

Nebraska Statewide Interoperability Mutual Aid Standard Operating Procedures



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1.0 Purpose and Scope

The Nebraska Statewide Interoperability Mutual Aid Standard Operating Procedures provide written documentation for all organizations using Nebraska's Mutual Aid Radio System. These standard operating procedures apply to all organizations, including staff of the organizations that use, manage, and service the system.

2.0 Background and Authority

- 2.1** The *Nebraska Mutual Aid Radio System* will allow responders to communicate on a regional and statewide basis. It will enable state and local agencies to readily communicate on an as-needed basis with local emergency agencies in other areas of the state.
- 2.2** The Nebraska Mutual Aid Radio System is a network of analog radio base stations using common, nationally accepted frequencies to provide radio coverage across the state controlled by local/regional system operators.
- 2.3** Emergencies transcend political jurisdictional boundaries and intergovernmental coordination is essential for the protection of lives and property and for best use of available assets both public and private. The Nebraska Mutual Aid Radio System provides for mutual cooperation among the participating subdivisions in the prevention of, response to and recovery from any emergency and in conducting disaster related exercises, testing or other training activities outside actual emergency periods.
- 2.4** The Nebraska Council of Regions (NCOR) was established by Executive Order No. 08-04 to provide oversight and integration for the eight local public safety communications regions of Nebraska. NCOR is also charged with fostering collaboration among stakeholders at the local, federal, and state level. Other responsibilities include the following:
- 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 shall prepare an annual report for the Governor and the Governor's Homeland Security Policy Group. Such report shall contain a current assessment of the Nebraska Regional wireless communication networks, including recommendations regarding the further development and operation of the system.
- The NCOR is responsible for developing and implementing the State Communications Interoperability Plan.

3.0 Definitions:

- 3.1 Cache radios**, also known as “swapped radios,” refer to maintaining a cache of standby radios that can be deployed to support regional incidents. These radios may be from a regional cache or from a participating agency. These radios allow all responders to use common, compatible equipment during an incident.
- 3.2 Gateway systems** interconnect channels of disparate systems (whether on different frequency bands or radio operating modes), allowing first responders using their existing radios and channels to be interconnected with the channels of other users outside of their agency. Dispatch consoles that are able to create patches will also be captured as gateways.
- 3.3 Intra-system shared channels** refer to common frequencies/talkgroups established and programmed into radios to provide interoperable communications among agencies using the **same** shared radio system. “Channel,” in this context, refers to the name of a common frequency/talkgroup visually displayed on a user’s radio.
- 3.4 Inter-system shared channels** refer to common frequencies/talkgroups established and programmed into radios to provide interoperable communications among agencies using **different** radio systems. “Channel,” in this context, refers to the name of a common frequency/talkgroup visually displayed on a user’s radio.
- 3.5 Mobile Communications Units (MCUs)** (also known as a Mobile Communications Centers (MCCs), Mobile Communications Vehicle (MCV), or Mobile EOCs) refers to any vehicular asset that can be deployed to provide or supplement communications capabilities in an incident area. Examples of the types of communications devices an MCU can house are: subscriber and base station radios of various frequency bands, gateway devices, satellite phones, wireless computer networks, video broadcasting/receiving equipment, etc. Typically these communications devices are permanently located or stored in the MCUs when not used. The MCU should also be able to temporarily provide the electrical power required to operate the communications devices.

- 3.6 Mobile Radio** is a vehicle radio or handheld radio used to communicate between base radio systems and other mobile radios. The mobile radio operates over an authorized area of operation.
- 3.7 Mutual Aid Base Station** is a wireless communications station installed at a fixed location and used to communicate as part of a [push-to-talk two-way radio](#) system or [a trunked radio](#) system for mutual aid use.
- 3.8 Mutual Aid** means response to an incident by multiple emergency responders across jurisdictional boundaries. Such an incident may exceed local resources, thereby demanding additional resources from nearby agencies.
- 3.9 NCOR** means the Nebraska Council of Regions that provides oversight and integration for the eight local public safety communications regions of Nebraska.
- 3.10 NRIN** means the Nebraska Regional Interoperability Network which provides data connectivity for public safety voice and data interoperability.
- 3.11 NWIN** means the Nebraska Wireless Interoperability Network which includes the Nebraska Statewide Radio System, the Mutual Aid Radio System, the Nebraska Regional Interoperability Network, and the Paraclete™ System.
- 3.12 OCIO** refers to the Office of the Chief Information Officer
- 3.13 Paraclete™** refers to statewide licensed computer software system that enables local, regional, and state emergency responders to communicate with one another using disparate radio systems.
- 3.14 PET Region** means one of the eight Planning, Exercise and Training Regions in the state of Nebraska
- 3.15 Shared systems** refer to a single radio system used to provide service to several public safety or public service agencies.
- 3.16 SOP(s)** means standard operating procedures as adopted by NCOR.

