Tactical Interoperable Communications (TIC) Plan



Adopted: 9/17/2019 Version 7

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This document establishes a Tactical Interoperable Communications (TIC) Plan for the Southwest Region. The TIC Plan is intended to document what interoperable communications resources are available within the Southwest Region, who controls each resource, and what rules of use or operational procedures exist for the activation and deactivation of each resource.



Section 1 Region Information

1.1 Overview

This TIC Plan has been created for the Southwest Region. The Southwest Region is defined to include (Archuleta County, Southern Ute Indian Tribe, La Plata County, San Juan County, Montezuma County, Ute Mountain Ute Indian Tribe, and Dolores County.

The seventeen (17) reporting jurisdictions in the Southwest Region are as follows:

- Archuleta County
- City of Cortez
- City of Durango
- City of Pagosa Springs
- City of Towaoc
- Dolores County
- La Plata County
- Montezuma County
- San Juan County
- Southern Ute Indian Tribe
- Town of Bayfield
- Town of Dove Creek
- Town of Dolores
- Town of Ignacio
- Town of Mancos
- Town of Rico
- Town of Silverton
- Ute Mountain Ute Indian Tribe

Southwest Regional Communications Committee (SWRCC) approved the appointment of Phil Campbell, as the Point of Contact (POC) and the Plan Administrator.



This TIC Plan is intended to apply to the Southwest Region as defined above. Specifically, the plan is intended to be used by the first responder disciplines that would respond to the scene of an emergency, as well as coordinate with other disciplines during the response. These include:

- Emergency Management
- Emergency Medical Services
- Fire Service
- Hazardous Materials Teams
- Health Care
- Law Enforcement
- Public Health
- Public Safety Communications
- Public Works
- School Districts
- Transportation
- Radio Amateur Civil Emergency Service

1.2 Included Agencies

The agencies represented in the TIC Plan are included in Appendix A.1 and A.2

1.3 TIC Plan Point of Contact

The primary point of contact (POC) that can be reached for questions regarding the plan is:

Name: Phil Campbell Title: SWRCC Chair

Address: 221 Turner Drive, Durango, CO 81301
Phone: (O) 970-375-4629, (C) 970-759-4326
E-Mail: phil.campbell@durangogov.org



Section 2 Governance

2.1 Overview

This TIC Plan has been developed under the authority of the SWRCC and Senate Bill 06-237.

There are four existing Sub-committees of the SWRAHAC.

- Communications
- Surge Capacity
- Training and Exercise
- Southwest Law Enforcement Group

The SWRCC shall provide all governance and coordination for the development and implementation of this TIC Plan.

2.2 Membership

Appendix A.2 provides POC information on members of the governing body.

2.3 Responsibilities of Southwest Region Governing Body

The governing body will hold the following responsibilities:

- Establishing and managing interoperable communications working groups.
- Maintaining and updating this TIC Plan.
- Adopting final solutions and direct implementation.
- Establishing training requirements in support of this TIC Plan.
- Creating chains of command for interoperable communications including trained Communications Unit Leaders.
- Executing Memorandum of Understanding and Sharing Agreements for interoperable communications.

2.4 Meeting Schedule

The governing body will have regular meetings on every other third Tuesday of the month at the Emergency Communications Center in Durango, CO at 1000 hours.



2.5 Agency Responsibilities and Rights

- Agencies will retain the following rights and responsibilities:
- Agencies are responsible for agreeing to and complying with Memorandum of Understanding / Agreements developed by the Governing Body.
- Agencies agreeing to this plan have the authority to request use of systems in accordance with Standard Operating Procedures (SOPs). Dispatch agencies and emergency communications centers of participating agencies have the authorization to request use of the systems.
- Where applicable, agencies will be responsible for maintaining, testing and exercising connectivity to interoperable communications systems.
- Agencies retain the right to decide when and where to participate in interoperable communications. For example, agencies will retain the right to accept or decline a patch to a gateway system to provide interoperable communications during an incident.

2.6 Regional Authority for Coordination and Assignment of Interoperability Assets

The region authorizes the Incident or Area Command and Emergency Operations Center (EOC) to coordinate and assign interoperability assets. The role and authority will be formalized in the Memorandum of Understanding and Sharing Agreements for interoperable communications executed by the Governing Body and agreed to by participating agencies. A central authority for the coordination of these assets better ensures the most appropriate resources can be assigned for a particular incident. Additionally, a central authority helps prioritize and coordinate resources when large scale incidents or multiple emergencies have occurred. The Regional Interoperability Coordination in the Southwest Region Area will be shared by organizations within the Southwest.

The appointed Regional Interoperability Coordinators will keep others apprised of what interoperability assets are in use at any given time.

When the same resources are requested for two or more incidents, the Area Command / Emergency Operations Center will prioritize resource assignment based on the priority levels below:

- 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.

If there are multiple incidents to resolve contention within the same priority, the channel should go to the organization with the wider span of control/authority. This shall be determined by the Area Command or the EOC or by the levels of authority/government identified in the contention.



Section 3 Interoperability Equipment

3.1 Swap Radio

"Swapping radios" refers 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. This allows all responders to use a common, compatible set of radios during an incident. Specific caches within the region and more detailed information on each radio cache are documented in Appendix B.

3.2 Shared Channel

"Shared channels" refer to common frequencies or channels (such as those of a participating agency) that have been established and are programmed into radios to provide interoperable communications among agencies. Specific shared interoperable communications channels available within the region and more detailed information on each channel is documented in Appendix C.

3.3 Gateway

"Gateway" systems interconnect channels of different systems (whether on different bands or modes), allowing first responders to use their existing radios and channels to be interconnected with the channels of other users outside of their agency. Specific gateway systems available for use within the region and more detailed information on each gateway are provided in Appendix D.

3.4 Shared System

"Shared systems" refers to the use of a single radio system infrastructure to provide service to most Public Safety agencies within a region. Details on each system are provided in Appendix E.

3.5 Communications Vans/Command Vehicles

Communications Vans/Command Vehicles listed in the Southwest Region

Type (Van, box truck)	Location	Capabilities (VHF, UHF, 800, etc.)	Management
Motor Home, 30 '	545 Wilson Gulch Drive, Durango, CO	VHF/800MHz- 2 base Units, VHF - Portable Units	Durango Police Department
Van Boxed Truck	742 Turner Drive, Durango, CO	VHF – 3 Base Units, 1 Portable Aircraft Band, 800Mhz- 1 Base Unit	La Plata County Sheriff's Department
Van Boxed Truck, 32'	742 Turner Drive, Durango, CO	VHF – 3 Base Units, 1 – Base Unit AM Aircraft Band, UHF – 1 800MHz – 2 Base	La Plata County Sheriff's Department



Section 4 Policies & Procedures for Interoperable Equipment

4.1 Swap Radios

4.1.1 Cache Provider Responsibilities

For a radio cache to be an effective shared resource, it should have the following characteristics:

- Be fully charged and maintained, ready for deployment at all times.
- Include extra charged batteries for extended deployments.
- Available personnel to transport the radios to the incident scene.
- Available technicians for on-scene support during the deployment.
- Check-out and tracking procedures are used during the incident to ensure the radios are properly returned to the cache following the incident.

All VHF radio caches are required to have the following channels programmed

Frequency Receive	Frequency Transmit	PL Tone	Description
155.475	155.475	CSQ	vLaw31
154.280	154.280	1.567	vFire21
154.265	154.265	1.567	vFire22
154.295	154.295	1.567	vFire23



All UHF radio caches are required to have the following channels programmed

Frequency Receive	Frequency Transmit	PL Tone	Description
169.925	164.9375	167.9	Wolf Creek Pass
451.175	451.175	146.2	La Plata Electric Association
461.050	466.050	179.9	ВР

All 800MHz radio caches are required to have the following channels programmed

Southwest Regional Interoperability Channel (SWRIC A)	Simplex 1 – Law enforcement
Southwest Regional Interoperability Channel (SWRIC B)	Simplex 2 – Fire
Southwest Regional Interoperability Channel (SWRIC C)	Simplex 3 – EMS
Southwest Regional Interoperability Channel (SWRIC D)	Simplex 4 – Non Public Safety
Mutual Aid Channel 13 Southwest (M13SW)	Simplex 5 – Non Public Safety
Mutual Aid Channel 14 Southwest (M14SW)	
Mutual Aid Channel 15 Southwest (M15SW)	
Mutual Aid Channel 16 Southwest (M16SW)	
Mutual Aid Channel 21 State Wide (M21SW)	



4.1.2 Radio Cache Rules of Use

- National Incident Management System Use of an Incident Command System compliant with the National Incident Management System is required
 for use of any regional interoperability resource.
- Plain language All Communications shall be in plain language. Radio codes, acronyms and abbreviations are to be avoided as they may cause confusion between agencies. Additionally, it should be understood that plain words such as "help", "assistance", "repeat" and "back-up" may have different operational meanings to different agencies. The word "Help" should not be used alone unless in the context of a life-threatening situation. Requests for assistance or backup should clarify the reason for the request.
- Unit Identification Agency name or identifier shall precede unit identifier.

