# South Dakota

## Statewide Communication Interoperability Plan (SCIP)

May 2014

OMB Control Number: 1670-0017
Date of Approval:
Date of Expiration:

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## EXECUTIVE SUMMARY

The South Dakota Statewide Communication Interoperability Plan (SCIP) is a stakeholder-driven, multi-jurisdictional, and multi-disciplinary statewide strategic plan to enhance interoperable and emergency communications. The SCIP is a critical mid-range (three- to five-years) strategic planning tool to help South Dakota prioritize resources, strengthen governance, identify future investments, and address interoperability gaps.

The purpose of the South Dakota SCIP is to:

- Provide the strategic direction and alignment for those responsible for interoperable and emergency communications at the State, regional, local, and tribal levels.
- Explain to leadership and elected officials the vision for interoperable and emergency communications and demonstrate the need for funding.
- Outline interoperability processes and procedures.

The following are South Dakota's Vision and Mission for improving emergency communications operability, interoperability, and continuity of communications statewide.

**Vision:** Reliable and available interoperable voice and data communications for all public safety and critical infrastructure responders.

**Mission:** Communications interoperability in South Dakota through:

- Development of recommendations for policies and guidelines
- Identification of technology and standards
- Coordination of intergovernmental resources
- Development of user awareness and capabilities

The following strategic goals represent the priorities for delivering South Dakota's vision for interoperable and emergency communications.

- Governance –
    - Collaborative decision making process
    - Established Public Safety Broadband Working Group
- Standard Operating Procedures (SOPs) –
    - Alignment of individual agency and local interagency SOPs with State radio system SOPs
    - State radio system SOPs integrated into interoperable communications training processes
- Technology –

  - Strategy for system build out, sustainment, or replacement of State radio system
  - Data collection consistent with State and Local Implementation Grant Program (SLIGP) requirements
  - Standardized interoperability channel programming requirements
- Training and Exercises –
  - Minimum standard established for end user training
  - Technical advisors/Communication Unit Leaders (COML)/ Communication Unit Technicians (COMT) incorporated into training exercises
  - Statewide Communication Unit (COMU) program
- Usage –
  - N/A
- Outreach and Information Sharing –
  - Enhanced outreach tools (e.g., website)
  - Public safety broadband outreach to first and second responders
- Life Cycle Funding –
  - State and local life cycle funding plans
  - Public/Private partnerships for public safety broadband participation

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# 1. INTRODUCTION

The South Dakota Statewide Communication Interoperability Plan (SCIP) is a stakeholder-driven, multi-jurisdictional, and multi-disciplinary statewide strategic plan to enhance interoperable and emergency communications. The SCIP is a critical mid-range (three to five years) strategic planning tool to help South Dakota prioritize resources, strengthen governance, identify future investments, and address interoperability gaps. This document contains the following planning components:

- Introduction – Provides the context necessary to understand what the SCIP is and how it was developed.
- Purpose – Explains the purpose/function(s) of the SCIP in South Dakota.
- State's Interoperable and Emergency Communications Overview – Provides an overview of the State's current and future emergency communications environment and defines ownership of the SCIP.
- Vision and Mission – Articulates the State's three- to five-year vision and mission for improving emergency communications operability, interoperability, and continuity of communications at all levels of government.
- Strategic Goals and Initiatives – Outlines the strategic goals and initiatives aligned with the three- to five-year vision and mission of the SCIP and pertains to the following critical components: Governance, Standard Operating Procedures (SOPs), Technology, Training and Exercises, Usage, Outreach and Information Sharing, and Life Cycle Funding.
- Implementation – Describes the process to evaluate the success of the SCIP and to conduct SCIP reviews to ensure it is up-to-date and aligned with the changing internal and external environment.
- Reference Materials – Includes resources that provide additional background information on the SCIP or interoperable and emergency communications in South Dakota or directly support the SCIP.

Figure 1 provides additional information about how these components of the SCIP interrelate to develop a comprehensive plan for improving interoperable and emergency communications.

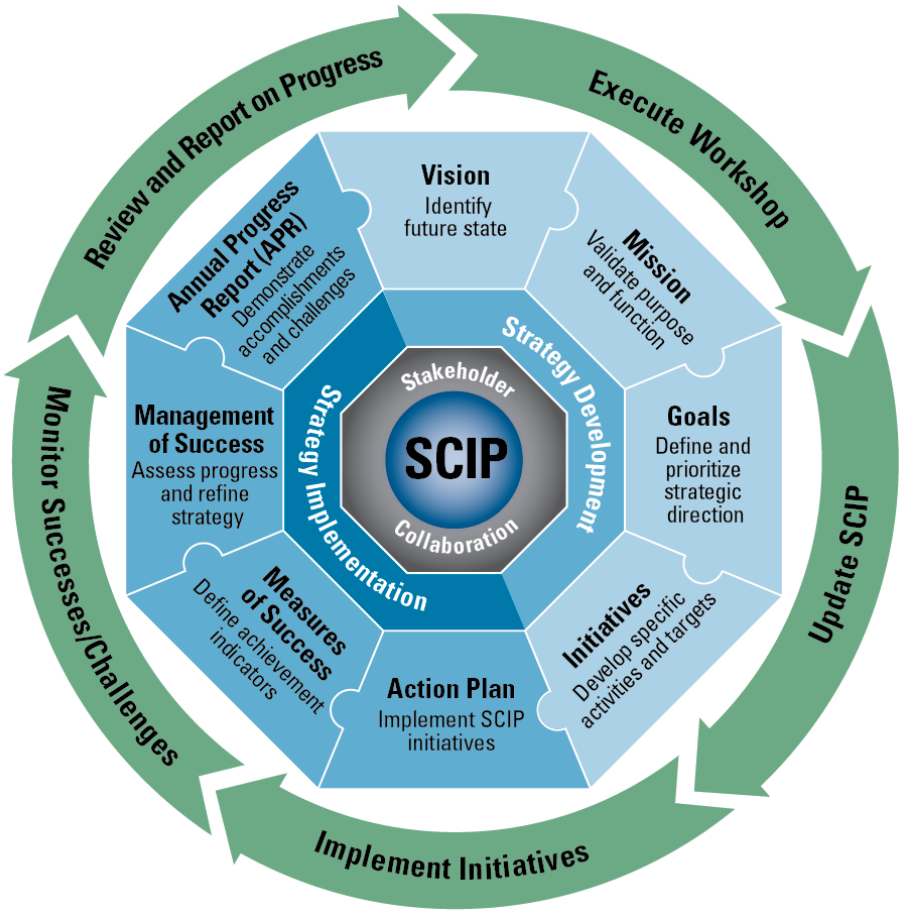



**Figure 1: SCIP Strategic Plan and Implementation Components**

The South Dakota SCIP is based on an understanding of the current and mid-range interoperable and emergency communications environment. South Dakota has taken significant steps towards enhancing public safety emergency communications for emergency responders operating within its borders. The State began the process of upgrading its infrastructure in 1999, with the caveat that the system would be available to all levels of government, regardless of their affiliation. After a review process, a digital trunked radio system operating on very high frequency (VHF) high band was selected, and in September of 2001 construction was initiated.

On October 23, 2002, the South Dakota Interagency Communications System was made available for use by any governmental agency in South Dakota with public safety ties. The current system consists of 54 tower sites across the state networked to a controller located in Pierre. "Roaming" is allowed between sites with the use of intelligent radios and networking. Roaming allows the user to traverse the State without losing communications, and the system allows individual agencies to maintain private communications with agency "talkgroups". The digital aspects of the system allow for clear communications over 98% of the geographic area of the State.

However, more remains to be done to achieve South Dakota's vision. It is also important to note that this work is part of a continuous cycle as South Dakota will always

need to adapt to evolving technologies, operational tactics, and changes to key individuals (e.g., Governor, project champions). In the next three- to five-years, South Dakota will encounter challenges relating to operability, interoperability, geography, aging equipment/systems, emerging technologies, changing project champions, and sustainable funding.

Wireless voice and data technology is evolving rapidly and efforts are underway to determine how to leverage these new technologies to meet the needs of public safety. For example, the enactment of the Middle Class Tax Relief and Job Creation Act of 2012 (the Act), specifically Title VI, related to Public Safety Communications, authorizes the deployment of the Nationwide Public Safety Broadband Network (NPSBN). The NPSBN is intended to be a wireless, interoperable nationwide communications network that will allow members of the public safety community to securely and reliably gain and share information with their counterparts in other locations and agencies. New policies and initiatives such as the NPSBN present additional changes and considerations for future planning efforts and require an informed strategic vision to properly account for these changes. Figure 2 illustrates a public safety communications evolution by describing the long-term transition toward a desired converged future.

