



# Nebraska Regional Interoperability Network

## FAQs



### **What is NRIN?**

Nebraska Regional Interoperability Network (NRIN) is a regional and statewide wireless communications and data sharing network designed to connect Public Safety Answering Points (PSAPS) or 911 centers and enables them to use statewide communications resources and new wireless technologies such as Next Generation 911. NRIN allows sharing of information quickly and efficiently thereby improving emergency responses and protecting lives and property. This information includes voice, video, pictures, documents, and other data transmitted to and from 911 centers, public safety agencies (e.g., law enforcement, fire), public power, emergency operations centers, weather services, crime and intelligence information centers, emergency alert systems, roads and motor vehicle agencies, ham radio networks, civil air patrol, and other public and private agencies. In addition, the NRIN system can benefit Nebraska communities by allowing the sharing of information in non-emergency situations such as conducting video arraignments, communicating across city and county government, and data sharing across a variety of agencies currently using and paying for expensive telecommunications lines.

### **What is the technology that allows this network to operate?**

NRIN is an Internet Protocol (IP) microwave network using towers across the state, including communications towers, and in some cases water towers, grain elevators and other buildings and structures. NRIN will be capable of linking with other emergency communications systems in Nebraska such as Paraclete© (a system that enables local, regional, and state emergency responders to communicate using disparate radio systems during local emergencies) and the Common Usage Channels project (a system that allows public safety responders to communicate using common protocols and radio frequencies). The Nebraska Emergency Management Agency (NEMA) is contracting on behalf of local government with Communications Services, Inc. (CSI) to build out the microwave network at more than 200 tower locations across the state. The pilot portion of this project is being done in the Panhandle and North Central Regions and will soon move to the rest of the state.

### **Who controls this system?**

Although most of the NRIN infrastructure is being built with federal Homeland Security funding administered through NEMA, the network will be governed and operated by local government. PSAPS and counties wishing to participate in NRIN will need to enter into an inter-local agreement that will spread the costs to manage, maintain, and monitor the system across all participating entities. The Inter-local agreement will form a governance structure made up of participants from each region, the Nebraska Office of the Chief Information Officer (OCIO), and Nebraska Public Power District (NPPD). The Nebraska Public Safety Communications Council (NSPCC) is a new committee made up of regional and state representatives and is working with local government on a format for the agreement.

### **How can authorized units get on the system? Do they need special equipment?**

As the NRIN system is built out, CSI is working with PSAPs to ensure appropriate linkage to the microwave system. Other authorized units of government will be able to connect to the system through linkages with the PSAPs using options such as inexpensive and secure fiber optic links.

### **Will this (NRIN) replace the 911 trunks and telephone switches?**

The telephone companies will still need to provide 911 trunk lines, and local government will still have the specialized telephone equipment to receive and process 911 calls in order to meet national standards. NRIN can be used in the process to help PSAPs share the costs of the equipment. Governments can share equipment and routing of calls. NRIN operates at a high speed – 100 mps, which means it is built to allow sharing.

### **Will this replace the law enforcement teletype?**

No. Currently, the costs for teletype cover the lease on equipment at the dispatch center and equipment at the State Patrol dispatch in Lincoln as well as the connection between the two endpoints.

### **If one site goes down, could service be denied?**

Not likely. The system is incredibly reliable – 99.999% of the time. In the event of catastrophic failure, dual radios are installed to make the system even more robust. The NRIN is designed and built in rings so if there is a loss within a ring, the voice and data can be re-routed another way to provide continuous service.



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### **Will existing systems/methods still be needed as redundant or as “back-up”?**

NRIN is built for redundancy. The Nebraska OCIO monitors the system for any issues with any piece of equipment. NRIN helps create redundancy for and links to the Common Usage Channel Base Stations. Currently, this type of link between Common Channel Base Stations using NRIN is being piloted in the North Central Region. Some systems will remain in place (such as teletype) while other systems will be made more robust through NRIN.

### **If one 911 center goes down (such as a building collapse) will NRIN allow for another PSAP to cover service?**

Yes. With radio and 911 systems operating over IP networks, the NRIN system can transport the data back and forth to the dispatch centers that act as backups. This enables one dispatch center to serve multiple counties as needed. This system also allows for dispatch sharing. In fact, this sort of event is a key benefit of the NRIN system.

### **Many counties use the NRIN system exclusively, while some counties don't. Will these counties still be able to use (old) existing systems to communicate with those solely on NRIN?**

NRIN operates as a connector system between local government and endpoints such as existing base stations and repeaters. NRIN simply enhances the connection by allowing sharing of radio resources with surrounding dispatch centers. Paraclete and Common Usage Channels will use NRIN exclusively. NRIN will also play a major role in Next Generation 911 systems and equipment.

### **What security protocols will be in place to protect sensitive data?**

For any of NRIN's potential uses, security is a key concern. Right now, discussions are ongoing with the Nebraska OCIO to manage and monitor the NRIN system. The OCIO also has the expertise to maintain the security of NRIN. This security system partnership between local officials and the OCIO is being tested in Keith County, Nebraska right now. There are firewalls installed, through partnerships with the State Radio System and NPPD, to protect unauthorized use and access to the system. There is no direct connection to the internet over the system, making the system more secure.

### **So why do I want to participate?**

The NRIN system will provide your local area with the connections and redundancy for more secure and robust 911 and dispatch systems. NRIN can transmit both voice and data effectively. The NRIN system will help you link your existing interoperable resources like Paraclete, Common Usage Channel Base Stations, the State Radio System, and your local networks. Networking using a microwave system like NRIN is cost effective and can help you share resources. Building of the network is already taking place throughout the state.

### **What will it cost to participate?**

Currently, a team of communications experts collaborating with the NSPCC is working to estimate potential costs. These costs may include equipment maintenance and replacement, insurance, tower leases, and the monitoring and maintenance of the system. Experience in the pilot regions indicate some of these costs may vary substantially by location. For example in some locations, tower owners have agreed to waive rent fees in exchange for tower enhancements such as building equipment shelters or providing cameras at the sites.

For more information, visit: <http://homelandplanning.nebraska.edu>