4.1.3 Interoperable Communications Request

- A. The Incident Commander will determine when a situation exists that requires use of a regional interoperability resource and notify Area Command / EOC.
- B. The Area Command / EOC having jurisdiction over the location of the incident follow internal agency procedures to contact other resource entities and relay pertinent information regarding the event.
- C. 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.
 - Expected duration of event.
 - User/requestor and/or servicing dispatch contact phone number.



- D. In the event that the agency activates its own radio cache, the Area Command / EOC is notified and provided the above information.
- E. The Area Command / EOC determine what regional interoperability resources are available for use and identifies a specific resource.
- F. The Area Command / EOC coordinate the deployment by providing the contact information for the radio cache to the Incident Commander or their designee.

4.1.4 Radio Cache Activation

- A. Each resource entity 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.
- B. The radio cache will be sent to the incident scene along with fully charged spare batteries and/or battery eliminators.
- C. Each radio in the radio cache will have a unique identification number for inventory tracking.
- D. Incident Command will be responsible for keeping a list for the incident of each user to whom a radio has been distributed, the agency of the user and the identification number of the radio(s) provided to that individual, and frequency/channel of use.
- E. Each user and/or agency that has received a radio from the radio cache will be responsible for the return of that radio to the cache at the end of the incident.

4.1.5 Radio Cache Deactivation

- A. The Incident Commander will determine when the regional interoperability asset is no longer required.
- B. The Incident Commander or Logistics Section Chief will be responsible for coordinating the return of cache radios to the resource entity.
- C. At the end of the incident, Incident Command will be responsible for inventorying all radios returned to the cache. Before leaving the incident scene, the Incident Command will determine if any radios have not been returned to the radio cache and note the user and/or agency to which



the radio was distributed. This information will be provided to the Incident Commander or Logistics Section Chief. If the missing radios cannot be recovered at the incident scene, the Incident Command will provide this information to the Area Command / EOC for resolution.

4.1.6 Problem ID and Resolution

- A. Agencies using radio caches may report any problems with the specific radio cache to the Southwest Regional Communications Committee. See Appendix A for Point of Contact information for the SWRCC.
- B. The SWRCC will be responsible for ensuring effective resolution to problems that exist with interoperability resources.
- C. During deployment, problems with individual radios will be reported to the Incident Command.

4.2 Shared Channels: Mutual Aid Channels

The procedures in section 4.2 apply to the VHF and 800MHz Mutual Aid channels as shown in Appendix C

4.2.1 Definitions

Back-up Network Control Center -- The back-up Network Control Center (NCC) is normally the Regional Communications Center (RCC).
 Each RCC is responsible for a multi-county area that comprises dispatch jurisdiction of multiple primary NCCs. Each back-up NCC is responsible for monitoring the appropriate MAC but defers to the respective primary NCC for initial responses. RCCs have not been established at this time

4.2.2 Overview of Mutual Aid (MA) Channel Use

- **vFIRE** are VHF radio frequencies that is used throughout the Southwest Region for mutual aid responses and on-scene communication. Primarily used by Fire and EMS Departments, will also be utilized by all agencies responding during a large scale operation.
- **vLAW** are VHF radio frequencies that is used throughout the Southwest Region for mutual aid responses and on-scene communication. Primarily used by Law Enforcement, will also be utilized by all agencies responding during a large scale operation.



• Mutual Aid Channel 13 Southwest (M13SW) This is a 800 MHz radio frequency that is used throughout the Southwest Region for mutual aid responses and on-scene communication.

4.2.3 Rules of Use

The Mutual Aid Channels in the region will be reserved for inter-communication in situations requiring the coordination of multiple public safety entities. They shall not be used for administrative or intra-agency communications unless so directed during a major emergency disaster situation.

- Examples of Proper Use of the Mutual Aid Channels:
- As working channels for multiple fire departments fighting a fire together.
- For coordination during a police chase through multiple jurisdictions where the agencies have no other communications link with each other.
- For communications during extended joint operations between multiple police agencies such as drug operations, riots, etc.
- For coordination during recovery operations after a disaster such as a flood when local, state, and federal officials require a common communications link.
- Examples of Improper Use of the Mutual Aid Channels:
- To support the administrative functions of a fire department which has a mutual aid agreement with an adjacent fire department to provide "move up" capability when a fire unit leaves its own coverage area.
- To provide an extra working channel for a public safety agency supporting a special event.
- To provide a surveillance channel for use between members of the same public safety agency.
- Other rules of use:
- National Incident Management System Use of an Incident Command System compliant with the National Incident Management System is required for use of any regional interoperability resource.



- Plain language All communications shall be in plain language. Radio codes, acronyms and abbreviations are to be avoided as they may cause confusion between agencies. Additionally, it should be understood that plain words such as "help", "assistance", "repeat" and "back-up" may have different operational meanings to different agencies. The word "help" should not be used alone unless in the context of a life-threatening situation. Requests for assistance or backup should clarify the reason for the request.
- Unit Identification Agency name or identifier shall precede unit identifier.
- Cross-Patching or telephone patching is not allowed on any of the Mutual Aid channels; except in accordance with the state plan for disaster situations.

4.2.4 Procedures

This section contains the step by step process for use of Mutual Aid calling.

Mutual AID Calling Procedures

- 1. Mutual Aid channels shall be designated by the Incident Command/Area Command and/or EOC at the beginning of an incident.
- 2. 800MHz radio user may hail on 800MHz M13SW
- 3. It will be the responsibility of the Incident Command to respond to the unit that is calling.
- 4. If the primary Incident Command is unable to respond, the dispatch center in that local jurisdiction will respond. This will depend on every situation as determined on a case-by-case basis.
- 5. During an incident, M13SW shall be monitored at all times, 24 hours a day, 7 days a week by the Dispatch Centers.
- 6. For an extended incident, the Incident Command is responsible for notifying the Area Command and/or EOC that the mutual aid channel is in use.

M13SW Procedures

When a unit hails on M13SW and it is determined that a large-scale (or multi-cluster) mutual aid incident is going to take place or no other MAC channel is appropriate or available, the dispatcher will advise the units involved to select the designated channel for the incident and contact the Incident Command.

The Incident Command notifies Area Command/EOC and/or Dispatch once the assigned channel is no longer needed.

Direct (or talk-around) communications may be used when two or more units are in close proximity of each other.

For an extended incident, the Incident Command is responsible for notifying the Area Command and/or EOC that the mutual aid channel is in use.



State Assistance/Control Procedures

- 1. Assistance/control from the State Regional Communications Center (RCC) may be requested under the following conditions:
 - a. The moving incident can no longer be operated or monitored by the originating agency and the primary NCC cannot hand over the incident to the successive primary NCC of the moving incident, or
 - b. The incident (moving or stationary) is such that it would benefit from assistance control of the RCC, or
 - c. Sufficient lead-time and briefing for the RCC is provided.
- 2. Given a, b, c above, the RCC will assume control of the mutual aid channel as the lead dispatcher throughout the remaining duration of the incident.
- 3. The RCC will enable and disable the mutual aid repeater as the moving incident moves in and out of the repeater areas (a.k.a., clusters).
- 4. The RCC may invoke "supervisory takeover" as the lead dispatcher, which will inhibit transmitting and repeater enable/disable by the primary NCC of each respective cluster.
- 5. Control handed over to the RCC will carry over to any and all successive NCC areas without the need to re-acquire control from successive NCC areas.
- 6. The RCC will relinquish control when mutually beneficial to the incident, the RCC, and primary NCCs.

Dispatchers / Incident Command

When monitoring mutual aid channels, if units are heard communicating and there is a question of authorization, the Incident Command / Dispatcher should request unit identification. If unauthorized communications are taking place, adjoining Commands/Dispatches should be called to identify the users. Officer safety may be compromised if the channel(s) are inadvertently disabled or otherwise altered. Follow-up activity by the Incident Command taking action should ensure future unauthorized use is mitigated.

4.2.5 Problem ID and Resolution

- A. The dispatch center having jurisdiction over the location of the incident reports any problems experienced to the SWRCC. See Appendix A for Point of Contact information for the SWRCC.
- B. The SWRCC will be responsible for ensuring effective resolution to problems that exist with interoperability resources.



4.3 Shared Channels: All Other Shared Channels

The procedures in this section apply to all other shared channels not addressed in section 4.2. See channels in Appendix C for more information on these mutual aid channels.

4.3.1 Shared Channels Rules of Use

The Mutual Aid Channels in the region will be reserved for inter-communication in situations requiring the coordination of multiple public safety entities. They shall not be used for administrative or intra-agency communications unless so directed during a major emergency disaster situation.

