each region, to develop standard language that could be inserted in all TICPs, and to develop an organizational chart describing the governance and organization for the state of Nebraska. Regions also received training on the use of the Communications Assets Survey and Mapping Tool (CASM), a web-based tool that assists public safety agencies to collect and visualize data, and assess inter-agency interoperability based on the communication assets and interoperability methods (i.e. land mobile radios, gateways, radio caches, interoperability channels, etc.) that exist in their area. Information from CASM can be exported into TICPs.

Challenges

Four primary challenges to the work of NCOR are highlighted in this report. The first challenge is related to the evolving need for close coordination with the official support agencies for NCOR (NEMA and OCIO).The NCOR Board needs information from NEMA and OCIO in order to set priorities, understand needs across the state, and manage grant funding. The flow of information between NCOR and its support agencies has improved over the course of the year but at times has been seen by members as inconsistent. This challenge was improved dramatically when NEMA assigned personnel to directly work with the technical aspects of planning for interoperability.

A second challenge related to information flow has been the tight deadlines for completion of goals that are tied to funding such as the public safety interoperable communications grant (PSIC). The need for transparency and information sharing between the state and regions increases as grant deadlines loom. At this point, no deadlines have been missed, and the board remains focused on goals to ensure timely completion of activities related to the PSIC grant and homeland security funding dedicated to achieving interoperable communication capabilities across the state.

A third challenge has been the implementation of the State Radio System, which changed the ways in which local agencies can communicate with state agencies. There have been discussions between NWIN and NCOR to address this issue including having local agencies subscribe to the State Radio System or purchasing new equipment to allow for communication.

A fourth challenge has been communicating with public officials and the public about the need for an as-needed, on-demand interoperable communications network. This has been particularly challenging given the complexity of the network components and the unknowns regarding costs and sustainability. NCOR is currently working to inform public officials, first responders, and emergency managers about the benefits and responsibilities associated with the Nebraska Interoperable Communications Network.

Recommendations

NCOR plans to continue with current projects, monitoring and ensuring that they are smoothly underway before moving on to other identified priorities in 2011. One of the highest priorities is achieving the build-out of the Nebraska Regional Interoperability Network. Regions will coordinate with the contractor to determine which local sites will be connected to the network. Ongoing coordination with NEMA and the OCIO will also continue to ensure equipment is purchased and installed for base stations and that appropriate personnel are included in Paraclete training. NCOR recommends that the state support agencies work with Regions in 2011 to create common training and exercise expectations for users of the wireless networks.

NCOR plans to continue its work to inform public officials about the Nebraska Interoperable Communications Network and to engage in discussion about sustainability of the network. With state and local partners, NCOR will develop and implement a system design for governance, management, monitoring and maintenance of the network. NCOR plans to complete and approve the Mutual Aid Standard Operating Procedures and begin developing guidelines for training and exercising them.

NCOR anticipates its members will again participate in an update of the 2011 Statewide Communications Interoperability Plan (SCIP). This collaborative effort with state agencies forms the basis for local tactical interoperable communications planning (TICP).