- 3.17 SRS** means the Nebraska Statewide Radio System, a VHF P25 digital trunked land mobile radio system being built through a partnership between the State of Nebraska and NPPD.
- 3.18 Talk group(s)** means a predetermined affiliation or grouping for radio operation that allows a number of subscribers to transmit and hear each other's radio traffic, even though the frequencies may change and the tower sites may change for members affiliated with a talk group.

4.0 Terminology & Guidelines for Communication

- 4.1** Nebraska agencies using mutual aid frequencies to communicate across jurisdictions or agencies need a common understanding of terminology and guidelines for communicating. Local or agency specific codes and jargon may hamper effective communication in a mutual aid situation. This procedure establishes acceptable terminology and guidelines for communicating on Nebraska’s mutual aid communications system. The intended audience includes all potential users of the mutual aid communications system. The purpose of this standard operating procedure is to establish a common understanding of terminology and of how to communicate effectively using Nebraska’s mutual aid communications system.
- 4.2** Radio communications procedures on interoperability channels must be consistent with the National Incident Management System (NIMS) and Incident Command System (ICS).
- 4.3** *Plain or commonly understood language* is to be used when communicating on Nebraska’s mutual aid system. When necessary, the phonetic alphabet may be used to help make your communication clear (See examples below).

Law Enforcement

A	Adam	N	Nora
B	Boy	O	Ocean
C	Charles	P	Paul
D	David	Q	Queen
E	Edward	R	Robert
F	Frank	S	Sam
G	George	T	Tom
H	Henry	U	Union
I	Ida	V	Victor
J	John	W	William
K	King	X	X-ray
L	Lincoln	Y	Young
M	Mary	Z	Zebra

Fire/EMS & Military

A	Alpha	N	November
B	Bravo	O	Oscar
C	Charlie	P	Papa
D	Delta	Q	Quebec
E	Echo	R	Romeo
F	Foxtrot	S	Sierra
G	Golf	T	Tango
H	Hotel	U	Uniform
I	India	V	Victor
J	Juliet	W	Whiskey
K	Kilo	X	X-ray
L	Lima	Y	Yankee
M	Mike	Z	Zulu

- 4.4** No 10 – codes will be used on the mutual aid channels.
- 4.5** Radio communications should be *Accurate, Brief and Clear* (See 4.12 for further discussion of this concept).
- 4.6** Radio users must *use complete phrases/designations* instead of abbreviations or acronyms.
- 4.7** Radio users must *be professional* in all your communications by avoiding humor, obscenities, jargon or casual conversation. Failure to abide by this guideline may place the user in violation of Federal Communications Commission regulations. Instances of inappropriate communication on mutual aid frequencies will be referred to the person in charge of the agency or jurisdiction that the alleged offender represents. The referral will be made by the incident commander or supervisor of mutual aid dispatch services as appropriate.
- 4.8** Calls initiated from the dispatch center must include identification by location or PSAP name. For example, Phantom County Nebraska Dispatch. The first call from the field must include identification that includes the caller's *agency and unit or badge number*, followed by *agency jurisdiction (city, county, state. Be as specific as possible about your location* in the field after identifying yourself to dispatch. For example, give your last known location; mile marker; or landmark. Subsequent communication may be shortened, but it is important to use all identifiers in the first call to dispatch or incident command. The shortened identifier will normally include either the agency or jurisdiction and number given.
For example: This is Phantom County Sheriff – 123 – Phantom County Nebraska. Located at mile marker 10 on Highway X. Subsequent communications may be shortened by dispatch to Phantom County 123.
- 4.9** Radio users shall end each communication by *re-stating the identifier that you used to begin the communication*.
- 4.10** The following procedures will be used to handle a non-responsive communicator in the field:
- Dispatch will wait up to 30 seconds for a call to the field or another station to be answered.
 - Dispatch may opt to repeat the call up to three times (depending on the urgency of the situation).

- Alternate methods of contacting the field or station will be attempted if no answer is received. (for example: calling a cell phone; sending an alert tone; dispatching someone else in the field to the last known location of the communicator)
- 4.11** A phonetic alphabet is a list of words used to identify letters in a message transmitted by radio or telephone. Below are two commonly used phonetic alphabets. Normally the letter is stated, followed by the phonetic word that represents that letter. For example, “A-Alpha; C-Charlie; T-Tango.”

4.12 Mutual aid radio communications guidelines:

- ***Be ACCURATE***

It is important that the exchange of information in a public safety setting be precise and accurate. One way to insure that information is received accurately is to repeat vital information a second time so the receiver can check for errors.