- 1. Examples of Proper Use of the Mutual Aid Channels:
 - a. As working channels for multiple fire departments fighting a fire together.
 - b. For coordination during a police chase through multiple jurisdictions where the agencies have no other communications link with each other.
 - c. For communications during extended joint operations between multiple police agencies such as drug operations, riots, etc.
 - d. For coordination during recovery operations after a disaster such as a flood when local, state, and federal officials require a common communications link.
- 2. Examples of Improper Use of the Mutual Aid Channels:
 - a. To support the administrative functions of a fire department which has a mutual aid agreement with an adjacent fire department to provide "move up" capability when a fire unit leaves its own coverage area.
 - b. To provide an extra working channel for a public safety agency supporting a special event.
 - c. To provide a surveillance channel for use between members of the same public safety agency.
- 3. Other rules of use:
 - a. National Incident Management System Use of an Incident Command System compliant with the National Incident Management System is required for use of any regional interoperability resource.
 - b. Plain language All communications shall be in plain language. Radio codes, acronyms and abbreviations are to be avoided as they may cause confusion between agencies. Additionally, it should be understood that plain words such as "help", "assistance", "repeat" and "back-up" may have different operational meanings to different agencies. The word "help" should not be used alone unless in the context of a life-threatening situation. Requests for assistance or backup should clarify the reason for the request.
 - c. Unit Identification Agency name or identifier shall precede unit identifier.



4.3.2 Shared Channel Procedures

- If an individual responder needs to talk to an agency with which they do not otherwise have communications, the responder notifies dispatch that they need to operate on one of the interoperability channels. Dispatch or the responder can determine the appropriate channel.
- For an extended incident, the dispatcher is responsible for notifying the Incident Commander that an interoperability or mutual aid channel is in use.
- When a responder is dispatched to an incident, the Incident Command is responsible for notifying responders what interoperability or mutual aid channels are being used for the incident.
- The Incident Commander determines when the interoperability or mutual aid channel(s) is (are) no longer required and notifies their dispatch center.
- The dispatch center having jurisdiction over the location of the incident notifies each responding agency that operations on the channel are ending.

4.3.3 Problem ID and Resolution

- The dispatch center having jurisdiction over the location of the incident reports any problems experienced to the SWRCC. See Appendix A for Point of Contact information for the SWRCC.
- The SWRCC Communications Sub-committee will be responsible for ensuring effective resolution to problems that exist with interoperability resources.



4.4 Fixed Site Gateways

This document provides guidance on use of the radio communication gateways for the Southwest Region to request interoperable communications between local, state, and federal agency commanders during emergency incidents. This standard operating procedure specifically addresses the interoperability of the gateway/interface located in the City of Durango, which acts as a control point to enable interoperable communications in the region.

4.4.1 Participating Agencies

Appendix D lists the agencies supported by each gateway device.

4.4.2 Fixed Site Gateway Communications Request

A radio user requiring direct communications with a user from a different agency shall follow their own agency's procedures for requesting connectivity. Typically, a user should request a patch by contacting their own agency's dispatcher.

The dispatch center having jurisdiction over the location of the incident follows internal agency procedures to contact the Incident or Area Command and EOC and relays pertinent information regarding the event.

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

- User's agency.
- Agencies or frequencies/talk groups to connect.
- Reason for request / type of event.
- Expected duration of event.
- User/requestor contact phone number.

In the event that the agency activates its own gateway, it provides the above information to the Incident or Area Command and EOC.

The Incident or Area Command and EOC determine what regional interoperability resources are available for use and identifies and activates a specific resource. For example, if a gateway is activated, the Incident or Area Command and EOC contact each Gateway Manager to activate that device.



The Incident or Area Command and EOC coordinate the deployment by providing the contact information for the gateway to the Incident Commander or their designee.

4.4.3 Fixed Site Gateway Activation

Once authorization has been granted from your agency, each agency should follow their internal procedures for activating the connectivity.

- A. Procedures for establishing communications connectivity include:
- B. Select a channel or talkgroup on your home system if necessary.
- C. Verify system-wide availability of required resources coordination among control point dispatchers.
- D. Provide radio call sign/designator information to connected agencies as needed.
- E. Assign the requested unit/agency to that channel or talkgroup.
- F. Utilize your agency's internal procedures for establishing a patch between the agencies.
- G. Contact the control point dispatcher to connect the agency to the appropriate talkgroup.
- H. Announce to users that interoperability is activated.
- I. Mark up on the interoperability channel using their agency name and unit identifier.
- J. Monitor the interoperability channel to address requests via dispatch for the jurisdiction.

4.4.4 Fixed Site Gateway Deactivation

When the interoperable communications connection or patch is no longer required, agencies should follow these deactivation procedures:

- A. The requesting agency/user or incident commander where the emergency event occurred shall contact their dispatcher so that the patch can be deactivated.
- B. If the connection does not include units from the control point dispatch jurisdictions, the requesting agency/user shall contact the control point dispatcher to deactivate the patch.
- C. The control point dispatcher shall make an announcement on the interoperable channel/talkgroup indicating that the connection will be deactivated prior to the connection being disabled.
- D. All personnel shall return to their appropriate home system channel assignments.



4.4.5 Fixed Site Gateway Rules of Use

The following rules of use shall govern interoperable communications between agencies:

- Connectivity between agencies shall only be requested for working emergency events as defined by the Southwest Region.
- Agencies will identify themselves by agency name and designated call sign/radio designator. (For example, if "505" from the FBI has requested communications with Durango Police Department personnel "PD 107", and a patch has been established, then "FBI 505" will call "Durango PD 107" on the designated channel/talkgroup).
- All radio traffic should be in plain language. The use of 10-Codes and specific agency acronyms is discouraged.
- All encrypted radio users will be required to work in the "clear" mode.
- During emergency events with multiple agencies, the designated incident commander may limit the interoperable channel/talkgroup to command level staff.
- The requesting agency's dispatcher should monitor the radio traffic between units and then advise the control point when the patch can be deactivated.

Note: The default policy will be that encrypted channels will not be used where non-encrypted channels are being interconnected with a gateway. This policy is necessary because interconnecting encrypted and non-encrypted channels on a gateway can compromise operations or allow sensitive information to be intercepted because it is difficult to ensure all encrypted channel users are aware of when there are interconnections to non-encrypted channels. An encrypted channel user can mistakenly believe that their communication is secure, when in fact the communication is being broadcast in the clear over a non-encrypted channel through a gateway connection.

4.4.6 Problem ID and Resolution

- A. The Gateway Manager reports any problems experienced during the deployment to the SWRCC following the incident. Agencies using gateways may also report any problems experienced. See Appendix A for Point of Contact information for the SWRCC.
- B. The SWRCC will be responsible for ensuring effective resolution to problems that exist with interoperability resources. The Gateway Manager immediately reports any problems with activation of the interconnects to the Incident or Area Commander and the EOC.



4.4.7 Fixed Site Gateway Limitations

The interoperability provided through the Gateway has the ability to link participating agencies but has the following limitations:

- The number of simultaneous patches that can be supported by the equipment will be limited by switch capacity and the number of lines connecting control centers and consoles. There are a maximum of eight frequencies that can be connected to one another by varying patches. 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. In addition, there are twenty-nine separate frequencies that can be manipulated manually into the maximum eight frequency bank.
- Home system coverage may limit communications. If agencies gain connectivity through the control point, agencies will only maintain interoperable communications when in their home system coverage area.
- Agencies not included in the list of participating agencies will require additional planning to establish interoperable communications: Agencies not
 included in the table cannot establish direct interoperable communications with the Gateway-connected agencies without additional planning.

4.4.8 Fixed Site Gateway Test Procedures

To ensure that equipment components of the interoperability solution are operating properly, specific selected agencies as designated by the communications manager will participate in the following testing procedure:

- A. A radio roll call will occur once a month on a predetermined date, time and channel/talkgroup. Mitigating circumstances allow for cancellation of the test.
- B. Each agency will enable the connectivity prior to the roll call.
- C. At the roll call the control point dispatch center will initiate roll call by contacting each agency by name.
- D. Each agency shall respond when called.
- E. Dispatch personnel shall document and maintain a check list of agency responses for each roll call.
- F. After the roll call list is complete, the control point dispatcher shall attempt to contact each non-responsive agency one additional time.
- G. The control point dispatcher will make an official announcement, via radio, that the test is complete.
- H. Each dispatcher will deactivate the connectivity after roll call is complete.



- I. Agencies that do not respond to the roll call will be contacted by the control point dispatcher by phone to attempt to identify any issues or problems that precluded their participating in the test.
- J. If the issue or problem can be identified, dispatch personnel should agree on who shall take corrective action. If the issue or problem cannot be identified, the control point dispatcher shall contact the appropriate technical personnel to address the issue or problem.

4.5 Mobile Gateways

This document provides guidance about how to request, deploy and use the mobile Gateways during emergency responses in the Southwest Region.

4.5.1 Participating Agencies

Appendix D lists the agencies supported by each gateway device.

4.5.2 Mobile Gateway Communications Request

When an emergency response event requires a mobile gateway to perform interoperable communications, a partnering agency representative shall follow their own agency's procedures for requesting equipment. Typically, a user should request a mobile gateway by contacting the agency's dispatcher, who will then contact the appropriate agency.

The dispatch center having jurisdiction over the location of the incident follows internal agency procedures to contact the Incident or Area Command and EOC and relays pertinent information regarding the event.

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

- User's agency.
- Agencies or frequencies/talk groups to connect.
- Reason for request / type of event.
- Expected duration of event.
- User/requestor contact phone number.