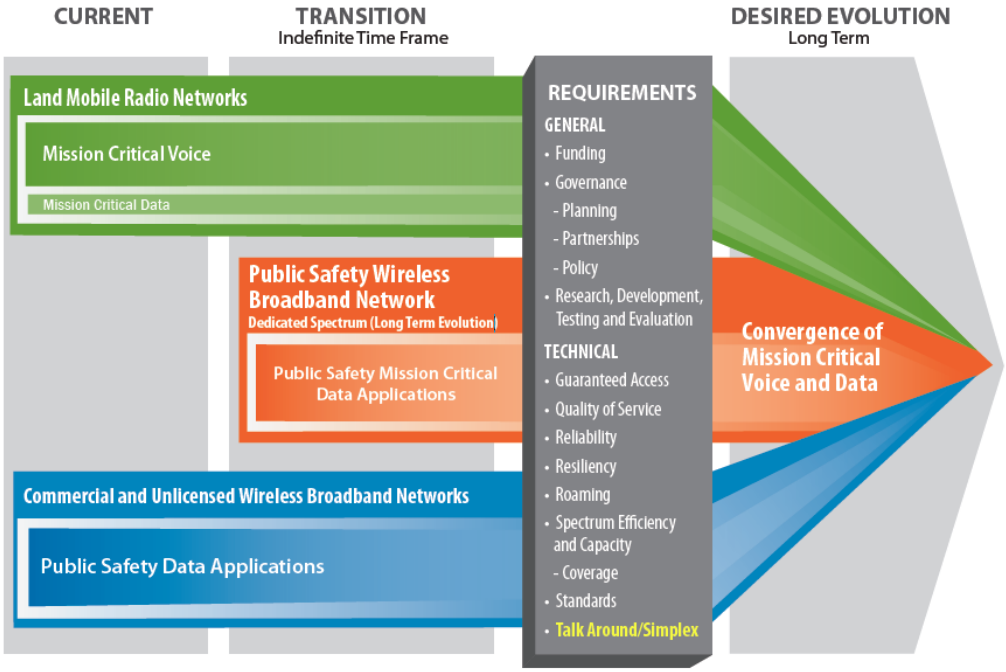



**Figure 2: Public Safety Communications Evolution**

Integrating capabilities such as broadband provide an unparalleled opportunity for the future of interoperable communications in South Dakota. It may result in a secure path for information-sharing initiatives, Public Safety Answering Points (PSAP), and Next Generation 911 (NG911) integration. However broadband will not replace existing Land Mobile Radio (LMR) voice systems in the foreseeable future due to implementation factors associated with planning, deployment, technology, and cost. A cautious approach to this investment is needed. Therefore, robust requirements and innovative

business practices must be developed for broadband initiatives prior to any implementation.

There is no defined timeline for the deployment of the NPSBN; however, South Dakota will keep up-to-date with the planning and build-out of the NPSBN in the near and long term in coordination with the First Responder Network Authority (FirstNet). FirstNet is the independent authority within the National Telecommunications and Information Administration (NTIA) and is responsible for developing the NPSBN, which will be a single, nationwide, interoperable public safety broadband network. The network build-out will require continuing education and commitment at all levels of government and across public safety disciplines to document network requirements and identify existing resources and assets that could potentially be used in the build-out of the network. It will also be necessary to develop and maintain strategic partnerships with a variety of stakeholder agencies and organizations at the national, State, regional, local, and tribal levels and design effective policy and governance structures that address new and emerging interoperable and emergency communications technologies. During this process, investments in LMR will continue to be necessary and in the near term, wireless data systems or commercial broadband will complement LMR. South Dakota has assigned their Statewide Interoperability Coordinator (SWIC) as the single point of contact (SPOC) and assigned the governance responsibility to the South Dakota Public Safety Communications Council (SDPSCC). More information on the role of these two technologies in interoperable and emergency communications is available in the Department of Homeland Security (DHS) Office of Emergency Communications (OEC) Public Safety Communications Evolution brochure.[1]

Additionally, achieving sustainable funding in the current fiscal climate is a priority for South Dakota. As State and Federal grant funding diminishes, States need to identify alternative funding sources to continue improving interoperable and emergency communications for voice and data systems. Key priorities for sustainable funding in South Dakota are:

1. Improving coverage in areas underserved by the statewide system
2. Updating site equipment - Current equipment is 11 years old
3. Continuing updates of subscriber equipment with goal of full Project 25 (P25) trunking statewide (network control has been updated but not sites)
4. Providing the 20% State match for the State and Local Implementation Grant Program (SLIGP) of the NPSBN

More information on a typical emergency communications system life cycle, cost planning, and budgeting is available in OEC's System Life Cycle Planning Guide.[2]

The Interoperability Continuum, developed by SAFECOM and shown in Figure 3, serves as a framework to address all of these challenges and continue improving operable/interoperable and emergency communications. It is designed to assist emergency response agencies and policy makers with planning and implementing interoperability solutions for voice and data communications.

[1] OEC's Public Safety Communications Evolution brochure is available here: http://publicsafetytools.info/oec_guidance/docs/Public_Safety_Communications_Evolution_Brochure.pdf
[2] OEC's System Life Cycle Planning Guide is available here: http://publicsafetytools.info/oec_guidance/docs/OEC_System_Life_Cycle_Planning_Guide_Final.pdf

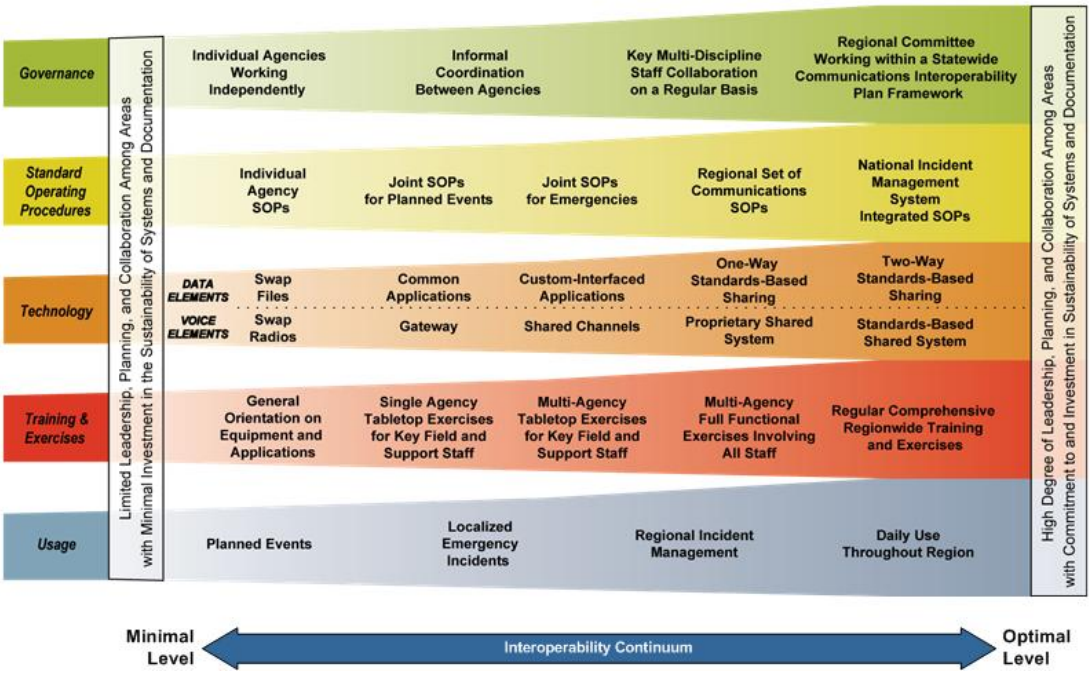



**Figure 3: The Interoperability Continuum**

The Continuum identifies five critical success elements that must be addressed to achieve a successful interoperable communications solution:

- Governance – Collaborative decision-making process that supports interoperability efforts to improve communication, coordination, and cooperation across disciplines and jurisdictions. Governance is the critical foundation of all of South Dakota's efforts to address communications interoperability.
- SOPs – Policies, repetitive practices, and procedures that guide emergency responder interactions and the use of interoperable communications solutions.
- Technology – Systems and equipment that enable emergency responders to share voice and data information efficiently, reliably, and securely.
- Training and Exercises – Scenario-based practices used to enhance communications interoperability and familiarize the public safety community with equipment and procedures.
- Usage – Familiarity with interoperable communications technologies, systems, and operating procedures used by first responders to enhance interoperability.

More information on the Interoperability Continuum is available in OEC's Interoperability Continuum brochure.[3] The following sections will further describe how the SCIP will be used in South Dakota and South Dakota's plans to enhance interoperable and emergency communications.

[3] OEC's Interoperability Continuum is available here: http://www.safecomprogram.gov/oecguidancedocuments/continuum/Default.aspx

## 2. PURPOSE

The purpose of the South Dakota SCIP is to:

- Provide the strategic direction and alignment for those responsible for interoperable and emergency communications at the State, regional, local, and tribal levels.
- Explain to leadership and elected officials the vision for interoperable and emergency communications and demonstrate the need for funding.
- Outline interoperability processes and procedures.

The development and execution of the SCIP assists South Dakota with addressing the results of the National Emergency Communications Plan (NECP) Goals and the Federal government with fulfilling the Presidential Policy Directive 8 (PPD-8)[4] National Preparedness Goal for Operational Communications.[5]

In addition to this SCIP, South Dakota will develop an Annual Progress Report (APR) that will be shared with OEC and other stakeholders to highlight recent accomplishments and demonstrate progress toward achieving the goals and initiatives identified in the SCIP. More information on the SCIP APR is available in Section 6.4.

This SCIP is owned and managed by the SWIC and SDPSCC. The SDPSCC has the authority to and is responsible for making decisions regarding this plan. The SDPSCC is also responsible for ensuring that this plan is implemented and maintained statewide. The South Dakota SCIP was developed by a group of first responder peers from all disciplines and all areas across the State. That representative process will continue, as the SDPSCC will assume responsibility for the review and update of the plan, per by-laws of the council. An annual review is mandated, and suggested changes will be reviewed and changes will be considered at each scheduled SDPSCC meeting. All changes will be updated on the SDPSCC website.

[4] PPD-8 was signed in 2011 and is comprised of six elements: a National Preparedness Goal, the National Preparedness System, National Planning Frameworks and Federal Interagency Operational Plan, an annual National Preparedness Report, and ongoing national efforts to build and sustain preparedness. PPD-8 defines a series of national preparedness elements and emphasizes the need for the whole community to work together to achieve the National Preparedness Goal. http://www.dhs.gov/presidential-policy-directive-8-national-preparedness.