- ***Be BRIEF***

Radio transmissions must be brief, concise, and specific. Say only what needs to be said and then stop transmitting. Transmissions should communicate specific information or requests. Superfluous (unnecessary) words hinder the smooth operation of any communication system. Use of filler words and jargon must be avoided.

Only information of an official nature is to be transmitted over the mutual aid radio system. Use a telephone, whenever practical and appropriate, rather than the radio to provide confidential or extensive information or to obtain expansive consultation.

- ***Be CLEAR***

Words must be pronounced correctly, distinctly and as clearly as possible in order to be understood. The Phonetic alphabet is a helpful tool, especially when dealing with difficult to pronounce names, locations or when transmitting numbers. Another aspect of clarity is the rate that one speaks. When communicating by radio, it is important to speak at a normal conversational rate. Speaking too fast or too slow makes it difficult for the other person to clearly receive messages.

Users should try to maintain a neutral tone of voice, not allowing anger or other emotion to show in their radio transmissions. Users should never engage in sarcastic or disrespectful language, or editorialize regarding persons or circumstances. Users should not engage in argumentative and unnecessary questioning of other personnel over the air.

- **GUIDELINES**
 - Listen First
 - Listen for instructions on channel usage
 - Listen for your identifier being called
 - Listen for details related to your role in the communication and/or event
 - Think before you Speak
 - Pause momentarily by taking one or two breaths before speaking over the mutual aid channel. This will allow the speaker to quickly formulate an accurate, brief, clear message using plain language.
 - Pause for Equipment
 - Some radio equipment may require the sender to pause before speaking so that the entire message is heard.
 - Pause for Priorities
 - Be prepared for Questions/Clarifications
 - Although radio traffic should be kept at a minimum, it is important that the message you are sending is received accurately. Questions about your transmission will help the receiver understand your message.

5.0 Mutual Aid Channel Usage

- 5.1** Nebraska agencies using mutual aid frequencies to communicate across jurisdictions or agencies must have a common understanding of how and when mutual aid channels are used. This procedure establishes general rules for assignment and use of these channels in emergency and non-emergency situations. The intended audience includes all potential users of the mutual aid communications system. The purpose of this standard operating procedure is to provide a framework to guide assignment and use of mutual aid channels in Nebraska.
- 5.2** Mutual aid channel usage for emergencies take priority over non-emergencies. An example of non-emergency mutual aid channel use is an agency calling for directions when transporting prisoners through or to an area that they are not familiar with. Generally, the following priorities will be used:
1. Disaster or extreme emergency operation for mutual aid and inter-agency communications;
 2. Emergency or urgent operation involving imminent danger to life or property;
 3. Joint operation among multiple agencies related to public safety
 4. Special event control, generally of a preplanned nature
 5. Joint training exercises (these channels do not qualify for use by single agencies for their secondary communications purposes)
 - Disaster, large-scale incident or extreme emergency requiring mutual aid or interagency communications;
 - Incidents where imminent danger exists to life or property;
 - Pre-planned events requiring mutual aid or interagency communications;
 - Incidents requiring the response of multiple agencies;
 - Incidents involving a single agency where supplemental communications are needed for agency use;
 - Drills, tests, and exercises
- 5.3** To resolve contention within the same priority when there are multiple incidents, the channel shall go to the organization with the wider span of control/authority. As a general rule, when there are multiple simultaneous incidents within the same priority, the resources shall be allocated according to the following:

- Incidents with the greatest level of exigency (e.g., greater threat to life or property, more immediate need, etc.) have priority over less exigent incidents.
 - Agencies with single/limited interoperable options have priority use of those options over agencies with multiple interoperable options.
 - When possible, agencies already using an interoperable asset during an event should not be redirected to another resource.
- 5.4** Until such time as Incident Command is established, the lead agency designee (i.e., communications supervisor/command personnel), in cooperation with assisting agencies, will have the authority to designate the use of interoperable assets. Once Incident Command has been established, Command Staff or Communication Unit Leaders (when designated) direct the further coordination and delegation of the interoperable communications assets assigned to the event or incident in question.
- 5.5** Emergency use of mutual aid channels will be guided by principles of incident command. Mobile communication assets brought into an area will be subject to mutual aid channel assignment by the local incident commander or communication leader. All mobile communication assets must report their communication capabilities to the incident commander or communication leader upon arrival at a site and before initiating any communication via their resources.
- 5.6** Agencies shall judiciously activate needed interoperable assets so as to both effectively respond to the event and/or incident and also minimize any negative impact on surrounding agencies or jurisdictions. Specifically, interoperable communications should be attempted with the following order of operations in mind (subject to variability based on the agencies involved and the nature of the event/incident):
1. Leverage face-to-face communications wherever appropriate. For example, the co-location of all Command and General Staff at the incident command post (ICP) provides the best direct communications and reduces the demand on interoperability resources.
 2. Employ local communications assets until such time as either those assets become taxed or inadequate based on the nature and/or scope of the incident.