In the event that the agency activates its own gateway, the Incident or Area Command and EOC is notified and provided the above information.



The Incident or Area Command and EOC determine what regional interoperability resources are available for use and identifies and activates a specific resource. For example, if a gateway is activated, the Incident or Area Command and EOC contact the Gateway Manager to activate that device.

The Incident or Area Command and EOC coordinate the deployment by providing the contact information for the gateway to the Incident Commander or their designee.

4.5.3 Mobile Gateway Deployment Procedure

Upon receiving a request for the deployment of a mobile gateway, the following guidelines should be followed.

The <u>dispatcher</u> should follow these deployment procedures:

- Contact the on-call mobile gateway operator/technician responsible for mobile gateway deployment.
- Dispatch mobile gateway system to the incident scene.
- Inform the requesting user that the mobile gateway is en route.

The <u>mobile gateway operator</u> / designee should follow these deployment procedures:

- Respond to dispatcher with estimated time to retrieve mobile gateway and estimated time to arrive on the incident scene.
- Drive dedicated vehicle and mobile gateway to the incident scene.
- Report to the Incident Commander on arrival.



4.5.4 Mobile Gateway Activation

Mobile gateways may not be outfitted with agency radios before the event. Therefore, all agencies will be required to bring a portable radio and charger to connect to the mobile gateway for the length of the operation. Gateway managers will ensure appropriate cables exist for area radios. Setup and installation of all radios will occur on-scene.

The Radio Communications Unit Leader should follow these procedures:

- Require participating agencies to check in at the command post and provide portable radios and frequency/talkgroup channels for use during the incident.
- Assign radio call sign/designator information to connected agencies.
- Instruct mobile gateway operator on where to set up and operate the mobile gateway.
- Inform mobile gateway operator what agencies are participating.
- Provide mobile gateway operator with agency provided radios and frequency/talk group channels to be used during the incident.
- Confer with mobile gateway operator concerning what command level or other specific talkgroups that need to be programmed into the mobile gateway.

The mobile gateway operator should follow these procedures:

- Obtain agency radios and connect to the mobile gateway with associated cables.
- Select the channel or talkgroup assigned by the agency.
- Assign the requested unit/agency to that channel or talkgroup as designated by the Incident Commander.



4.5.5 Mobile Gateway Deactivation

When interoperable communications is no longer required, agencies should follow these guidelines. Participating agencies are responsible for retrieving the portable radio provided during the operation.

The Radio Communications Unit Leader should follow these deactivation procedures:

- Make an announcement on the command channel to all commanders to advise them the mobile gateway is being deactivated.
- Contact the mobile gateway operator to shut down the mobile gateway.

The mobile gateway operator should follow these deactivation procedures:

- Ensure agencies retrieve portable radios.
- Take inventory of equipment and note any item needing repair or replacement.
- Return to pre-response location and make mobile gateway ready for service.



4.5.6 Mobile Gateway Rules of Use

The following rules of use shall govern interoperable communications between agencies:

- Connectivity between agencies shall only be requested for working emergency events.
- Agencies will identify themselves by agency name and designated call sign/radio designator. (For example, if "505" from the FBI has requested communications with Durango Police Department "103" and a patch has been established, then "FBI 505" will call "Durango PD 103" on the designated channel/talkgroup).
- All radio traffic should be in plain language. The use of 10-Codes and specific agency acronyms is discouraged.
- All encrypted radio users will be required to work in the "clear" mode.
- Agencies are encouraged to work in the simplex mode.
- Interoperability is encouraged for command level personnel only.

Note: The default policy will be that encrypted channels will not be used where non-encrypted channels are being interconnected with a gateway. This policy is necessary because interconnecting encrypted and non-encrypted channels on a gateway can compromise operations or allow sensitive information to be intercepted because it is difficult to ensure all encrypted channel users are aware of when there are interconnections to non-encrypted channels. An encrypted channel user can mistakenly believe that their communication is secure, when in fact the communication is being broadcast in the clear over a non-encrypted channel through a gateway connection.

4.5.7 Problem ID and Resolution

- A. The Gateway Manager reports any problems experienced during the deployment to the SWRCC following the incident. Agencies using gateways may also report any problems experienced. See Appendix A for Point of Contact information for the SWRCC.
- B. The SWRCC will be responsible for ensuring effective resolution to problems that exist with interoperability resources. The Gateway Manager immediately reports any problems with activation of the interconnects to the Incident Commander and the Incident or Area Command and EOC.



4.5.8 Mobile Gateway Limitations

The interoperability provided through the mobile gateways has the ability to link participating agencies but has the following limitations:

- Battery life of portable radios limit time of use: Mobile gateways are designed to enable interoperable communications for short duration events or until a mobile command vehicle arrives. In the event that the mobile gateways will need to be used for an extended period of time, precautions such as an additional power supply, personal radio chargers, or other provisions should be considered.
- Home system coverage may limit communications: All units utilizing the mobile gateway should be operating in a simplex or non-repeated mode once they arrive on the scene and during emergency response operations. Access to repeaters of an agency's home system while en route to or while on the scene of the incident will be dependent on the coverage of their home system. Alternate methods of communication (e.g., frequency sharing, use of a cellular phone) may be required to communicate with your agency's home system if you are outside coverage of your home system. Mobile Gateway systems operating in repeated modes on-scene must follow Fixed Gateway rules in section 4.4.
- Interoperability connectivity needs to be planned in advance. For agencies to have interoperability on the scene of an incident they would need to have provided a portable radio in advance or provided one on scene of the incident.

4.5.9 Mobile Gateway Test Procedures

To ensure that equipment components of the interoperability solution are operating properly, each agency will participate in the following testing procedure:

- Representatives from each agency should meet on a regular basis to test the interoperability solution.
- Testing should include deployment, setup operation, and deactivation of the mobile gateway. Agency representatives should arrive at the test location to test their ability to communicate with other agencies utilizing the mobile gateway.
- If an issue or problem is identified during the testing procedure, personnel shall determine who will take corrective action. If the issue or problem can not be identified, personnel shall contact the appropriate technical personnel to address the issue or problem.



4.6 Shared Systems

4.6.1 Shared System Rules of Use

- National Incident Management System Use of an Incident Command System compliant with the National Incident Management System is required for use of any regional interoperability resource.
- Plain Language All communications shall be in plain language. Radio codes, acronyms and abbreviations are to be avoided as they may cause confusion between agencies. Additionally, it should be understood that plain words such as "help", "assistance", "repeat" and "back-up" may have different operational meanings to different agencies. The word "help" should not be used alone unless in the context of a life-threatening situation. Requests for assistance or backup should clarify the reason for the request.
- Unit Identification Agency name or identifier shall precede unit identifier.

4.6.2 Shared System Procedures

- If an individual responder needs to talk to an agency with which they do not otherwise have communications, the responder notifies dispatch that they need to operate on a shared channel/talkgroup. Dispatch or the responder can determine the appropriate channel/talkgroup.
- For an extended incident, the dispatcher is responsible for notifying the Incident or Area Command and EOC that an interoperability channel/talkgroup is in use.
- When a responder is dispatched to an incident, each agency dispatcher is responsible for notifying responders what interoperability channel(s)/talkgroup(s) is (are) being used for the incident.
- The Incident Commander determines when the interoperability channels/talkgroups is (are) no longer required and notifies their dispatch center.

4.6.3 Problem ID and Resolution

The agency having jurisdiction over the location of the incident reports any problems experienced to the SWRCC. See Appendix A for Point of Contact information for the SWRCC.

The SWRCC will be responsible for ensuring effective resolution to problems that exist with interoperability resources.



Section 5 Plans for Tactical Communications During an Incident

5.1 Event

The plan assumes a large magnitude event. The plan that has been laid out in this section addresses the need for interoperable communications on-scene in the first 12 hours of the incident response.

Although no amount of planning can address every possible outcome during an event, a plan for interoperable communications is expected to have the following benefits:

- The development of a plan builds an understanding of what resources could be applied to a general type of incident and what limitations exist.

 This knowledge can be applied during events as well as in the development of requirements for future interoperability systems that may be implemented by the region.
- By establishing the planned use for interoperable communication resources, agencies can train, equip or take other measures to ensure that personnel have access to the communication resources needed by their discipline.

5.2 Participating Functional Disciplines

In response to an event, the local and regional functional disciplines involved in the initial incident-scene response are expected to include:

- Fire
- Law Enforcement (Local and State)
- Emergency Medical Services
- Emergency Management
- Explosive Ordinance Disposal
- Hazardous Materials Teams
- Public Safety Communications
- Public Works
- Public Health
- Health Care
- School Districts
- Transportation
- Radio Amateur Civil Emergency Service



In addition to the local agencies above, State and Federal agencies may also be involved in the initial incident-scene response. The State and Federal agencies listed below have been provided copies of this plan. These State and Federal agencies will be invited to participate in the training and exercise activities related to this plan.