[5] National Preparedness Goal – Mitigation and Response Mission Area Capabilities and Preliminary Targets – Operational Communications: Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.

1. Ensure the capacity to communicate with the emergency response community and the affected populations and establish interoperable voice and data communications between Federal, State, and local first responders.
2. Re-establish sufficient communications infrastructure within the affected areas to support ongoing life-sustaining activities, provide basic human needs, and transition to recovery.

## 3. STATE'S INTEROPERABLE AND EMERGENCY COMMUNICATIONS OVERVIEW

The SDPSCC was created in March of 2007 through an Executive Order signed by the Governor. The SDPSCC is an oversight council with the mission to improving interoperable communications in the State. Represented on the council are all groups utilizing the statewide network and include:

- South Dakota Police Chief's Association
- South Dakota Sheriff's Association
- Division of Criminal Investigation, Office of the Attorney General
- South Dakota Game, Fish, and Parks
- South Dakota Department of Transportation
- South Dakota National Guard
- South Dakota Emergency Managers Association
- South Dakota Fire Fighters Association
- South Dakota Association of Healthcare
- South Dakota Department of Public Safety/Highway Patrol
- South Dakota Association of Public Safety Communications Officials (APCO)/National Emergency Number Association (NENA) Chapter
- South Dakota Emergency Medical Technician (EMT) Association
- South Dakota Department of Agriculture/Wildland Fire
- South Dakota Association of County Commissioners
- South Dakota Department of Health
- Tribal Government or tribal government association
- Federal Government or Federal government association
- South Dakota Bureau of Information and Telecommunications (BIT) Engineering Manager

This group has assumed responsibility for this plan, defines priorities for grant funding, and updates the protocols within this document annually.

Beginning in 2002, the South Dakota Interagency Communications System was made available for use by any governmental agency in South Dakota with public safety ties. This communications system replaced several State systems and allowed access to local agencies that had migrated to systems and spectrum outside of that used by State agencies. As part of the process over 3,000 radios for State users and over 7,000 radios were distributed to local first responders, allowing every first responder in the State access to a single unified communications system. In the period after the statewide system was made available, roughly 10,000 radios were added by State, local, Federal, and tribal users providing access to nearly every first responder in the State.

The statewide system has been delivering a capability to first responders in the State never before possible. Neighboring jurisdictions now have a common communications medium, emergency response is greatly enhanced and State/local/Federal/tribal communications are possible anywhere within the State. The distribution of radios to State, local, Federal, tribal, and others matches the percentage of use patterns

observed through the control center. The current system consists of tower sites across the State networked to a controller located in Pierre. "Roaming" is allowed between sites with the use of intelligent radios and networking. This capability allows the user to traverse the State without losing communications, and the system allows individual agencies to maintain private communications with agency "talkgroups". The digital aspects of the system allow for clear communications over 98% of the State.

All State agencies requiring wide-area communications utilize the network. Local agencies actively utilizing the system include fire departments, emergency medical services (EMS)/Emergent care, police departments, sheriff's offices, emergency managers, transit buses, highway/road departments, parks departments, municipal utilities, and other non-governmental agencies involved in public safety and infrastructure. Federal and tribal radio users are migrating to the system as it offers the only statewide trunked network available outside of the commercial cellular systems. Traffic over the network is averaging over 2,000,000 calls per month, and has been instrumental in the response to law enforcement, emergency medical, fire, and weather related situations.

## 4. VISION AND MISSION

The Vision and Mission section describes the South Dakota vision and mission for improving emergency communications operability, interoperability, and continuity of communications statewide.

**South Dakota's Interoperable and Emergency Communications Vision:**

Reliable and available interoperable voice and data communications for all public safety and critical infrastructure responders.

**South Dakota's Interoperable and Emergency Communications Mission:**

Communications interoperability in South Dakota through:

- Development of recommendations for policies and guidelines
- Identification of technology and standards
- Coordination of intergovernmental resources
- Development of user awareness and capabilities

# 5. STRATEGIC GOALS AND INITIATIVES

The Strategic Goals and Initiatives section describes the statewide goals and initiatives for delivering the vision for interoperable and emergency communications. The goals and initiatives are grouped into seven sections, including Governance, SOPs, Technology, Training and Exercises, Usage, Outreach and Information Sharing, and Life Cycle Funding.

## 5.1 Governance

The Governance section of the SCIP outlines the future direction of the South Dakota governance structure for interoperable and emergency communications. The oversight for protocols, training, and the annual review and maintenance of this plan is the responsibility of the SDPSCC, created by Executive Order in March of 2007. The 18-member council consists of local, tribal, State, and Federal members with a stake in the operational and budgetary aspects of communications within their respective organizations. This group provides direct input on such items as grant expenditure, system expansion, protocols, technology changes/upgrades, and priorities of the system.

As the SDPSCC continues to evolve, it is focused on engaging its membership to foster a collaborative decision making process. Part of this effort is also focused on enhancing outreach tools to engage its membership more effectively and exploring meeting support tools to increase engagement of members. In addition, the SDPSCC plans to develop a Public Safety Broadband Working Group to focus on efforts associated with public safety broadband.

Table 1 outlines South Dakota's goals and initiatives related to governance.

**Table 1: Governance Goals and Initiatives**

| Governance Goals and Initiatives | | | | |
|---|---|---|---|---|
| Goal # | Goals | Initiatives | Owner | Completion Date |
| 1. | Collaborative decision making process | Identify relevant email distribution and meeting notification lists | SDPSCC, SWIC | June 2014 |
| | | Evaluate and determine meeting collaboration support tool options | SDPSCC | June 2014 |
| | | Update email distribution and meeting notification lists | SWIC | September 2014 |
| 2. | Established Public Safety Broadband Working Group | Solicit and identify interested parties and disciplines | SDPSCC, SWIC | March 2014 |
| | | Invite interested parties to SDPSCC meeting | SDPSCC, SWIC | March 2014 |

| Governance Goals and Initiatives | | | | |
|---|---|---|---|---|
| Goal # | Goals | Initiatives | Owner | Completion Date |
| | | Identify responsibilities for Public Safety Broadband Working Group and assign tasks as required | SDPSCC, SWIC | June 2014, Annually |
| | | Public Safety Broadband Working Group reports quarterly to SDPSCC meeting as a regular agenda item | Public Safety Broadband Working Group | September 2014, Annually |

## 5.2 Standard Operating Procedures (SOPs)

The SOPs section of the SCIP identifies the framework and processes for developing and managing SOPs statewide. The SDPSCC in conjunction with agencies have developed best practices and procedures that encompass both operational and technical components. Command and control protocols have been developed as National Incident Management System (NIMS)-compliant and incorporate the Incident Command System (ICS) as an operational guide. For tactical-level SOPs, please refer to ***Appendix B*** for additional information. In addition, the South Dakota Communications Field Operations Guide (CFOG) serves as a ready reference with a collection of technical reference material to aid Communications Unit personnel in establishing solutions to support communications during emergency incidents and planned events.

As the State continues to focus on SOPs, it will look at ways to align individual agency SOPs with State radio system SOPs. In addition, South Dakota plans to explore and develop an approach to integrate State radio system SOPs into communications-related training efforts in the State.

Table 2 outlines South Dakota's goals and initiatives for SOPs.

**Table 2: Standard Operating Procedures Goals and Initiatives**

| Standard Operating Procedures Goals and Initiatives | | | | |
|---|---|---|---|---|
| Goal # | Goals | Initiatives | Owner | Completion Date |
| 3. | Alignment of individual agency and local interagency SOPs with State radio system SOPs | Distribute CFOGs (e.g., website posting) to build awareness of State radio system SOPs | SDPSCC, State Radio Communications (SRC) Chief Engineer | June 2014, Annually |
| | | Review and update State radio system SOPs | SDPSCC | December 2014, Annually |

| Standard Operating Procedures Goals and Initiatives | | | | |
|---|---|---|---|---|
| Goal # | Goals | Initiatives | Owner | Completion Date |
| | | Provide State radio system SOPs as template for use by local agencies | SWIC | December 2014 |
| 4. | State radio system SOPs integrated into interoperable communications training processes | Build consensus on recommended approach for plain language interagency use | SDPSCC | September 2014 |
| | | Leverage State APCO and NENA chapters to recommend approach for incorporation of plain language for interagency use | SDPSCC | December 2014 |
| | | Research best practices for conventional tactical channel interoperability solutions | SWIC | December 2014 |
| | | Adopt and promote recommended policies for:<br>• Plain language interagency use<br>• Radio discipline<br>• Radio etiquette<br>• Conventional tactical channel interoperability | SDPSCC | September 2015 |

## 5.3 Technology

The Technology section of the SCIP outlines South Dakota's plan to maintain and upgrade existing technology; the roadmap to identify, develop, and implement new and emerging technology solutions; and the approach to survey and disseminate information on current and future technology solutions to ensure user needs are met. The State initiated upgrades to its communications infrastructure in 1999 with the caveat that the system would be available to all levels of government, regardless of their affiliation. After a review process, a digital trunked radio system operating on VHF high band was selected, and in September of 2001 construction was initiated. On October 23, 2002, the South Dakota Interagency Communications System was made available for use by any governmental agency in South Dakota with public safety ties.

The existing radio network was built primarily for mobile coverage, and the original system of 35 sites provided coverage to 90% of the States' geography with a 90% reliability factor. Over the past several years the State has added on 21 additional sites, raising the mobile geographic coverage to 98% and the reliability factor to 95%; however, there are still difficult topographical areas of the State that are underserved. In addition, all public safety in the State equipped with radios that are operable on the system. The current statewide system consists of 54 tower sites across the State networked to a controller located in Pierre. The digital aspects of the system allow for clear communications over 98% of the geographic area of the State. Through the

narrowbanding process, several agencies have moved to the statewide system as their primary system. There are approximately 25,000 user IDs on the system representing about 20,000+ users on the system. Every agency is supplied with radio equipment, and the State is served with 98% mobile coverage and 70%+ portable coverage. For the purposes of this document, it is assumed that all interagency emergency response communications will be conducted on the statewide network, as it is ubiquitous within the State. By 2017, the State plans to have the system upgraded to P25.