3. If response agencies are users of a shared system, utilize that shared system to establish interoperable communications.
 4. If response agencies operate on disparate systems, utilize shared or mutual aid channels to establish interoperable communications.
 5. If response agencies do not share systems or channels, utilize a gateway solution to establish interoperable communications.
 6. Where interoperable communications cannot otherwise be established between response agencies, utilize swap or cache radios to establish operable communications for responders.
 7. If no other method of interoperability can be established, relay communications through staff members.
- 5.7** Mutual aid frequency channels will not be patched by anyone who has not been designated to function as a primary communication center. It is permissible to patch a mutual aid channel to another working channel when it is done by order of an Incident Commander or Communication Leader in an emergency or per local approved plans in non-emergency situations.
- 5.8** Mutual aid PSAP dispatch centers will take direction regarding mutual aid channel assignment and usage from local incident command or communication leader in an emergency situation and local dispatch centers in non-emergency situations.
- 5.9** Local communication center personnel will serve as the communication leader until one is designated by the local incident commander in an emergency. Local communication center personnel will assign channel usage in non-emergency situations and will designate initial channel usage in an emergency situation until incident command is established.
- 5.10** Generally, mutual aid channels are used in situations where multiple agencies are involved in a special event or common cause. The following are examples of proper use of mutual aid channels but are not exclusive of other appropriate uses.
- a. Working channels for multiple fire departments fighting a fire together
 - b. Coordination during a police chase through multiple jurisdictions where the agencies have no other communication links with each other
 - c. Communication during extended joint operations among multiple police agencies such as drug operations or civil unrest

- d. Coordination of an event during recovery operations after a disaster (e.g., a tornado) that requires local, state and federal officials to have a common communications link
- e. Any responder outside their own jurisdictional area needing assistance or needing to report to the local dispatch center.
- f. Coordination of multi-jurisdictional events involving mass casualties
- g. Coordination of multi-jurisdictional events involving hazardous materials

5.11 The following are examples of improper use of mutual aid channels, but are exclusive of other improper uses.

- a. Support of functions that are purely administrative in nature
- b. Use of a mutual aid channel as an extra working channel for a single public safety agency supporting a special event
- c. Use of a mutual aid channel as a surveillance channel among members of the same public safety agency
- d. Use of any mutual aid channel for paging

5.12 Assignment of mutual aid channels in an emergency situation that requires incident command will generally include assignment of channels to serve the communication needs of specific functions. An initial assignment of a staging channel by local dispatch may precede designation of other functional channels by incident command. For example, one channel will be designated by incident command as the Command Channel that is not used as a call channel. Other functions will be assigned a mutual aid channel as required by the event, such as:

- Law Enforcement
- Fire
- Emergency Medical Systems

6.0 Mutual Aid Requests, Use and Discontinuation

- 6.1** The following procedures will be followed when requesting, using, or discontinuing the use of shared communication systems:
- If an agency needs to talk to another agency with which they do not otherwise have communications, the agency representative notifies dispatch that they need to operate on a shared channel/talkgroup. Dispatch or the agency representative can determine the appropriate channel/talkgroup.
 - For an extended incident, the dispatcher is responsible for notifying the Nebraska Emergency Response Planning Committee (NERPC) Chairperson (or his/her designee) that an interoperability channel/talkgroup is in use.
 - When an agency is dispatched to a mutual aid incident, each agency dispatch center is responsible for notifying responders which interoperability channel(s)/talkgroup(s) are being used for the incident.
 - The Incident Commander determines when the interoperability channel(s)/talkgroup(s) are no longer required and notifies the appropriate dispatch center.
- 6.2** The following procedures shall be used when requesting, using, or discontinuing the use of shared communication systems:
- When an individual responder needs to interoperate with other agencies on their same shared system, the responder will notify their dispatch center. The dispatcher can then identify and designate an appropriate channel. Note that in cases where no dispatcher intervention is required, responders still notify dispatch that they are switching to a shared channel to maintain responder safety.
 - Notify dispatch when the interoperability channels/talkgroups are no longer required and announce the return to normal operations channels.
- 6.3** For extended incidents, the following procedures shall be used:
- The lead agency dispatcher notifies the Communications Coordinator (COMC)/Communications Unit Leader (COML)/designee that interoperability channels/talkgroups are in use.
 - Each agency's dispatch center tells additional en-route responders what interoperability channels are in use for the incident.
 - The Incident Commander determines when the interoperability channels are no longer required and notifies the appropriate dispatch center.