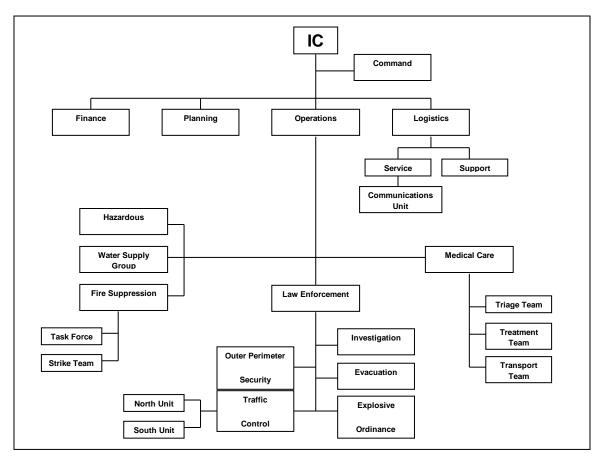
- Colorado Bureau of Investigation
- Colorado Department of Transportation
- Colorado DOC / Parole
- Federal Bureau of Investigation
- Federal Lands
- U.S. Federal Marshal's Service
- U.S. Probation
- U.S. Forest Service Law Enforcement
- Utility Companies



5.3 Incident Command Structure

Figure 5.3.1 shows a hypothetical Incident Command System structure that would be generally appropriate for the level of incident addressed by this plan.

Figure 5.3.1 Hypothetical Event ICS structure





5.4 Prioritizing Interoperable Communications

Because interoperable communications resources will be limited, a priority order must be established.

5.4.1 Priority Users

The incident commander will have the authority to apply resources as the Incident Action Plan requires. The following list should be considered as a possible priority order of uses for interoperable communications:

- Highest level of operational command
- Command Staff and General Staff
- Medical Care Group
- Fire Suppression Group
- Law Enforcement Branch
- Hospital Coordination
- School District Group
- Transportation Group
- Radio Amateur Civil Emergency Service Group

5.4.2 Priority Assignment of Mutual Aid Channels

If all applicable agencies share communications on a common frequency, or if a radio cache is being deployed to support the incident, frequency assignments will be directed by the Incident Commander.



5.5 Event Interoperable Communications Requirements

5.5.1 Highest Level of Operational Command

At the highest level of operational command, the Operations Section in this event will need interoperable communications among section members that could include Urban Search & Rescue, Fire Suppression, Law Enforcement and Medical Care. The Southwest Region has identified this as the most critical need for interoperability because of the diversity of agencies involved.

If the Incident Commander has not already ordered deployment of a radio cache and activation of any applicable fixed or mobile gateways, one of the first actions by the Operations Section Chief during an event must be to ensure this resource is requested through the Logistics Section Chief.

For the Operations Section Chief and applicable Group Supervisors, Branch Directors and Unit Leaders at the highest level of operational control, interoperable communications will be attempted in the following order:

- If responders at the highest level of operational control are users of a shared system, the shared system will be used to establish interoperable communications.
- If responders at the highest level of operational control do not have a common shared system, but operate on the VHF or 800MHz frequency bands, use of a mutual aid channel should be attempted to establish interoperable communications. The preferred mutual aid channel will be designated by the Incident Commander.
- If shared systems or common mutual aid channels above are not available to establish interoperable communications, a request should be made to make use of any gateway devices that can interconnect the disparate radio systems of the agencies involved at the highest level of operational command. Dispatch and the Incident or Area Command and EOC will identify any available resources.
- If no other method above is available, the Operations Section will wait for the arrival of the radio cache. When the radio cache arrives, the Communications Unit Leader shall distribute radios and use the channel assigned for the highest level of operational control.



5.5.2 Command Staff and General Staff Communications

In an incident, unless it is known that all responding agencies will be operating on the same shared communication system, the Incident Commander should immediately order deployment of a radio cache and activation of any applicable fixed or mobile gateways through dispatch. Dispatch will work with the Incident or Area Command and EOC to activate applicable resources.

Interoperable Communications will be attempted in the following order:

- Collocation of all Command and General Staff at the incident command post provide the best direct communications and reduces demand on interoperability resources.
- If the Command Staff and General Staff are users of a shared system, the shared system will be used to establish interoperable communications.
- If the Command Staff and General Staff do not have a common shared system, but operate on the VHF or 800MHz frequency bands, use of a mutual aid channel should be attempted to establish interoperable communications. The preferred mutual aid channel will be designated by the Incident Commander.
- If none of the methods above are available, a request should be made to make use of any gateway devices that can interconnect the disparate radio systems of the Command Staff and General Staff. Dispatch and the Incident or Area Command and EOC will identify any available resources. However, the highest level of operational command should be given first priority for available interoperable communications resources.
- If no other method above is available, the Incident Commander will wait for the arrival of the radio cache. When the radio cache arrives, the channel assigned will be used for the Command Staff and General Staff.
- If no other method of interoperability cannot be established, the Command Staff and General Staff will relay communications through staff members

5.5.3 Medical Care Group

The Medical Care Group may need interoperable communications resources for directing triage, treatment and transport efforts. Interoperable Communications will be attempted in the following order:

- If the Medical Care Group agencies are users of a shared system, the shared system will be used to establish interoperable communications.
- If the Medical Care Group agencies do not have a common shared system, but operate on the VHF or 800MHz frequency bands, use of a mutual aid channel should be attempted to establish interoperable communications. The preferred mutual aid channel will be designated by the Incident Commander.
- If none of the methods above are available, a request should be made to make use of any gateway devices that can interconnect the disparate radio systems of the Medical Care Group agencies. Dispatch and the Incident or Area Command and EOC will identify any available resources. However, priority for assignment of gateway resources should be followed as indicated in section 5.4.1.
- If cache radios are available for distribution, the channel assigned by the Incident Commander will be used for the Medical Care Group.



5.5.4 Fire Suppression Group

The Fire Suppression Group may need interoperable communications resources for directing fire suppression efforts. Interoperable Communications will be attempted in the following order:

- If the Fire Suppression Group agencies are users of a shared system, the shared system will be used to establish interoperable communications.
- If the Fire Suppression Group agencies do not have a common shared system, but operate on the VHF or 800MHz frequency bands, use of a mutual aid channel should be attempted to establish interoperable communications. The preferred mutual aid channel will be designated by the Incident Commander.
- If none of the methods above are available, a request should be made to make use of any gateway devices that can interconnect the disparate radio systems of the Fire Suppression Group agencies. Dispatch and the Incident or Area Command and EOC will identify any available resources. However, priority for assignment of gateway resources should be followed as indicated in section 5.4.1.
- If cache radios are available for distribution, the channel assigned by the Incident Commander will be used for the Fire Suppression Group.

5.5.5 Law Enforcement Branch

The Law Enforcement Branch may need interoperable communications resources for directing outer perimeter security, evacuation, explosive ordinance disposal, investigations, and traffic control efforts. Interoperable Communications will be attempted in the following order:

- If the Law Enforcement Branch agencies are users of a shared system, the shared system will be used to establish interoperable communications.
- If the Law Enforcement Branch agencies do not have a common shared system, but operate on the VHF or 800MHz frequency bands, use of a mutual aid channel should be attempted to establish interoperable communications. The preferred mutual aid channel will be designated by the Incident Commander.
- If none of the methods above are available, a request should be made to make use of any gateway devices that can interconnect the disparate radio systems of the Law Enforcement Branch agencies. Dispatch and the Incident or Area Command and EOC will identify any available resources. However, priority for assignment of gateway resources should be followed as indicated in section 5.4.1.
- If cache radios are available for distribution, the channel assigned by the Incident Commander will be used for the Law Enforcement Branch.

5.5.6 Hospital Coordination

EMS transport vehicles will use the channels assigned by the Incident Commander to communicate with hospitals and arrange for patient care.



5.5.7 School District Group

The School District Group may need interoperable communications resources for directing school district efforts. Interoperable Communications will be attempted in the following order:

- If the School District Group agencies are users of a shared system, the shared system will be used to establish interoperable communications.
- If the School District Group agencies do not have a common shared system, but operate on the VHF or 800MHz frequency bands, use of a mutual aid channel should be attempted to establish interoperable communications. The preferred mutual aid channel will be designated by the Incident Commander.
- If none of the methods above are available, a request should be made to make use of any gateway devices that can interconnect the disparate radio systems of the School District Group agencies. Dispatch and the Incident or Area Command and EOC will identify any available resources. However, priority for assignment of gateway resources should be followed as indicated in section 5.4.1.
- If cache radios are available for distribution, the channel assigned by the Incident Commander will be used for the School District Group.

5.5.8 Transportation Group

The Transportation Group may need interoperable communications resources for directing transportation efforts. Interoperable Communications will be attempted in the following order:

- If the Transportation Group agencies are users of a shared system, the shared system will be used to establish interoperable communications.
- If the Transportation Group agencies do not have a common shared system, but operate on the VHF or 800MHz frequency bands, use of a mutual aid channel should be attempted to establish interoperable communications. The preferred mutual aid channel will be designated by the Incident Commander.
- If none of the methods above are available, a request should be made to make use of any gateway devices that can interconnect the disparate radio systems of the Transportation Group agencies. Dispatch and the Incident or Area Command and EOC will identify any available resources. However, priority for assignment of gateway resources should be followed as indicated in section 5.4.1.
- If cache radios are available for distribution, the channel assigned by the Incident Commander will be used for the Transportation Group.