A. Subscriber Radios
   - 13,572 radio ID's in use for local agencies
   - 3,792 radio ID's in use for State agencies
   - 2,595 radio ID's in use for Federal/tribal/Bureau of Indian Affairs (BIA) agencies
   - All subscriber radios are required to contain statewide Interagency, and Special Operations (emergency) talkgroups within their radios to gain access to the system

B. System
   - 54 tower sites, capacity at sites range from 4 repeaters to 10 per site, generator protected power source
   - Protected ring connectivity up to last mile
   - Master site has redundant zone controllers, connectivity, uninterruptible power supply (UPS) and generator backup
   - System diagnostics are monitored 24x7

C. Dispatch Centers
   - 3 State dispatch centers, all 36 PSAP's capable of operation on the statewide network with 3 directly connected

D. Backup:
   - Conventional mutual aid repeaters statewide for local mobile operation.
   - Trunked system sites default to local operation upon loss of connectivity to network, all PSAP's are in proximity to a trunked site where very few areas of the State would be without some means of communications back to a 911 center
   - BIT/State Radio has an ACU-1000 that could be utilized in an emergency to link different communications systems, or those systems to the public switched telephone network (PSTN)

In terms of risk mitigation, the South Dakota system is very fault tolerant. Generally the risk to the system is at a single site, with the telecommunications link from the fiber-optic network to the site being single threaded, or not redundant. The Master Site (Network Controller) has full redundancy, but is at a single site. In the event of a catastrophic failure at the Master site, the entire system will revert to site trunking, or will only be able to communicate within the boundaries of the radio frequency (RF) coverage of each site. Trunking features, talkgroups, etc., will continue, but only within the coverage of the tower affiliated on. If all network connections to the Master Site are lost, all dispatch communication will need to be routed through the PSAP in the coverage area of the

tower affiliated on, or handled locally within the agency. Wide area communications will need to be relayed by the PSAP or agency through alternate means.

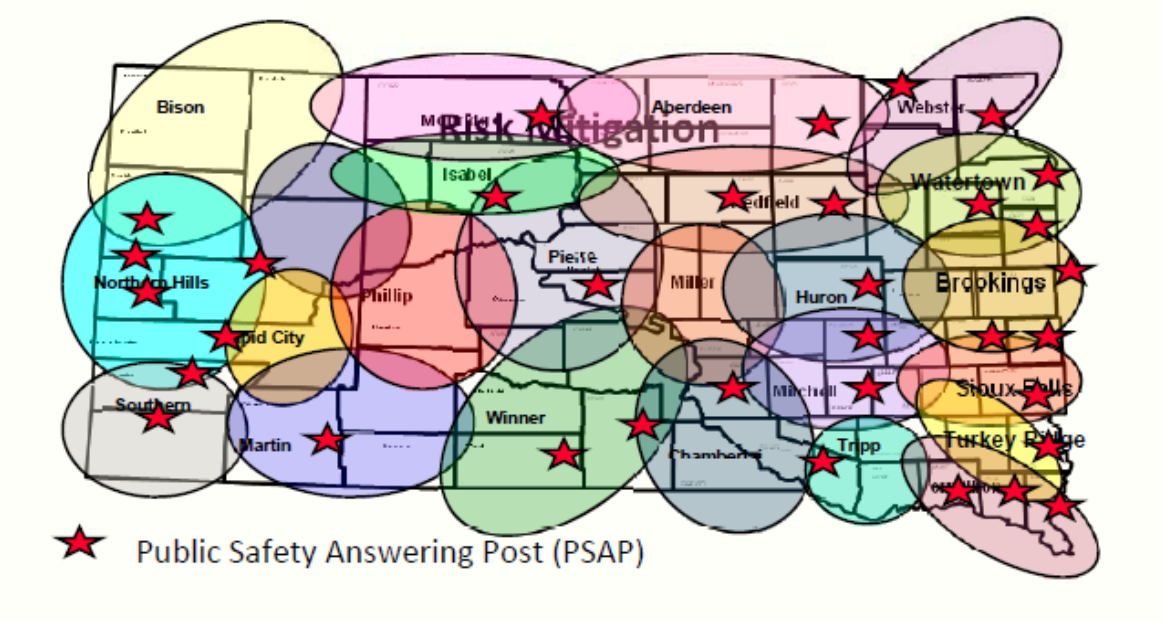



**Figure 1: PSAP Coverage Locations in South Dakota**

BIT/State Radio and the SDPSCC intend to provide a more complete view of every agency and each location. Training for the Communications Asset Survey and Mapping (CASM) tool was completed in 2009 and information is being collected and entered.

To support mobile data, the State signed an agreement with cellular carriers within the State to utilize the carriers' data network statewide for mobile data. This infrastructure and specific software will allow subscriber's access to National Criminal Information Center (NCIC), South Dakota Law Enforcement Telecommunications System (SDLETS), and other databases necessary for day-to-day and emergency operations within the State. This contract is open to all first responders in the State. The SDPSCC has also been assigned as the governance body for the NPSBN, and a SPOC has been appointed to coordinate activities within the State. It is anticipated that through the Implementation and Planning Grant period that South Dakota will make a decision on participation in the NPSBN.

The State plans to develop an overall long-term strategy for continued build out, sustainment, and/or replacement of the State radio system. In addition, as the State looks to new capabilities such as public safety broadband, it plans to conduct data collection to meet SLIGP requirements. To continue support of interoperability between systems, the State also plans to develop standardized interoperability channel programming requirements.

Table 3 outlines South Dakota's goals and initiatives for technology.

**Table 3: Technology Goals and Initiatives**

| Technology Goals and Initiatives | | | | |
|---|---|---|---|---|
| Goal # | Goals | Initiatives | Owner | Completion Date |
| 5. | Strategy for system build out, sustainment, or replacement of State radio system | Research current trends of mission critical voice technology | SDPSCC, SWIC | December 2016 |
| | | Develop replacement/upgrade plan for the State radio system | SDPSCC, SWIC | June 2017 |
| | | Develop a funding and build out solution | SWIC, BIT | August 2017 |
| | | Implement system architecture upgrades | BIT | July 2018 |
| 6. | Data collection consistent with SLIGP requirements | Hire three contractors to perform data collection | BIT | June 2014 |
| | | Conduct outreach, data collection, enter information into data collection tool | SPOC, Contractors | August 2016 |
| 7. | Standardized interoperability channel programming requirements | Distribute and promote use of the current CFOG and the associated channel programming recommendations | SDPSCC, SRC Chief Engineer | December 2014, Annually |

## 5.4 Training and Exercises

The Training and Exercises section of the SCIP explains South Dakota's approach to ensure that emergency responders are familiar with interoperable and emergency communications equipment and procedures and are better prepared for responding to real-world events. South Dakota initiated early efforts to establish interoperability in the State:

- Nearly every first responder in the State was issued a radio at the outset of the project and is capable of communicating statewide
- The statewide network is used as a primary communications media for the majority of the users in the State, system is used and tested on a daily basis
- A user-based council (SDPSCC) has been established to provide representation
- A standards-based communications manual has been in place since 2004
- Quarterly and annual testing is done on the system by Department of Health, Office of Emergency Management (OEM), and the urban area security initiative (UASI) for which the State Tactical Interoperable Communications Plan (TICP) was established. This testing involves statewide users of all disciplines. Additional county-wide and region-wide testing is performed annually per local protocols

To ensure end users are effectively trained, the State is focused on the following efforts:

- Continually improving on-line and other electronic training media (website added in 2009)
- Having at least one resource per county that has attended the train the trainer course (in development)
- Sponsoring training at major meetings and other statewide events (ongoing)
- Distribution of the State CFOG
- South Dakota hosted a Communications Unit Leader (COML) training session in 2009, and is anticipating requesting additional Technical Assistance (TA). We continue to look at alternatives to enhance user knowledge of the statewide system

There are also several exercises held across the State that test the local and wide area aspects of the interoperable communications network:

- Quarterly radio tests by the South Dakota Department of Health (DOH). Each quarter, a test is conducted where State personnel in Pierre contact each healthcare center facility and emergency medical service in the State via radio
- Testing is pre-scheduled and users are required to reply on talkgroups other than their normal operating talkgroup
- South Dakota Forestry conducts a communications exercise every spring between the State, local, and Federal responders in the area that might be called in to fight forest fires in the Black Hills

As the State continues to focus on training and exercises associated with interoperable and emergency communications, it plans to enhance and build on current associated efforts. Efforts are focused on developing a minimum standard for end user training. The State also plans to incorporate technically focused advisors and COMLs/Communications Unit Technicians (COMT) into current training and exercises. A statewide Communications Unit (COMU) program is also a key focus for the State to build and formalize COMU-related efforts across South Dakota.

Table 4 outlines South Dakota's goals and initiatives for training and exercises.