7.0 Problem Identification and Resolution

- 7.1** If there is a problem functioning on one of the shared communication systems, the agency will contact the appropriate system manager. The following general problem identification and resolution process will apply to a shared mutual aid system.
- Agencies using interoperable equipment should report any problems with the specific equipment to the designated PET Regional contact.
 - The PET Region will ensure effective resolution to problems that exist with interoperability resources.
- 7.2** During deployment, report problems with individual radios to the on-scene technician and/or Communications Unit Leader who is on the scene. During activation, report shared mutual aid system problems to the Communications Technician (COMT) or Communications Unit Leader/designee assigned to the incident/event who will follow established agency procedures to resolve the problem.
- 7.3** Following an incident, the following general problem identification and resolution processes apply to all shared systems:
- Report any problems with the shared system to the appropriate Point of Contact for the owning agency. The Point of Contact will be responsible for ensuring effective resolution to problems that exist with the shared system.
 - Report any unresolved problems with that system directly to the PET Region /Communications Unit Leader/designee. The PET Region/Communications Unit Leader/designee ensures effective resolution to the reported shared system problems.

8.0 Base Station Frequencies

Base stations will use the following frequencies:

VHF-H

- All VHF-H base stations will be simplex.
- VHF base stations must be planned in every region for a statewide coverage overlay.
- Frequencies:
 - VCALL – 155.7525 (transmit and receive), Tone 156.7
 - VTAC1 – 151.1375 (transmit and receive), Tone 156.7 (mobile use only)
 - VTAC2 – 154.4525 (transmit and receive), Tone 156.7
 - VTAC3 – 158.7375 (transmit and receive), Tone 156.7
 - VTAC4 – 159.4725 (transmit and receive), Tone 156.7

UHF

- With the exception of UTAC3, all UHF base stations will be simplex.
- UHF base stations must be planned for coverage along Interstate 80 throughout Nebraska, all areas south of the Interstate and in areas where UHF is of predominant use.
- Frequencies:
 - UCALL – 453.2125 (transmit and receive), Tone 156.7
 - UTAC1 – 453.4625 (transmit and receive), Tone 156.7
 - UTAC2 – 453.7125 (transmit and receive), Tone 156.7
 - UTAC3 – 453.8625 (transmit), 458.8625 (receive), Tone 156.7 (optional repeater)
 - UCALLD – 458.2125 (transmit and receive), Tone 156.7
 - UTAC1D – 458.4625 (transmit and receive), Tone 156.7 (mobile use only)
 - UTAC2D – 458.7125 (transmit and receive), Tone 156.7 (mobile use only)
 - UTAC3D – 458.8625 (transmit and receive), Tone 156.7

800Mhz

- With the exception of the calling channel (8CALL), 800 base stations will be duplex (repeated).
- 800 base stations must be planned for coverage along Interstate 80 throughout Nebraska and in areas where 800 is of predominant use.
- Frequencies:
 - 8CALL Transmit 851.0125, Receive 806.0125, Tone 156.7 (NPSPAC Ch. 601)
 - 8TAC1 Transmit 851.5125, Receive 806.5125, Tone 156.7 (NPSPAC Ch. 639)
 - 8TAC2 Transmit 852.0125, Receive 807.0125, Tone 156.7 (NPSPAC Ch. 677)
 - 8TAC3 Transmit 852.5125, Receive 807.5125, Tone 156.7 (NPSPAC Ch. 715)
 - 8TAC4 Transmit 853.0125, Receive 808.0125, Tone 156.7 (NPSPAC Ch. 753)

9.0 Equipment Requirements

- 9.1** Base station equipment will be narrowband, simplex and analog. (Note exception above for UHF and 800Mhz.)
- 9.2** Base station equipment must have Ethernet interface.
- 9.3** Base station equipment will be, at minimum, 100 watt and continuous duty.
- 9.4** Antennas will be gain and of commercial quality with 7/8 inch coaxial cable used in installation.
- 9.5** Communications Centers controlling base station equipment must have IP based consoles or the Paraclete™ application available.
- 9.6** Mutual aid base stations shall be co-located with the planned regional broadband network project wherever possible.