5.5.9 Radio Amateur Civil Emergency Service Group (RACES)

The Radio Amateur Civil Emergency Service (RACES) Group may need interoperable communications resources for directing all the support efforts. Interoperable Communications will be attempted in the following order:

- If the RACES Group agencies are users of a shared system, the shared system will be used to establish interoperable communications.
- If the RACES Group agencies do not have a common shared system, but operate on the UHF, VHF or 800MHz frequency bands, use of a mutual aid channel should be attempted to establish interoperable communications. The preferred mutual aid channel will be designated by the Incident Commander.
- If none of the methods above are available, a request should be made to make use of any gateway device that can interconnect the disparate radio systems of the RACES Group agencies. Dispatch and the Incident or Area Command and EOC will identify any available resources. However, priority for assignment of gateway resources should be followed as indicated in section 5.4.1.
- If cache radios are available for distribution, the channel assigned by the Incident Commander will be used for the RACES Group.

5.6 Communications Unit Responsibility

This section contains a plan for tactical use of interoperability resources during an incident. This is only a plan. The Communications Unit Leader has the responsibility to assign frequencies and equipment during an actual event, based on the circumstances, agencies involved and available resources. The Communications Unit Leader must be part of the planning process and determine the communications resources required to support the objectives and tactics of the Incident Action Plan, as it develops.



Section 6 NIMS Communications Unit Leader Training

6.1 Communication Unit Leaders (N/A)

The SWRCC recommends that each agency has trained Communications Unit Leader.

6.2 Interoperability Training Schedule

The SWRCC will meet and establish the training criteria and training calendar to support the Interoperation Communication Plan.

Training	Location	Date	Invitees
Communication Unit	Each County and Tribal Communication Center	Before November 1	Public Safety Communications Specialists
Shared Channels	Each County and Tribal agencies and Communication Centers	Before November 1	System Users
Fixed Site and Mobile Gateways	 Durango/La Plata County Emergency Communications Center City of Durango La Plata County Sheriff's Office Consolidated Emergency Communications Center of Archuleta County Archuleta County Sheriff's Department Pagosa Fire Protection District 	Before November 1	System Users
Shared Systems	N/A		

6.3 Certification

The Division of Homeland Security & Emergency Management or NWCG will provide a standard card to trained operational and technical interoperation communications support personnel indicating their level of training and capabilities for out of jurisdictional responses to area jurisdictions.



Appendix A

Governance Contacts

The region's points of contact for governance entities as well as any individuals appointed for regional coordination of interoperability resources.

Table A.1: Southwest Regional Tactical Interoperable Communications (TIC) Members

SOUTHWEST REGIONAL TIC MEMBERS

Name	Agency	Phone #	Fax #	<u>Email</u>
Benz, Bob	DigitCom Electronics	719-469-0193	719-384-7583	Bob.benz@digitcomelectronics.com
Brammer, Bob	Durango Police Department	970-375-4769	970-375-4718	bob.brammer@durangogov.org
Brockus, Don	Southern Ute Tribe OEM	970-749-7975		dbrockus@southernute-nsn.gov
Campbell, Phil	Durango Communication Center	970-375-4629	970-385-2908	phill.campbell@durangogov.org
Coley, Bruce	DigitCom Electronics	800-753-8553		bruce.coley@digitcomelectronics.com
Deming, Brett	Ft Lewis College Police	970-247-7491		Deming_b@fortlewis.edu
Driscoll, Adrian	Colorado State Patrol	970-385-1675		adrian.driscoll@state.co.us
Escude, Larry	Upper San Juan Health Services	970-731-5811	970-731-5813	larry.escude@pmedicalcenter.org
Harr, Kati	Consolidated ECC of Archuleta County	970-731-2160	970-731-2168	kharr@archuletacounty.org
Hoecker, Terry	City of Durango OEM	970-375-4739	970-375-4718	hoeckertl@ci.durango.co.us
Johnson, Lori	Cortez Communications Center	970-565-8441	970-565-3991	ljohnson@cityofcortez.com
Keesling, Keith	Dolores County OEM	970-769-0005		dcem@fone.net
Krupa, Mike	Durango Fire Protection District	970-382-6012	970-382-6018	krupamb@durangofirerescue.org
Le Roux, Mike	Archuleta County Sheriff's Office OEM	970-398-0612		mleroux@archuletacounty.org
Loven, Ron	Colorado State Patrol	970-240-7673		ronald.loven@state.co.us
Lowrance, Steve	San Juan County Sheriff's Office	970-387-5531		sjcsolowrance@aol.com
McIntyre, Joe	Bayfield Marshals Office	970-884-9636	970-884-6053	jmcintyre@bayfieldgov.org
McNamara, Tom	SW CO DHSEM Field Manager	970-749-7057		thomas.mcnamara@state.co.us
Miller, Andrew	Mercy Regional Medical Center	970-764-2169	970-764-2449	andrewmiller@centura.org
Montoya, David	Pagosa Fire Department	970-731-4191	970-731-4191	dmontoya@pagosafire.com
Morris, Kathleen	Durango School District 9-R	970-759-0681	970-247-8333	kmorris@durango.k12.co.us
Naranjo, Chris	Southern Ute Police Department	970-563-0246	X3306	cnaranjo@southernute-nsn.gov
Petty, Dave	Bear Communications	303-907-9011	720-904-5860	Dave.petty@bearcom.com

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Phillips, Kirk	Ignacio Police Department	970-563-4206	970-563-9498	kphillips@townofignacio.com
Ray, Dennis	Durango-La Plata County Airport	970-382-6079	970-247-8145	raydm@ci.durango.co.us
Reynolds, Jeff	Radio Systems Coordinator-Pueblo CO	719-583-6237	719-583-6218	reynoldsr@co.pueblo.co.us
Smith, Julie	Southern Ute Communications Center	970-563-0246	x3311	jusmith@southernute-nsn.gov
Spratlen, Jim	Southwest Incident Management Team	970-759-4253		Jim.swimt@gmail.com
Staby, Paul	Amateur Radio	970-259-7577		jpstaby@msn.com
Trocheck, John	Ute Mountain Ute Tribe/Public Safety	970-564-5441	970-564-5443	jtrocheck@utemountain.org
Vreeland, Roy	Upper Pine River Fire Department	970-769-7453		rvreeland@upperpinefdp.org
Wilson, Don	Dolores County Sheriff's Office	970-677-2257	970-677-2880	dwilson@fone.net



 Table A.2: Southwest Regional Communications Committee Executive Board Members

SOUTHWEST REGIONAL COMMUNICATIONS COMMITTEE (SWRCC)

Position	Name	Agency	Phone #	Fax#	Address
Chairman	Campbell, Phil	Durango Communication Center	970-375-4629	970-385-2908	phil.campbell@durangogov.org
Vice Chairman	Spratlen, Jim	Southwest Incident Management Team	970-759-4253		jim.swimt@gmail.com
Secretary	Morris, Kathleen	Durango School District 9-R	970-759-0681	970-247-8333	kmorris@durango.k12.co.us
Exec Director/FIRE	Le Roux, Mike	Archuleta County Sheriff's Office	970-398-0612		mleroux@archuletacounty.org
Exec Director/FIRE	Krupa, Mike	Durango Fire Protection District	970-382-6012	970-382-6018	krupamb@durangofirerescue.org
Exec Director/LE	Johnson, Lori	Cortez Communications Center	970-565-8441	970-565-3991	ljohnson@cityofcortez.com
Exec Director/LE	Driscoll, Adrian	Colorado State Patrol	970-385-1675		adrian.driscoll@state.co.us
Exec Director/OEM	Trocheck, John	Ute Mountain Ute Tribe/Public Safety	970-564-5441	970-564-5443	jtrocheck@utemountain.org
Exec Director/LE	Smith, Julie	Southern Ute Communications Center	970-563-0246	x3311	jusmith@southernute-nsn.gov
Exec Director/LE	Loven, Ron	Colorado State Patrol	970-240-7673		ronald.loven@state.co.us
Exec Director/OEM	Keesling, Keith	Dolores County OEM	970-769-0005		dcem@fone.net

Appendix B

Swap Radios

The table below lists the county, agency, quantity of gateways and type or each radio cache. The appendix section corresponding to each gateway is also listed.

Table B.1 – Index of Swap Radios (Radio Caches)

Appendix	Responsible Agency	Cache Name	Quantity	Туре
B.1.1	Archuleta County Sheriff's Office	Archuleta County IMG	6	XTS 1500 – 800 MHz
B.1.2	Durango Police Department	DPD VHF	10	VHF

Appendix C

Shared Channels

C.1.1 Primary Use

The Mutual Aid Channel 13 Southwest, is assigned for base station and mobile radio use under the following circumstances:

- During emergency situations in which a vehicle is out of its home area and unable to access the local dispatch center using the Primary Dispatch Communications channel/talkgroup of that area (mutual-aid communications);
- In isolated critical situations during which prolonged use of the Primary Dispatch Communications channel/talkgroup would not be feasible due to other primary dispatch communications traffic;
- When a common emergency channel is required for base/mobile and mobile/mobile communications among agencies in a region or in an adjacent region.