**Table 4: Training and Exercises Goals and Initiatives**

| Training and Exercises Goals and Initiatives | | | | |
|---|---|---|---|---|
| Goal # | Goals | Initiatives | Owner | Completion Date |
| 8. | Minimum standard established for end user training | Develop training curriculum targeted for end users | BIT | June 2014 |
| | | Develop train-the-trainer program | BIT | December 2014 |
| | | Conduct train-the-trainer sessions | BIT, State OEM | June 2015, Annually |

| Training and Exercises Goals and Initiatives | | | | |
|---|---|---|---|---|
| Goal # | Goals | Initiatives | Owner | Completion Date |
| | | Conduct training for end users and document | Local Trainers, State OEM, BIT | July 2015, As Needed / Ongoing |
| 9. | Technical advisors/COMLs/COMTs incorporated into training exercises | Expand current offering through local emergency responders | BIT | December 2014, Ongoing |
| 10. | Statewide COMU program | Identify the agencies that are credentialing COMLs and COMTs in South Dakota | SWIC | March 2014 |
| | | Develop a statewide coordinated COMU program | Wildland Fire, OEM, SWIC | December 2015 |

## 5.5 Usage

The Usage section of the SCIP outlines efforts to ensure responders adopt and familiarize themselves with interoperable and emergency communications technologies, systems, and operating procedures in the State. Regular usage ensures the maintenance and establishment of interoperability in case of an incident. Currently, there are no Goals identified for Usage in South Dakota.

Table 5 outlines South Dakota's goals and initiatives for usage.

**Table 5: Usage Goals and Initiatives**

| Usage Goals and Initiatives | | | | |
|---|---|---|---|---|
| Goal # | Goals | Initiatives | Owner | Completion Date |
| N/A | N/A | | | |

## 5.6 Outreach and Information Sharing

The Outreach and Information Sharing section of the SCIP outlines South Dakota's approach for building a coalition of individuals and emergency response organizations statewide to support the SCIP vision and for promoting common emergency communications initiatives. South Dakota is focused on enhancing its outreach and information sharing efforts across the State by exploring additional tools to support

these efforts. Additionally, the State plans to build an outreach strategy associated with public safety broadband to build greater stakeholder awareness throughout the State.

Table 6 outlines South Dakota*'s* goals and initiatives for outreach and information sharing.

**Table 6: Outreach and Information Sharing Goals and Initiatives**

| Outreach and Information Sharing Goals and Initiatives | | | | |
|---|---|---|---|---|
| Goal # | Goals | Initiatives | Owner | Completion Date |
| 11. | Enhanced outreach tools (e.g., website) | Leverage websites and social media capabilities to increase education and awareness of public safety interoperable communications and grant opportunities | SDPSCC, SWIC | July 2014, Quarterly |
| | | Develop data tracking tool to collect site metrics | BIT | July 2014 |
| 12. | Public safety broadband outreach to first and second responders | Develop clientele list | SPOC | March 2014 |
| | | Develop mail correspondence for first and second responders across the State | SPOC | March 2014 |
| | | Hire three contractors to conduct public safety broadband outreach | BIT | June 2014 |
| | | Conduct public safety broadband outreach | SPOC, Contractors | August 2016 |

## 5.7 Life Cycle Funding

The Life Cycle Funding section of the SCIP outlines South Dakota's plan to fund existing and future interoperable and emergency communications priorities. The operations and maintenance of the statewide system is generally funded through a line item in the State's annual budget. The users are responsible for their end user equipment; however, equipment such as connected dispatch consoles and recording capabilities may be categorized as infrastructure. As the State continues to maintain its existing capabilities, it plans to focus on building life cycle funding plans for continued sustainment. In addition, as public safety broadband efforts continue to evolve, South Dakota is focused on exploring public/private partnerships.

Table 7 outlines South Dakota's goals and initiatives for life cycle funding.

**Table 7: Life Cycle Funding Goals and Initiatives**

| Life Cycle Funding Goals and Initiatives | | | | |
|---|---|---|---|---|
| Goal # | Goals | Initiatives | Owner | Completion Date |
| 13. | State and local life cycle funding plans | Identify communications life cycle criteria | BIT, SDPSCC, County Emergency Management | December 2016 |
| | | Determine costs associated with technology refresh and replacement | BIT, SDPSCC, County Emergency Management | June 2017 |
| | | Establish funding mechanism | BIT, Local Governments | August 2017 |
| 14. | Public/Private partnerships for public safety broadband participation | Develop statewide Memorandum of Understanding (MOU) for public safety broadband participation | SPOC, Attorney General's Office | January 2015 |
| | | Execute MOUs | SPOC, Attorney General's Office, Local Legal Representation | August 2016 |

# 6. IMPLEMENTATION

## 6.1 Action Plan

The Action Plan section of the SCIP describes the process South Dakota will use to determine a plan to execute the initiatives in the SCIP. To ensure that the SCIP goals and initiatives are executed, the South Dakota SWIC will work with the SDPSCC to determine the best approach. The SDPSCC will ensure that SICP updates are included as a regular agenda item for their recurring meetings to ensure progress associated with the SCIP is reported and tracked throughout the year.

## 6.2 Measures of Success

The Measures of Success section of the SCIP defines the measures that South Dakota will use to monitor progress and indicate accomplishments toward achieving the vision for interoperable and emergency communications. Measures of success are used to meaningfully assess the outcomes and impacts of program functions and processes in meeting strategic goals. Table 8 outlines these measures for South Dakota. More information on how these measures are managed is included in Section 6.3.

## Table 8: SCIP Measures of Success

| Measures of Success | | | | | |
|---|---|---|---|---|---|
| Goal # | Strategic Goal(s) Supported | Initial State | Target Measurement | Measure Completion Date | Owner or Source |
| 1. | Collaborative decision making process | SDPSCC established; Limited clientele participation in the decision making process | 10% annual increase in council member initiated business items | December 2014, Annually | SWIC |
| 2. | Established Public Safety Broadband Working Group | SDPSCC is the governing body and in the process of forming a Public Safety Broadband Working Group | Established working group that provides recommendations to the SDPSCC on issues identified by FirstNet and end users | September 2014, Annually | SDPSCC |
| 3. | Alignment of individual agency and local interagency SOPs with State radio system SOPs | Unknown percentage of alignment between local and State SOPs | 100% of SOP alignment between emergency managers and communications centers in the State | December 2018 | SWIC, SDPSCC, Local Emergency Managers |
| 4. | State radio system SOPs integrated into interoperable communications training processes | Limited amount of training that includes State radio system SOPs | Communications training incorporated as a specific component of public safety training programs and academies throughout the State | December 2018 | SWIC, Public Safety Training Organizations, SRC Chief Engineer |
| 5. | Strategy for system build out, sustainment, or replacement of State radio system | Life cycle of the State radio system has been determined to be 2028 | Replacement upgrade plan in place | August 2017 | BIT, SDPSCC |

| Measures of Success | | | | | |
|---|---|---|---|---|---|
| Goal # | Strategic Goal(s) Supported | Initial State | Target Measurement | Measure Completion Date | Owner or Source |
| 6. | Data collection consistent with SLIGP requirements | SLIGP funds granted to the State; Data collection process funded but not yet defined | Collection of required data components | August 2016 | SPOC |
| 7. | Standardized interoperability channel programming requirements | Program requirements have been defined; Compliance is undetermined | Determine through the training program with the goal of 10% annual improvement | December 2014, Annually | SWIC, SRC Chief Engineer, Train-the-Trainers |
| 8. | Minimum standard established for end user training | Current standard being used and under revision | Updated and current minimum standard that is disseminated | December 2014 | SRC Chief Engineer, SWIC, Trainers |
| 9. | Technical advisors/COMLs/COMTs incorporated into training exercises | Technical advisors used in current exercises when requested | Technical advisors/COMLs used in all emergency response exercises | December 2017 | State OEM, Local Emergency Managers, SRC Chief Engineer, SWIC |
| 10. | Statewide COMU program | Two separate tracks currently underway | Coordinated COMU program with 50% increase in trained resources | December 2018 | Wildland Fire, OEM, SWIC |
| 11. | Enhanced outreach tools (e.g., website) | SDPSCC Website in operation and under revision | Incorporate social media and complete revision of website to achieve10% increase in website visitor traffic in first calendar year after website revision | July 2014 | SDPSCC, SWIC, BIT |

| Measures of Success | | | | | |
|---|---|---|---|---|---|
| Goal # | Strategic Goal(s) Supported | Initial State | Target Measurement | Measure Completion Date | Owner or Source |
| 12. | Public safety broadband outreach to first and second responders | Received SLIGP funds and in process of hiring outreach coordinators | Engagement with 100% of first and second responders in the State to increase Statewide awareness of public safety broadband | August 2016 | SPOC, BIT, Contractors |
| 13. | State and local life cycle funding plans | State funding plan in place through 2018; Status of local funding plans unknown | State funding plan established through 2028; Funding requirements communicated to local governments | June 2017 | BIT, SDPSCC, County Emergency Management |
| 14. | Public/Private partnerships for public safety broadband participation | No partnerships, MOUs, or MOAs in place | Legal strategy for public/private partnerships established | August 2016 | SPOC, Attorney General's Office, Local Legal Representation |

## 6.3 Management of Success

The Management of Success section describes the iterative, repeatable method South Dakota will follow to add, update and refine the measures of success. In addition to the regular SCIP progress updates at SDPSCC meetings, the SWIC will review and track progress associated with SCIP goals and initiatives.

## 6.4 Strategic Plan Review

The Strategic Plan Review section outlines the process South Dakota will use to conduct reviews of the SCIP to ensure it is up to date and aligned with the changing internal and external interoperable and emergency communications environment as well as to track and report progress against the defined initiatives and measures of success. Each year, the SWIC will develop the South Dakota APR to document the progress made and challenges over the past year associated with the SCIP. Once the APR is developed, the SWIC will post the APR on the SDPSCC website and requests SDPSCC membership review prior to the regular SDPSCC meeting and is submitted in October, once approved by membership.

## 7. REFERENCE MATERIALS

The Reference Materials section outlines resources that contribute additional background information on the SCIP and interoperable and emergency communications in South Dakota. Table 9 includes the links to these reference materials.