10.0 Roles and Responsibilities

- 10.1** The local PSAP/dispatch will be in control of their mutual aid base station.
- 10.2** Incident command authorities will be established for coordination.
- 10.3** The PSAP will monitor the use and control of the mutual aid channels when monitoring an event.
- 10.4** VHF/UHF/800 will be in non-repeat mode until activated to repeat by the local PSAP.
- 10.5** Repeater operation for UHF and 800 MHz will be in “knocked down” mode on the Calling Channel.
- 10.6** Decide dispatch-to-dispatch calling on simplex stations. (This may be used as a redundant low common denominator means of communicating regionally between dispatch centers.)
- 10.7** The OCIO holds licenses for mutual aid frequencies and will issue letters of authorization for frequency channel assignment.
- 10.8** The OCIO coordinates with local/regional officials on tower facilities and PSAP connectivity. Local jurisdictions will provide tower information and supporting documentation as required to demonstrate eligibility.
- 10.9** User training will be provided regionally on the use of the calling channel and TAC channels. User organizations are responsible for training about the proper use of the mutual aid system and these SOPs.
- 10.10** Interoperability governance structure will support user/dispatcher input for ongoing development.
- 10.11** Jurisdictions and regions may adopt use policies that support the intended use for these shared frequencies. Written agreements are encouraged that establish written guidelines or instructions for incident response. Operational agreements should be the focus, but also agreements that support technical maintenance of the mutual aid resources.

11.0 Mutual Aid Heavy Traffic Conditions

- 11.1** When a dispatcher or an incident commander feels that excessive non-essential radio traffic is impacting dispatch operations or incident operations, the incident commander or dispatcher will make a radio traffic restriction announcement on the appropriate talk group(s). A typical radio traffic restriction announcement would be, "All subscribers with non-essential radio traffic, stay off the air."
- 11.2** An alternate agency or interoperable talk group can be assigned by dispatch for non-incident related communications.
- 11.3** When the condition is over, the dispatcher or incident commander will broadcast a message announcing resumption of normal radio traffic conditions.

12.0 Gateway Procedures

12.1 General Procedures

- 12.1.1** “Gateway” systems interconnect channels of disparate systems (whether on different frequency bands or radio operating modes), allowing first responders using their existing radios and channels to be interconnected with the channels of other users outside of their agency. Dispatch consoles that are able to create patches will also be captured as gateways.
- 12.1.2** On a day-to-day basis, dispatch centers will coordinate with one another to establish any needed patch. The fixed site gateway dispatch center will establish the patch and announce on the air that it has been established. If the patch includes the primary dispatch channel of the neighboring jurisdiction, traffic should be minimal and the patch maintained only as long as required to resolve the incident.
- 12.1.3** Agency representatives must be aware that multiple gateway activations in support of an incident can result in mutual interference. Interference issues are best resolved by the technical support team assigned to the gateways. No other Gateway activation will be authorized for activation without prior approval from the Incident Dispatch Center. The following information is provided by the requesting agency at the time of an activation request:
- User’s agency
 - On-scene agencies requiring interoperability
 - Reason for request/type of event
 - Equipment required
 - Expected duration of event
 - User/requestor and/or servicing dispatch contact phone number
- 12.1.4** The Communications Unit Leader and/or Incident Commander must be aware that activating multiple gateways to support an incident can result in mutual interference. Interference issues are best resolved by the technical support team assigned to the gateways.
- 12.1.5** The agency requesting the use of a fixed or mobile gateway device for incident/event communications support should document and provide the following information to the owning gateway agency Point of Contact, on request:

- Requesting agency
- On-scene agencies requiring interoperability
- Incident/event type (e.g., wild land fire, etc.)
- Equipment required
- Expected duration of event
- Location required/access information
- Incident Point of Contact
- User/requestor and/or servicing dispatch contact phone number
- Additional support services requested (e.g., gateway operator, generator, etc.)

12.2 Region-wide Gateway Deployment Procedures

12.2.1 Upon receiving a request for the deployment of a mobile gateway, the owning agency dispatcher should follow these deployment procedures:

- Contact the on-call mobile gateway operator/technician responsible for mobile gateway deployment.
- Dispatch the mobile gateway operator to the incident scene.
- Inform the requesting agency that the mobile gateway is en route and provide an estimated time of arrival (ETA), if available.

12.2.2 The mobile gateway operator should follow these deployment procedures:

- Provide dispatch with an ETA at the incident and method of communications while en route (e.g., designated radio channel, cell number).
- Retrieve the dedicated unit and mobile gateway from its storage location and deliver it to the incident scene
- Report to the Incident Commander or Check-in on arrival.
- Once on-scene, establish patches via the mobile gateway in accordance with the Gateway Activation Procedures listed below.