C.1.2 Notes

- In addition to the above uses, the channels may be used in the following situations:
- Multi-agency involvement in an emergency situation such as riots, civil unrest, hot pursuits, etc. for coordination, command and control via a single dispatch center.
- Individual agency loss of the primary dispatch channel.
- Limited portable radio use for surveillance and stake-out operations such that it does not cause interference to other agencies.
- Tactical communications in the event secondary use of a channel compromises its primary function for an extended duration.



Appendix D

Gateways

The table below lists the county, agency, type of gateway, quantity of gateways and an identification of whether the gateway is located at a fixed site or is mobile. The appendix section corresponding to each gateway is also listed.

Table D.1 – Index of Gateway Devices in the Southwest Region

Appendix	County	Agency	Quantity	Fixed/Mobile
Section				
D.1	La Plata County	Durango Police Department	1	Mobile
D.2	La Plata/Durango Emergency Communications Center	Communications Center	1	Fixed Interface
D.3	La Plata County	La Plata County Sheriff's Office	1	Mobile
D.4	Archuleta County - EOC	Archuleta County Sheriff's Office	1	Fixed
D.5	Archuleta County – EOC	Archuleta County Sheriff's Office	2	Mobile
D.6	Archuleta County	Pagosa Fire Protection District	1	Mobile



Appendix D.1: Durango Police Department - Gateway (Mobile)				
Location	Durango Police Department, 990 E. 2 nd Avenue, Durango, CC	Durango Police Department, 990 E. 2 nd Avenue, Durango, CO		
Responsible Agency	Durango Police Department			
Agency Contact	Bob Brammer			
Email	bob.brammer@durangogov.org			
Phone #	(970) 375-4			
24 hour #	(970) 385-2900			
Service Area	This gateway system is mobile and is readily available for de	ployment.		
Type and Capacity	This is a mobile gateway system that can support up to 5 act cellular phone involved in up to 2 interconnects. The system VHF radio, an MT1000 VHF radio and a XTS 2500 800MHz radio.	n contains a JT1000		
Participating Agencies	Agencies and channels supported on the particular gateway charts beside the gateway system.	system are posted on		

Appendix D.2: Durango - La Pla	Appendix D.2: Durango - La Plata Emergency Communications Center - Gateway (Fixed)			
Location	Durango – La Plata Emergency Communications Center			
Responsible Agency	Durango – La Plata Emergency Communications Center			
Agency Contact	Phil Campbell			
Email	phil.campbell@durangogov.org			
Phone #	(970) 385-2900			
24 hour #	(970) 385-2900			
Service Area	This gateway system is fixed and available for use throughou	it the frequency		
	range in the Southwest Region.			
Type and Capacity	This is a fixed gateway system that can support up to 32 acti	ve channels involved		
Type and capacity	in up to 4 interconnects.			
	Agencies and channels supported on the particular gateway	•		
Participating Agencies	involving all agencies listed in the SWRCC MOU. Lists of all these channels are			
	posted on charts beside the gateway system.			



Appendix D.3: La Plata County Sheriff's Office - Gateway (Mobile)			
Location	La Plata County Sheriff's Office, 742 Turner Dr., Durango, CO, 81303		
Responsible Agency	La Plata County Sheriff's Office		
Agency Contact	Frank Sandoval		
Email	frank.sandoval@co.laplata.co.us		
Phone #	(970) 769-1454		
24 hour #	(970) 769-1454		
Service Area	This gateway system is mobile and is readily available for de	ployment.	
Type and Capacity	This is a mobile gateway system that can support up to 16 a cellular phone involved in up to 8 interconnects. The system – CDM 1250 VHF radios, 1 each CDM 1250 UHF radio, and 2 800MHz radio with adaptors.	n contains three each	
Participating Agencies	Agencies and channels supported on the particular gateway system are numerous involving all agencies listed in the SWRCC MOU. The ability to interconnect 176 talk groups in the 800MHz system with 44 Channels in the VHF system is possible. Lists of all these channels are posted on charts beside the gateway system.		

Appendix D.4: Consolidated Emergency Communications Center of Archuleta County- Gateway (Fixed)			
Location	Archuleta County EOC, 777 County Road 600, Pagosa Springs, CO., 81147		
Responsible Agency	Archuleta County Sheriff's Office		
Agency Contact	Mike Le Roux – ECHO1 or Christina Kraetsch – ECHO2		
Email	mleroux@archuletacounty.org ckraetsch@archuletacounty.org		
Phone #	970-731-2160. Christina Kraetsch		
24 hour #	970-731-4799		
Service Area	This gateway system is fixed and available for use throughout the frequency range in the Southwest Region.		
Type and Capacity	This is a fixed gateway system that can support up to 8 active channels involved in up to 4 interconnects.		
Agencies and channels supported on the particular gateway system are numerous involving all agencies listed in the SWRCC MOU. The ability to interconnect 500 talk groups in the 800MHz system with 200 Channels in the VHF system is possible. Lists of all these channels are posted on charts beside the gateway system.			
Appendix D.5: Consolidated Emergency Communications Center of Archuleta County – Gateways (2) (Mobile)			





Location	Consolidated Emergency Communications Center of Archuleta County, 777		
	County Road 600, Pagosa Springs, CO., 81147		
Responsible Agency	Archuleta County Sheriff's Office		
Agency Contact	Mike Le Roux – ECHO1 or Christina Kraetsch – ECHO2		
Email	mleroux@archuletacounty.org ckraetsch@archuletacounty.org		
Phone #	Mike Le Roux 970-749-2439 Christina Kraetsch 805-403-0403		
24 hour #	970-731-4799		
Service Area	This gateway system is mobile and is readily available for deployment.		
Type and Capacity	This is a mobile gateway system that can support up to 5 active channels and 1 cellular phone involved in up to 2 interconnects. The system contains a no radios but has radio adaptors.		
Participating Agencies	Agencies and channels supported on the particular gateway system are posted on charts beside the gateway system.		

Appendix D.6: Pagosa Fire Protection District – Gateway (Mobile)			
Location	Pagosa Fire Protection District, 191 N. Pagosa Blvd, Pagosa Springs, CO		
Responsible Agency	Pagosa Fire Protection District		
Agency Contact	David Montoya		
Email	dmontoya@pagosafire.com		
Phone #	970-946-7455		
24 hour #	970-731-4191		
Service Area	This gateway system is mobile and is readily available for de	ployment.	
Type and Capacity	This is a mobile gateway system that can support up to 5 active channels and 1 cellular phone involved in up to 2 interconnects. The system contains no radios but has radio adaptors.		
Participating Agencies	Agencies and channels supported on the particular gateway charts beside the gateway system.	system are posted on	



Appendix E

Shared Systems - NA

Appendix E will contain information on all shared systems within the region. At the time of this document, there are no shared systems within the Southwest Region.

Appendix F

Communications Center Managers/Contacts

Table F.1: Communications Center Contacts/Managers

County	Agency	Contact	Email	Phone
Archuleta County	Consolidated Emergency Communications Center of Archuleta County	Kati Harr	kharr@archuletacounty.org	970-731-2160
Dolores County	Dolores county Sheriff's Department	Don Wilson	sheriff@fone.net	970-677-2257
La Plata County	Durango – La Plata Emergency Communications Center	Phil Campbell	phil.campbell@durangogov.org	970-385-2900
Montezuma County	City of Cortez Communications Center	Lori Johnson	ljohnson@cityofcortez.com	970-565-8441
San Juan County	Montrose Regional Communication Center	Ronald Loven	ronald.loven@state.co.us	970-249-4392
Southern Ute Indian Tribe	Southern Ute Communications Center	Julie Smith	jusmith@southern-ute.nsn.us	970-563-0100/3320
Ute Mountain Ute Indian Tribe	Ute Mountain Ute Indian Tribe	Larry Benally	larrybenally@bia.gov	970-565-3706



Appendix G

Regional Strategic Planning

G.1 Overview

This foundation for developing an expanded communications and interoperability regional strategic plan is based upon a commitment to partnerships. Through strong local, regional, and state emergency management and public safety partnerships this can become reality. State agencies, private industry, and local emergency management and public safety will all play significant roles in a regional strategic plan. Strategic planning will be based upon and driven primarily by local and regional goals and needs. Though our state agency and private industry needs are critical, this plan outline will focus on local and regional issues. As requirements, technology and local and regional needs evolve; the final plan developed will be regularly reviewed and updated.

The Southwest Regional Communications Committee (SWRCC) is a sub-committee of the Southwest Region All-Hazards Advisory Council, and is tasked with identifying regional cooperative and collaborative goals and developing a comprehensive plan to address interoperable communications solutions in the region.

G.1.2 Southwest Region Position Statement

The Southwest Regional Communications Committee (SWRCC) agrees that local emergency management and public safety communications should be managed at the local level with support from the region, as well as from state and federal agencies. Various communications systems can and shall coexist utilizing interoperability between existing systems such as Ultra High Frequency (UHF) and Very High Frequency (VHF) as well as newer digital technologies, to include the State of Colorado's 800 MHz Digital Trunked Radio (DTR) System.