**Table 9: SCIP Reference Materials**

| Title | Description | Source/Location |
|---|---|---|
| South Dakota Public Safety Communications Council (SDPSCC) | Website for related SDPSCC activities. | http://www.sdpscc.sd.gov/ |
| Executive Order for SDPSCC | Executive Order that established the SDPSCC in 2007. | http://www.sdpscc.sd.gov/documents/Executive%20Order%202007-05%20--%20March%2014%202007.pdf |
| 2012 South Dakota SCIP | Statewide strategic communication interoperability plan that incorporates SOP-related information for the State. | http://www.sdpscc.sd.gov/commplan.aspx |
| South Dakota Communications Field Operations Guide (SD-CFOG) | Collection of technical reference material to aid Communications Unit personnel in establishing solutions to support communications during emergency incidents and planned events. | http://www.sdpscc.sd.gov/documents/SouthDakotaCFOG07102012v1v14_000.pdf |

## APPENDIX A: MAJOR SYSTEMS

### Table A-1: Major Systems, Updates, and New Systems

| Major Systems Information | | | | | | |
|---|---|---|---|---|---|---|
| System Type | System Name | System Owner(s) | System Description | # Subscribers and Agencies | Users' Level of Government | Status and Changes/Updates |
| Statewide System | South Dakota Statewide Radio Communications System | State of South Dakota | VHF High Band<br>Trunked<br>Voice<br>54 Sites | -13,572 radio ID's in use for local agencies<br>-3,792 radio ID's in use for State agencies<br>-2,595 radio ID's in use for Federal/tribal/Bureau of Indian Affairs (BIA) agencies | Federal, State, local, Tribal | Existing System |

# APPENDIX B: STANDARD OPERATING PROCEDURES (SOPS)

## 1. Routine Traffic

a. All radio communication should be brief and to the point. Radio system traffic shall be limited to official business only. Agency heads are responsible for the appropriate use of the system in accordance with adopted standard protocols established by the SDPSCC. Proper radio etiquette is expected on any communications system.

b. Radio messages will be made and received in the following manner

   i. Caller waits for clear air time on selected talkgroup

   ii. When initiating communication on the statewide radio system, the following format will be used

      – "Receiving agency/unit—sending unit— on talkgroup used" (i.e. "Metro-HP20 on SF Interagency")

   iii. Receiver acknowledges by stating their State assigned/approved call sign

   iv. When utilizing private agency talkgroups, call sign protocol is at agency discretion

   v. All radio traffic must be conducted in a professional manner

   vi. State-recognized 10 codes (Attachment 1) or clear speech will be used on system

c. Local Operation

   i. Normal operations will be conducted on assigned agency talkgroups

   ii. Interagency traffic will be conducted on the State Interagency Talkgroup for that geographic area

   iii. Interagency talk groups are not to be used for normal dispatch

   iv. Special Operations and State Fire 2 & 3 talkgroups must be requested and authorized by State Radio for events or incidents

d. Operation outside of local area

   i. Users traveling outside their normal operating area will switch from their local talkgroup to the appropriate interagency talkgroup for the geographic area you are currently in. This is needed to prevent radios from unnecessarily tying up system resources

   ii. The digital trunked radio system is not currently set up to limit talkgroups to particular sites outside of special events. This configuration allows necessary communications outside of the normal service area of an agency, often made necessary by prisoner transports, EMS and fire support outside of area

iii. The drawback to this wide area operation is that when a talkgroup is transported to another area of the State, all traffic associated with that talkgroup is then repeated over the local tower that the user is affiliated on. This can cause an overload situation for the local tower, especially if a large number of users are affiliated on their home talkgroups on a single tower. This may result in a busy condition for not only the local users where the outside talkgroups are brought into, but a potential talkgroup busy back in the home area of the user

iv. The system is designed for this purpose, but within capacity limitations. Use home talkgroups outside of normal service area only when necessary

e. Monitoring of talkgroups outside of home area for non-service related business is prohibited

i. The effect on system same as outlined above in Section 4

ii. Monitoring is defined as the physical affiliation (talkgroup selected on the radio)

iii. Non-selected talkgroups being scanned do not have the same impact on system

## 2. Emergencies

An emergency is defined as a non-scheduled significant incident that requires the coordinated response and interoperability of multiple agencies or jurisdictions. All emergency communications will be subject to the NIMS guidelines. To include incidents that move between jurisdictions.

**All interagency emergency traffic will be conducted in clear language.**

a. When situation dictates coordinated resources from agencies without common talkgroups, communications will be on the State Interagency Talkgroup for that geographic area

b. All responding units will monitor the Interagency talkgroup designated by the requesting agency for additional information and the initial report on conditions

c. Special Operations talkgroup(s) will be assigned for the duration of the emergency upon request

i. For fire operations, the acting COML may request additional State Fire talkgroup(s).

d. State Radio dispatch will be notified by requesting agency or acting Communications Unit Leader within the Incident Command/Unified Command when the requested talkgroup will no longer be needed.

## 3. Planned/Scheduled Events

Any event, known in advance, that requires additional communications resources.

a. Special Operations talkgroup(s) will be assigned as available through any SRC Dispatch Center for the duration of the event upon request. Talkgroup assignment is subject to preemption if required for reassignment to an emergency incident.
    i. Special Operations talkgroups should be scheduled as far in advance as possible.
b. State Radio dispatch will be notified by requesting agency or Incident Commander when the requested talkgroup will no longer be needed.

## 4. Heavy Radio Traffic Conditions

a. If a Communications Center or an Incident Commander feels that excessive non-essential radio traffic is impacting dispatch operations or incident operations, the Incident Commander or Communications Center will make a radio traffic restriction announcement. This announcement will be made on appropriate talkgroup(s). The radio traffic restriction announcement will normally be, "All Units and Stations with non-essential radio traffic stay off the air." May also be accompanied by a “channel marker” or a repeated tone.
    i. An alternate agency talkgroup can be assigned by Communications Center for non-incident related communications.
b. When the condition is over, the Communications Center or an Incident Commander will broadcast a message announcing resumption of normal radio traffic conditions.

## 5. Use of Equipment in Electronically Sensitive Areas

Radio equipment generates RF Interference (RFI) that may interfere with the operation of medical or other sensitive electronic equipment. Caution needs to be observed when operating radio equipment in such areas.

## 6. Communications with Adjacent States

All States bordering South Dakota operate on VHF systems, or have a VHF overlay on their statewide systems. The following channel plan will be coordinated with adjacent States, and all first responder/public safety radios in the State of South Dakota are strongly encouraged to include this channel plan when programming/reprogramming radio equipment.

| Frequency (MHz) or Channel Set | Notes | Channel Label |
|---|---|---|
| VHF | | |
| 151.1375 Base/Mobile | Emergency Use Only | VTAC1 |

| Frequency (MHz) or Channel Set | Notes | Channel Label |
|---|---|---|
| 154.4525 Base/Mobile | Emergency Use Only | VTAC12 |
| 155.475 Mobile | LE Use Only | NATLAW |
| 155.7525 Base/Mobile | Emergency Use Only | VCALL10 |
| 158.7375 Base/Mobile | Emergency Use Only | VTAC13 |
| 159.4725 Base/Mobile | Emergency Use Only | VTAC14 |
| 157.250 Mobile | Emergency Use Only | RTAC1 |
| 161.850 Base/Mobile | Emergency Use Only | RTAC1a |
| 157.225 Mobile | Emergency Use Only | RTAC2 |
| 161.825 Base/Mobile | Emergency Use Only | RTAC2a |
| 157.275 Mobile | Emergency Use Only | RTAC3 |
| 161.875 Base/Mobile | Emergency Use Only | RTAC3a |
| UHF | | |
| 453.2125 Base/Mobile | Emergency Use Only | UCALL a |
| 458.2125 Mobile | Emergency Use Only | UCALL |
| 453.4625 Base/Mobile | Emergency Use Only | UTAC 1a |
| 458.4625 Mobile | Emergency Use Only | UTAC 1 |
| 453.7125 Base/Mobile | Emergency Use Only | UTAC 2a |
| 458.7125 Mobile | Emergency Use Only | UTAC 2 |
| 453.8625 Base/Mobile | Emergency Use Only | UTAC 3a |
| 458.8625 Mobile | Emergency Use Only | UTAC 3 |

## 7. Tribal Communications

Presently all tribal governments within the state are migrating to the South Dakota Interoperability Network. This will streamline further the process of communicating from and to the reservations and coordination with other emergency services. Previous to the conversion, all tribal operations were on conventional VHF and the same radios could be used for both systems.

Tribal agencies operating on the system are required to program the basic talkgroup plan and attend training. This ensures interoperability when needed.

## 8. Interoperability Outside of VHF or the Statewide Network

Trunked radios to operate on the statewide network have been issued to all first responders in the State. This ensures that for any communications situation within the State, every first responder is able to communicate without intervention. It is also the communications goal of South Dakota to not only be interoperable within our own user base, but also with those coming in from the outside in times of need. VHF is a given and all interoperability channels possible that will not interfere with the operation of the system will be programmed into all radios as a prerequisite. For those responders coming into the State without VHF equipment, the plan is as follows:

a. VHF Low-Band

Prior to the installation of the statewide VHF high band network in the State, operations for law enforcement were primarily on the VHF low band part of the spectrum. Portable base stations have been retained, and can be made compatible by cross banding with an ACU-1000 gateway in the area of operations.

b. UHF

Currently all vehicular repeater operation in the State is on common ultra high frequency (UHF) channels licensed by the State. The State also maintains a 200-radio UHF cache, portable repeaters, and has associated UHF equipment in the State mobile emergency response center. The national U-Call and U-TAC frequencies will be added to all radios upon next maintenance.

c. 700/800 MHz

South Dakota is in the process of establishing its state 700-megahertz (MHz) plan. The 800MHz plan was established in the State per requirements in 1993 and is in place as needed. In anticipation of possible responders from out of State arriving with 700MHz equipment, South Dakota is planning for interoperability with:

i. Plans to integrate 700MHz radio cables into the ACU-1000 gateway device. This can then be tied into a base station or the transport for the statewide network and cross-banded to allow communications.