12.3 Region-wide Gateway Activation Procedures

12.3.1 The Incident Commander will determine when a situation exists that requires use of a regional interoperability resource and notifies the appropriate dispatch center. The primary agency dispatch center must determine which interoperability resource will best support the needs of the incident. Should the center determine that a mobile gateway is

required, the dispatch center will follow the following procedures to contact the mobile gateway owning agency Point of Contact and relay pertinent information regarding the event:

- Notify the On-duty Shift Supervisor in the Communications Center.
- The On-duty Shift Supervisor will contact the local Emergency Manager or Communications Department Director.
- The Emergency Manager or Communication Department Director will make the request via established emergency notification to the mobile gateway agency Point of Contact.
- This request will be validated by the owning agency Point of Contact.
- The following information is provided by the requesting agency to the Mobile Gateway Agency Point of Contact at the time of an activation request:
 - User's agency
 - On-scene agencies requiring interoperability
 - Reason for request/type of event (i.e., IED, WMD, etc.)
 - Equipment required
 - Expected duration of event
 - Location required/access information
 - Incident point of contact
 - User/requestor and/or servicing dispatch contact phone number

12.3.2 The gateway owning agency coordinates the deployment by providing the contact information for the gateway to the Incident Commander or their designee. The gateway owning agency will provide an estimated response or activation time, which will be relayed to the dispatch center of the agency having jurisdiction over the event and the Incident Commander.

12.3.3 The mobile gateway will then be sent to the incident scene. The requesting Agency will staff and maintain the gateway through the duration of the event.

12.3.4 The gateway owning agency will follow their deployment procedures. On a day-to-day basis, dispatch centers will coordinate with one another to establish any needed patch. The fixed site gateway dispatch center

will establish the patch and announce on the air that it has been established. If the patch includes the primary dispatch channel of the neighboring jurisdiction, traffic should be minimal and the patch maintained only as long as required to resolve the incident.

- 12.3.5** Agency representatives must be aware that multiple gateway activations in support of an incident can result in mutual interference. Interference issues are best resolved by the technical support team assigned to the gateways. No other gateway activation will be authorized for activation without prior approval from the Incident Dispatch Center.

The following information is provided by the requesting agency at the time of an activation request:

- User's agency
- On-scene agencies requiring interoperability
- Reason for request/type of event
- Equipment required
- Expected duration of event
- User/requestor and/or servicing dispatch contact phone number

- 12.3.6** Once the owning agency grants authorization to use their fixed gateway, the region-wide procedures for establishing communications connectivity are:

- Select a channel or talkgroup on the home system for use in the gateway patch.
- Verify the system-wide availability of required resources (coordinate among control point dispatchers).
- Provide radio call sign/designator information to connected agencies as needed.
- Assign the requested unit/agency to that channel or talkgroup.
- Connect the agency to the appropriate talkgroup.
- Announce to users that interoperability is activated.
- Identify users on the interoperability channel using their agency name and unit identifier through a roll call.
- Monitor the interoperability channel to address requests.

12.4 Region-wide Gateway Deactivation Procedures

- 12.4.1** When the interoperable communications connection is no longer required, agencies should follow these deactivation procedures:
- The requesting agency/user or Incident Commander where the incident occurred shall contact their dispatcher and request that the patch be deactivated
 - The dispatcher shall make an announcement on the interoperable channel or talk group indicating that the connection will be deactivated prior to the connection being disabled
 - All personnel shall return to their appropriate home system channel assignment
- 12.4.2** Participating agencies are responsible for returning the portable radios provided during the operation. When the interoperable communications connection is no longer required, agencies should follow these deactivation procedures:
- The Communications Unit Leader or Incident Commander shall contact the operator of the gateway to inform them that the gateway connections are no longer required
 - The dispatcher shall be notified by the Communications Unit Leader or Incident Commander to make an announcement on the interoperable channel(s) or talk group(s) indicating that the connection will be deactivated prior to the connection being disabled
 - All personnel shall return to their appropriate home system channel assignment
- 12.4.3** The Communications Unit Leader will follow their established deactivation procedures. They will make an effort to:
- Ensure agencies retrieve portable radios
 - Take inventory of equipment and note any needing repair or replacement
- 12.4.4** When the gateway connection(s) is (are) no longer required, agencies should follow these deactivation procedures:
- Contact the monitoring dispatcher (for fixed gateways) or the mobile gateway operator (for mobile gateways) to request patch/gateway deactivation.

- Announce over all patched channels/talkgroups that connections will be deactivated prior to the connection being disabled.
- Return all personnel to their appropriate home system channel assignments.

12.5 Region-wide Gateway Problem ID and Resolution

12.5.1 During an incident:

- Report gateway problems to the owning agency dispatcher (for fixed gateways) or mobile gateway operator (for mobile gateways), who will follow established agency procedures to resolve the problem.

12.5.2 Following an incident, the following general problem identification and resolution processes apply to all regional gateways:

- Report any problems with the gateway to the appropriate Point of Contact for that agency. The Point of Contact will be responsible for ensuring effective resolution to problems that exist with the gateway.
- Report unresolved gateway problems directly to the PET Region [Communications Coordinator/Communications Unit Leader/designee]. The PET Region [Communications Coordinator/Communications Unit Leader/designee] ensures effective resolution to reported gateway problems.
- Report any unresolved problems with 1) the Statewide Radio System to the Technical Operations Center (TOC); 2) the Mutual Aid System to the Regional Point of Contact; 3) Paraclete™ to Regional Point of Contact 4) the Nebraska Regional Interoperability Network (NRIN) to Regional Point of Contact.