It remains important to note the limitations as well as the benefits and advantages of UHF, VHF and DTR communications systems. In the future, DTR will provide the majority of communications interoperability in Colorado. Issues that may exist with DTR technology must be addressed prior to achieving successful implementation.

Through partnerships and cooperative, collaborative efforts at the local, regional, and state levels a shared redundant and integrated interoperable communications system can be developed, benefiting all user groups, as well as the public.



G.1.3 Critical Success Factors

To ensure success, the SWRCC continues an ongoing regional long-term communications needs assessment. The Southwest Region assessment shall periodically be reviewed, updated, and included as an annex to the final strategic plan. The assessment and strategic plan will focus on local and regional needs and goals, to include a comprehensive communications plan utilizing a regional communication center concept discussed in the Southwest Region Plan developed as a requirement of the Federal Emergency Management Agency (FEMA) 2002 Supplemental Planning Grant. The final Southwest Region assessment and strategic plan will also address the following:

- Commitment to long-term interagency participation.
- Establishment of long term funding options.
- Updated operational procedures and processes.
- Operational autonomy and flexibility.
- Development of long-term solutions regarding local, regional, state and federal interoperability.
- Identification and elimination of single points of failure in local, regional, and state DTR systems.
- Microwave systems within the region.
- Ongoing outreach and communication of project goals and risks.
- Ongoing development of Tactical Interoperable Communications (TIC) plan.
- Continued UHF/VHF/DTR interoperability with federal agencies.
- Integration within the guidelines of the National Incident Management System (NIMS), National Response Framework (NRF), and National Infrastructure Protection Plan (NIPP).
- Interoperability and gaps therein.

G.1.4 Planning for the Future

Radio communications is a critical and essential tool to all emergency management, public safety and public works service providers. A robust communications infrastructure is the primary goal of the Southwest Region and SWRCC's mission. The Southwest Region will continue to develop and update an all inclusive comprehensive needs assessment by which improved communications functionality and interoperability at all levels will be achieved.



G.2 Southwest Region Strategic Goals

The SWRCC has identified the following goals to incorporate existing communications infrastructure and the State of Colorado DTR system:

- Continue to integrate the statewide DTR system into all emergency management functions and public safety communications centers within the region.
- Continue to build the infrastructure to connect the five counties and two tribes in the Southwest Region via microwave, in support of expanded radio communications and data. This will necessitate expanding DTR functionality within the region by adding additional strategically placed DTR sites to benefit specific emergency communications needs.
- Ensure existing UHF/VHF systems and MAC channels are integrated into the region's communications system through available interoperable technology. The identified technology gateway must serve as a bridge between conventional and trunked systems. It is critical that the two systems, while bridged together, remain isolated to avoid failure of both; the failure of one system should not trigger the failure of the other.
- Continue discussions on the feasibility of developing Regional Communications Centers (RCC).
- Continue to update an auxiliary plan allowing for continued operation on critical communications center functions, including radio, phone, and 911 systems should evacuation or major disruption of technology service occur. The auxiliary plan shall include local secondary communications and emergency operations centers (EOC's) as well as the ability to transfer operations to another communications center.
- Continue to ensure first responder safety as a primary goal in the Southwest Region strategic plan outline and as technological transitions continue to occur and the SWRCC plan evolves.

In addition to the strategic goals listed above, the SWRCC has identified the following as necessary to complete this strategic plan outline:

- Promote "interoperability" as the ability to seamlessly communicate with any and all agencies in the region regardless of technology. Continue to develop communications systems to serve local day-to-day operational needs, as well as accommodating larger scale incidents.
- Maximize communications technology and funding for same by procuring the best system and coverage at the most competitive price by adhering to appropriate technological studies and regional needs assessments.
- Using a "ground up" approach, incorporate communications plans and strategies from every jurisdictional agency into the SWRCC plan, including the State of Colorado's plan
- Cooperate and collaborate with the State of Colorado Division of Information Technology (DOIT) to determine optimal DTR repeater sites, priorities, time-line strategies, and methods of connecting the various communications technologies.
- To aid in prioritization and funding, identify repeater sites that serve state, local and regional interests combined and those that serve singular interests.



- Include local and regional federal offices in SWRCC communications discussions to ensure the ability to communicate with those agencies will be maintained and enhanced.
- Update this planning document as needed so that it may be considered in the statewide plan.
- Continue to create effective communications links between communications centers in the Southwest Region to create redundancy without replacing current systems or technologies.
- Incorporate DTR technology into existing systems in areas where infrastructure installation and coverage can be accommodated, thus providing redundancy in the event one system goes down. An additional layer of interoperability will be provided by the separate technologies, enhancing incidents requiring large mutual aid response.

Maintain dual systems (DTR & UHF/VHF) in the Southwest Region for:

- Continuity of existing systems while transition to DTR occurs;
- Addressing differences in extreme geographical variations, as well as financial capabilities;
- Ensuring interoperability and redundancy for both short and long term;
- Continued communications capabilities with the region's three border states [Arizona, New Mexico, Utah] that do not and may not have DTR capability;
- Continued cooperation and collaboration with the State of Colorado to identify support of UHF/VHF systems and funding;
- It is recommended that all VHF radios within the region have the following specific radio channels programmed into each radio depending on the space in the radio.



Suggested Interoperability Channels for use in Southwest Colorado and their Priority of Importance for VHF, UHF, 800 and Dispatch

Priority	VHF	Rx/Tx	Tx cg
1	vFire 21	154.2800N	156.7
2	vLAW31	155.4750N	156.7
3	vFire 22	154.2650N	156.7
4	vFire 23	154.2950N	156.7
5	vCall10	155.7525N	156.7
6	vTac11	151.1375N	156.7
11	vMed 28	155.3400N	156.7

Priority	UHF	Rx/Tx	Tx cg
1	uCall40D	453.2125N	156.7
2	uTac41D	453.4625N	156.7
3	uTac42D	453.7125N	156.7
4	uTac43D	453.8625N	156.7

7	vTac12	154.4525N	156.7
8	vTac13	158.7375N	156.7
9	vTac14	159.4725N	156.7
10	HEAR	155.3400W	

Priority	700/800	Rx/Tx	Tx DCG
1	MAC 13	CO DTR	
2	STAC D	CO DTR	
3	MAC 14	CO DTR	
4	MAC 15	CO DTR	
5	MAC 16	CO DTR	
6	MAC 21	CO DTR	
7	8Call90D	851.0125N	659
8	8Tac91D	851.5125N	659
9	8Tac92D	852.0125N	659
10	8Tac93D	852.5125N	659
11	8Tac94D	853.0125N	659
12	7Fire63D	769.89375N	659
13	7Law61D	770.39375N	659
14	7Fire64D	769.99375N	659
15	SWRIC A	CO DTR	
16	SWRIC B	CO DTR	
17	SWRIC C	CO DTR	
18	SWRIC D	CO DTR	
19	Other CO MACs	CO DTR	
20	7Med65D	769.39375N	659

We will consider developing a strategy statement with communications committees in the West and Northwest regions to identify common goals and concerns with regards to communications on Colorado's Western Slope. With the spirit of cooperation and active participation in the decision process between the other Western Slope regions, this activity may lend a unified voice and stronger legislative effect to communications issues in common;

Should a cooperative Western Slope communications strategy statement evolve, we will build upon the 2002 FEMA Supplemental Planning Grant area and regional plans (Communications Section) to further develop physical strategies that could link Western Slope communications centers.

We will also continue to provide infrastructure and personnel training for Association of Public Safety Communication Officials (APCO) 25 compliant base systems.



G.3 Action Plan

- Continue to review and update the shared local and regional and statewide voice radio system while maintaining the integrity of existing local systems.
- Move decisively and responsibility as a region and continue to update the implementation of a shared local and regional and statewide
 emergency management and public safety voice radio system, consisting of multiple voice networks optimized to meet the requirements of the
 five participating counties and two tribes in the Southwest, as well as the needs of the State of Colorado.
- Continue to review and update the phased implementation of the DTR system in the Southwest Region.
- Maintain the SWRCC and work cooperatively with other regions and the State of Colorado.
- Coordinate and align the goals and strategies of the SWRCC with those of the adjacent regions.
- Maintain user agency administrative control. User agencies should retain responsibility for administrative control over their respective radio systems, while maintaining the goals and strategies of the SWRCC.
- The Southwest Region, its member counties and tribes, will continue to maintain membership and participation in appropriate communications user groups.
- Continue to update the existing communications Memorandum of Understanding (MOU) amongst participating agencies and disciplines within the Southwest Region.



Conclusion - Adoption

The Southwest Region All-Hazards Advisory Council will continue to work codensure the five counties and two tribes within the region maintain and impro	operatively with the Southwest Regional Communications Committee (SWRCC) to ove needed communications.
IN WITNESS WHEREOF, the parties of the Southwest Regional Communicatio Communication Plan for the Southwest Regional Communications Committe	ons Committee (SWRCC) have voted and have executed this Tactical Interoperable se (SWRCC).
Phil Campbell, Chairman of the SWRCC	Dated