12.6 Region-wide Gateway Limitations

Interoperability provided through a gateway can connect participating agency responders but has the following limitations:

- Agency representatives must be aware that multiple gateway activations in support of an incident can result in mutual interference. Interference issues are best resolved by the technical support team assigned to the gateways. No other Gateway activation will be authorized for activation without prior approval from the Incident Dispatch Center.

- The number of simultaneous patches that can be supported by the gateway will be limited by switch capacity and the number of lines connecting control centers and consoles. As a result, a limited number of patches involving resources at different control points can be supported simultaneously. Likewise, a limited number of patches involving resources that are accessed through a communications center console may be supported simultaneously.
- Home system coverage may limit communications. Gateway users must be within the footprint of their coverage area.
- Never assume that encryption carries across the gateway.
- Agencies not permanently configured on a given gateway will require additional planning to establish interoperable communications through that gateway.
- All system functionalities may not be supported in a gateway environment, i.e., emergency button, User ID.

12.7 Region-wide Gateway Test Procedures

To ensure that equipment components of the gateway operate properly, each agency will participate in the following testing procedure:

- Representatives from multiple agencies should meet on a regular basis to test each gateway.
- Each agency should participate in regular testing as established by agreement of the agencies.
- Testing should include deployment (mobile only), setup, operation, and deactivation of each gateway.
- If an issue or problem is identified during the testing procedure, determine who will take corrective action. If the issue or problem cannot be resolved, contact the appropriate technical personnel to address the issue or problem.
- Twenty-five percent of all gateway connections will be tested quarterly by the agency owning the gateway.

13.0 Controls and Measures:

- 13.1** Subscriber organizations and guest organizations have primary responsibility for enforcing these SOPs within their own agency or organization. If a subscriber or guest organization has failed to resolve improper use of the mutual aid system, NCOR will take action pursuant to these SOPs.
- 13.2** The State OCIO will adopt a resolution to arbitrate in the event that problems or conflict occurs in the use of mutual aid resources. The OCIO will attempt to resolve problems with local officials directly. In the event the problem cannot be resolved, the Nebraska Council of Regions will arbitrate the issue..
- 13.2** A managing agency may limit, restrict or revoke the privileges of a subscriber, at the request of the subscriber organization employing that subscriber.
- 13.3** The managing agencies, will notify the designated representative of the subscriber organization when they detect excessive, improper or inappropriate usage of the mutual aid system. The managing agency will provide documentation of the use as requested by the agency.
- 13.4** Subscribers, subscriber organizations, management staff and management organizations not following Mutual Aid SOPs may be subject to disciplinary action by NCOR as follows: (1) A letter of censure; (2) having the privileges of an subscriber limited, restricted or revoked, or (3) having the privileges of the subscriber organization limited, restricted or revoked.
- 13.4.1** NCOR may only take action under this section based on violation of Mutual Aid protocols and standard operating procedures, not for violation of agency specific policies.
- 13.4.2** NCOR shall follow its By-Laws when taking action to issue a letter of censure, limit, revoke or restrict privileges.
- 13.5** Actions authorized by section 13.4 shall only occur after the subscriber organization is notified in writing of the alleged violation of SOPs and has had an opportunity to respond to NCOR. The subscriber organization shall have 15 calendar days to respond to the allegations.
- 13.6** Actions authorized by section 13.4 shall only be taken at the direction of NCOR, except in the event of an emergency. A system emergency is an event or activity involving the mutual aid system that poses a significant risk to the integrity or operation of the radio system.

- 13.6.1** In the event of a system emergency, if possible, the technical support organization identifying the system emergency should first notify the subscriber agency of the situation and give it a reasonable opportunity to correct the problem.
- 13.6.2** If a system emergency threatens to cause the mutual aid system to fail, the regional managing organization(s) may take immediate, temporary action to limit, restrict or revoke the privileges of operations staff or a subscriber organization. Such emergency action shall be limited to action necessary to preserve the system operation. It shall be limited to affect the fewest subscribers necessary to preserve the mutual aid system during the emergency situation and limited in duration to the minimum time necessary to address the situation.
- 13.6.3** The system emergency and response shall be brought before NCOR at the earliest opportunity, together with documentation showing the basis of the system emergency and justifying the response. The chairman of the NCOR Council may modify any temporary emergency actions until the matter can be heard by NCOR, if the problem has been adequately addressed.
- 13.7** Users that do not follow these SOPs will be referred to management in their agency or organization for appropriate personnel actions.
- 13.8** Vendor personnel not following these SOPs will be referred to their management for appropriate action.