## 9. Non-Governmental Organization

Governmental organizations in South Dakota are defined within South Dakota Codified Law as the following:

24-2-20.1. "Governmental entities" defined. As used in § 24-2-20, the term, governmental entities, means any department, division, or other public agency of any municipal, county, State, or national government.

**Source:** SL 2001, ch 118, § 5; SL 2004, ch 168, § 12.

Any organization not covered in the above description is known as a "Non-Governmental Organization". These organizations are inclusive of but not limited to:

- Aid organizations
- Public utilities
- Any organization, contractor, or personnel that are a recognized participant of an emergency response or disaster recovery process.

Communications equipment requests from Non-Governmental Organizations (NGO) are routed through the Incident Commander and are routinely approved to facilitate communications between NGO's and other emergency response personnel.

## 10. Strategic Technology Reserve (STR)

In order to provide additional communications resources in emergency events, the State of South Dakota has established a reserve of communications equipment that will assist local communications in the areas affected.

a. Pierre

The State maintains a cache of system compatible portable radios (200) which have been distributed for emergencies in the past. As part of the cache, individual and bank battery chargers, external magnetic mount antennas, and extra batteries are maintained. In addition to equipment capable of operating on the statewide network, UHF repeaters and portables, a portable tower and tower building, an ACU-1000 gateway, a mobile emergency operations center, and technical staff are on standby 24x7x365. Smaller items such as radios, chargers, etc. are loaded onto a State plane and can be anywhere in the State within 2 hours. The larger items such as the repeaters, tower and trailer, and mobile Emergency Operations Center (EOC) are tested monthly for operation, and are transported to the scene.

b. Sioux Falls

The State Radio technician in Sioux Falls maintains a smaller cache of radios (50) along with batteries and chargers.

c. Rapid City

The State Radio technicians in Rapid City maintain a smaller cache of radios (50) along with batteries and chargers.

## 11. Talkgroups

a. Statewide Talkgroups

The following is a list of Statewide Talkgroups. It is recommended that these talkgroups be programmed as a Standardized Block within the appropriate radios to assure uniformity and interoperability across the State.

i. SRC (State Radio Communications) talkgroups — are intended for any law-enforcement communications between mobile and State Radio dispatch. All law enforcement field units will be programmed with these talkgroups. These talkgroups shall be labeled as follows:

| Talk Group | Radio Display |
|---|---|
| SRC Sioux Falls | SRC SF |
| SRC Turkey Ridge | SRC TKR |
| SRC Vermillion | SRC VERM |
| SRC TRIPP | SRC TRIP |

| Talk Group | Radio Display |
|---|---|
| SRC MITCHELL | SRC MIT |
| SRC BROOKINGS | SRC BRK |
| SRC WATERTOWN | SRC WTN |
| SRC WEBSTER | SRC WEB |
| SRC Isabel | SRC ISAB |
| SRC ABERDEEN | SRC ABR |
| SRC REDFIELD | SRC RED |
| SRC HURON | SRC HUR |
| SRC MILLER | SRC MIL |
| SRC CHAMBERLAIN | SRC CHAM |
| SRC WINNER | SRC WIN |
| SRC PIERRE | SRC PIER |
| SRC MOBRIDGE | SRC MOB |
| SRC PHILLIP | SRC PHIL |
| SRC MARTIN | SRC MAR |
| SRC BISON | SRC BISN |
| SRC RAPID CITY | SRC RC |
| SRC S. HILLS | SRC SH |
| SRC N. HILLS | SRC NH |
| SRC FAITH | SRC FATH |

b. INT (Interagency) Talkgroups

These are intended for any interdepartmental radio communications. Due to the potential for high volume usage of these talkgroups, *they are not intended as primary day-to-day routine dispatch operations*. All multijurisdictional/ multi-agency incidents should be initiated on the Interagency talkgroups and then moved to an operational or user-specific talkgroup. Every radio on the system will be programmed with the 24 Regional Interagency Talkgroups. These talkgroups shall be labeled as follows:

| Talk Group | Radio Display | Intended Use |
|---|---|---|
| Sioux Falls Interagency | SF INT | Interagency Traffic |
| Turkey Ridge Interagency | TKR INT | Interagency Traffic |
| Vermillion Interagency | VERM INT | Interagency Traffic |
| Tripp Interagency | TRIPP INT | Interagency Traffic |
| Mitchell Interagency | MIT INT | Interagency Traffic |
| Brookings Interagency | BRK INT | Interagency Traffic |
| Watertown Interagency | WTN INT | Interagency Traffic |
| Webster Interagency | WEB INT | Interagency Traffic |
| Isabel Interagency | ISAB INT | Interagency Traffic |
| Aberdeen Interagency | ABR INT | Interagency Traffic |
| Redfield Interagency | RED INT | Interagency Traffic |
| Huron Interagency | HUR INT | Interagency Traffic |
| Miller Interagency | MIL INT | Interagency Traffic |

| Talk Group | Radio Display | Intended Use |
|---|---|---|
| Chamberlain Interagency | CHAM INT | Interagency Traffic |
| Winner Interagency | WIN INT | Interagency Traffic |
| Pierre Interagency | PIER INT | Interagency Traffic |
| Mobridge Interagency | MOB INT | Interagency Traffic |
| Phillip Interagency | PHIL INT | Interagency Traffic |
| Martin Interagency | MAR INT | Interagency Traffic |
| Bison Interagency | BIS INT | Interagency Traffic |
| Rapid City Interagency | RC INT | Interagency Traffic |
| Southern Hills Interagency | SH INT | Interagency Traffic |
| Northern Hills Interagency | NH INT | Interagency Traffic |
| Faith Interagency | FATH INT | Interagency Traffic |

c. SP OPS (Special Operations) Talkgroups

These are requested talkgroups for non-routine operations. Requests for these talkgroups will be directed towards one of the three State Radio dispatch centers. All radios on the system will be programmed with these talkgroups. These talkgroups shall be labeled as follows:

| Talk Group | Radio Display | Intended Use |
|---|---|---|
| Special Operations 1 | SP OP 1 | Communications During Disasters and Special Events |
| Special Operations 2 | SP OP 2 | Communications During Disasters and Special Events |
| Special Operations 3 | SP OP 3 | Communications During Disasters and Special Events |
| Special Operations 4 | SP OP 4 | Communications During Disasters and Special Events |
| Special Operations 5 | SP OP 5 | Communications During Disasters and Special Events |
| Special Operations 6 | SP OP 6 | Communications During Disasters and Special Events |
| Special Operations 7 | SP OP 7 | Communications During Disasters and Special Events |
| Special Operations 8 | SP OP 8 | Communications During Disasters and Special Events |
| Special Operations 9 | SP OP 9* | Communications During Disasters and Special Events |
| Special Operations 10 | SP OP 10** | Communications During Disasters and Special Events |

* Some radios labeled HP
** Some radios labeled SRC

i. The Special Operations talkgroups were designed to allow for incident management communications off of the normal operating talkgroups,

freeing up those talkgroups for normal operations. These are designated to be operated on in either a proactive manner, or a reactive manner, depending upon the situation.

ii. Special Operations talkgroups can be used for either scheduled events or emergencies, but must be reserved. Scheduled events assignments may be pre-empted by emergency situations. Special Operations talkgroups are request-only talkgroups, with request made to State Radio Dispatch via radio over any Interagency Talkgroup, or by telephone to one of the following dispatch centers:

- Pierre-- 605-773-3536
- Huron-- 605-353-7132
- Rapid City-- 605-393-8121

d. State Fire (ST FIRE 2 and 3 only) Talkgroups

These are intended for use as a request-mutual aid fire talkgroup. All radios will be programmed with these talkgroups. These talkgroups shall be labeled as follows:

| Talk Group | Radio Display | Intended Use |
|---|---|---|
| State Fire 1 | STFIRE-1 | Interagency Fire related contact with Great Plains Dispatch Center in Rapid City* |
| State Fire 2 | STFIRE-2 | State Mutual Aid Fire – Special Operations Channel |
| State Fire 3 | STFIRE-3 | State Mutual Aid Fire – Special Operations Channel |

i. *Note that State Fire 1 is intended for interagency fire-related communications with Great Plains Dispatch Center in Rapid City and IS NOT intended for Special Operations Request-Mutual Aid from resources other than Great Plains.

ii. The State Fire 2 and 3 talkgroups are request-only talkgroups, with requests being made to State Radio Dispatch via radio over any Interagency Talkgroup, or by telephone to one of the following dispatch centers:

- Pierre-- 605-773-3536
- Huron-- 605-353-7132
- Rapid City-- 605-393-8121

e. NWS Talkgroups

The National Weather Service (NWS) talkgroups are a direct link to the NWS Offices in Rapid City, Aberdeen, and Sioux Falls. These talkgroups are to be used for communications with NWS when relaying weather spotter, fire conditions and other weather related information from the field. All radios on the system will be programmed with these talkgroups. These talkgroups shall be labeled as follows:

| Talk Group | Radio Display | Intended Use |
|---|---|---|
| National Weather Service | NWS-W | Weather Related Reporting to NWS – Western, South Dakota |
| National Weather Service | NWS-C/NE | Weather Related Reporting to NWS – Central/Northeastern South Dakota |
| National Weather Service | NWS-SE | Weather Related Reporting to NWS – Southeastern, South Dakota |

f. EMS (Hospital) Talkgroups

South Dakota's facilities are included in this plan for three primary reasons:

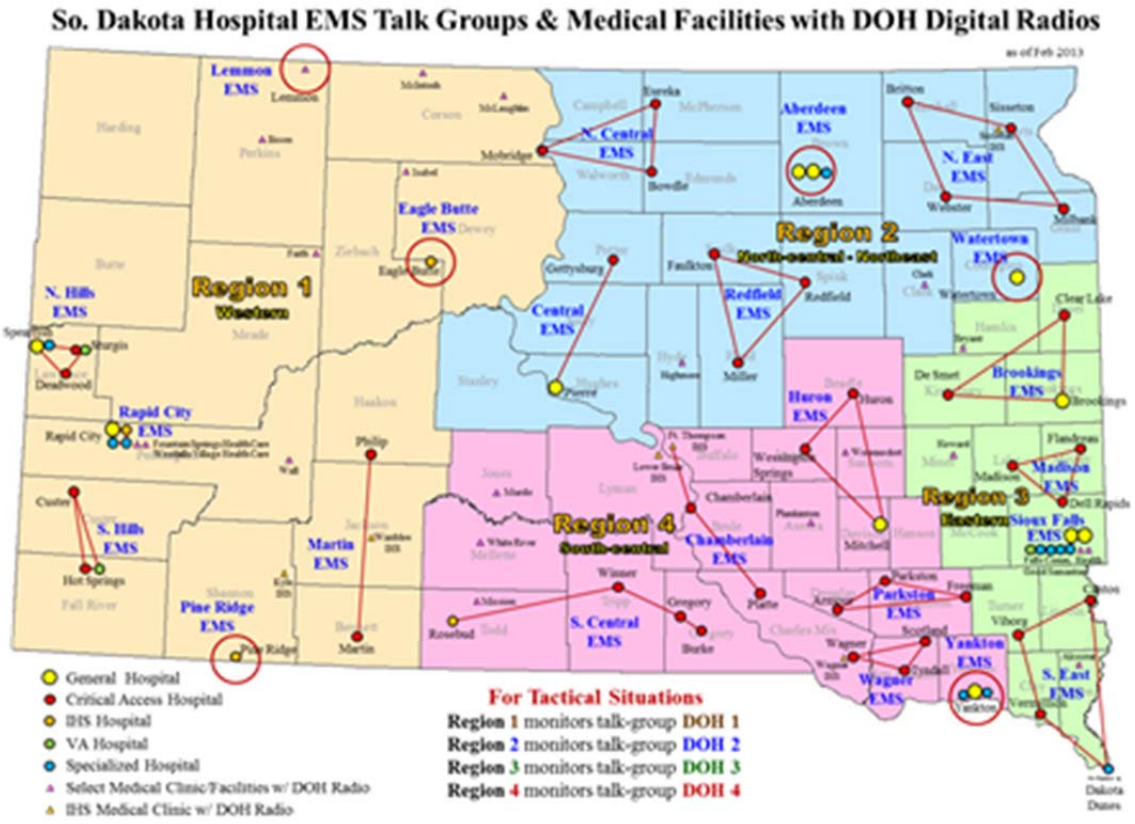
1. Ambulance services throughout the State will be using this technology to communicate with hospitals to obtain online medical control, and relay pertinent patient information.
2. Helicopter air ambulances will be equipped with the technology to:
    - Provide air to ground communications during emergencies
    - Provide communications to referring facilities during inter-facility transport.
    - Provide contact for dispatch/communications centers during flight following procedures when traditional duplex communication is not possible.
3. Hospital laboratories that are designated by the State as surge laboratories must have access to the system during bio-terror threats, or other mass casualty events for surveillance purposes.

<u>Procedure:</u>

Radios provided by the South Dakota Department of Health to facilities in the state have been pre-programmed with various local and regional talkgroups. These talkgroups are in place so public safety agencies (primarily ambulance services) would be able to predict the talkgroup the receiving facility would be operating when transporting a patient. This principle will apply to all hospitals in the State that have obtained the state public safety radio system. Hospitals should monitor the talkgroup of which they are a member according to the following map entitled "SOUTH DAKOTA HOSPITAL TALKGROUPS

Example:

According to the following map, hospitals in Madison, Flandreau, and Dell Rapids are connected on the MAD EMS talkgroup. This must be the talkgroup monitored by these facilities since ambulances coming from other areas will expect to contact them here. Hospitals in Spearfish, Deadwood, and Sturgis are connected on the NHILLS EMS talkgroup. Public safety agencies need to be able to contact these facilities in emergencies, and a statewide plan that can be predicted by all agencies will be the most effective. Hospitals in Parkston, Freeman, and Armour are connected via the PARK EMS talkgroup; a helicopter responding to a call to transport needs to be able to contact these facilities, and when the plan is followed, can predict which talkgroup the facility will be monitoring. If the hospital in Faulkton has a patient to be transferred, a helicopter called to transport would be able to select the REDF EMS talkgroup in order to make landing arrangements, and so on. If an ambulance is called to transport a patient from Phillip to a hospital in Rapid City, that ambulance would be able to select the RC EMS talkgroup to relay pertinent information to the receiving facility in Rapid City.



Agency Talkgroups

Each agency is considered as "owner" of the private talkgroup assigned to them. Agencies are expected to use the talkgroups assigned to the department for all interdepartmental traffic. Policies and procedures for the use of the agency talkgroup are at the discretion of the department, within the technical limitations set forth in Section V item A4.

g. Requests for Additional Talkgroups

Requests for new talkgroups will be submitted to the System Administrator using Attachment 2.

Authorization of private talkgroups for operations and monitoring of other agencies will be processed through the System Administrator. Attachment 3 will be filled out for each authorization, a copy kept on file, and another copy sent to:

State Radio Communications
Attn: System Administrator
1302 E Hwy 14
Pierre, SD 57501

Or Faxed To: 605-773-4629

h. Authorization/Revocation for Sharing of Talkgroups

To access non-agency talkgroups, authorization from the “owner” of that talkgroup must be obtained using attachment 3 in this document. Authorization of private talkgroup to operate/monitor on that talkgroup may be rescinded by the talkgroup “owner” by written notice.

## 12. Authorized System Access

Access will be granted to public safety. Further applications beyond public safety will be reviewed on a case-by-case basis by the System Administrator and the SDPSCC review committee.

a. Public Safety

Law Enforcement

- Any agency recognized by the South Dakota Attorney General, and their associated dispatch/911 operations
- Any agency recognized by US Attorney General
- Any agency recognized as a tribal law-enforcement agency

Fire Departments

- Any agency recognized by state Fire Marshal’s Office

- Any Federally recognized fire agency/department
- Any tribal fire agency/department

EMS

Ambulance:

- Any licensed ambulance service

Facilities

- Any hospital or facility recognized by the State Department of Health

Emergency Management

- Any emergency management agency recognized by the state Department of Public Safety

b. Public Service

Transportation

- State and local transportation units
- Transit systems (by request & review process)
- Support Agencies
- Agencies authorized by State statute such as Red Cross, Salvation Army, and like agencies that support in times of emergency. To include communications service agencies that support radio maintenance or operations, utility and other assigned critical support entities.

NWS

- 3 current weather services offices

Public Works

Court Services/Corrections

Regulatory

Other Governmental/Non-Governmental (NGO) Agencies

- NGO agencies such as Red Cross, Salvation Army, etc. upon approval of Incident Commander.

## 13. Applying for System Access

Agencies or entities wishing to be granted access to the State-wide Radio Network System fill out the System Access application requested from and returned to the SRC System Administrator.

- The SRC System Administrator will recommend approval or denial and forward the applicant information to the SDPSCC.
- The SDPSCC will review the application and will give written notice of approval or denial within 45 days.
- If the requesting agencies application is denied, the SDPSCC will provide the requesting agency with the necessary stipulations of compliance to obtain system access, or a written explanation of the decision to deny access to the system.
- A copy of the notice of approval or denial will be forwarded to the SDPSCC and the Commissioner of BIT.

# APPENDIX C: NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS)/INCIDENT COMMAND SYSTEM (ICS) TRAINING COURSES

| | |
|---|---|
| Federal/State/Local/Tribal/Private Sector & Non-governmental personnel to include:<br>*Entry level first responders & disaster workers*<br>• Emergency Medical Service personnel<br>• Firefighters<br>• Hospital staff<br>• Law Enforcement personnel<br>• Public Health personnel<br>• Public Works/Utility personnel<br>• Skilled Support Personnel<br>• Other emergency management response, support, volunteer personnel at all levels | • FEMA IS-700: NIMS, An Introduction<br>• ICS-100: Introduction to ICS or equivalent |
| Federal/State/Local/Tribal/Private Sector & Non-governmental personnel to include:<br>*First line supervisors*, single resource leaders, field supervisors, and other emergency management/response personnel that require a higher level of ICS/NIMS Training. | • FEMA IS-700: NIMS, An Introduction<br>• ICS-100: Introduction to ICS or equivalent<br>• ICS-200: Basic ICS or equivalent |
| Federal/State/Local/Tribal/Private Sector & Non-governmental personnel to include:<br>*Middle management* including strike team leaders, task force leaders, unit leaders, division/group supervisors, branch directors, and multi-agency coordination system/emergency operations center staff. | • FEMA IS-700: NIMS, An Introduction<br>• FEMA IS-800: National Response Framework (NRF), An Introduction*<br>• ICS-100: Introduction to ICS or equivalent<br>• ICS-200: Basic ICS or equivalent<br>• *ICS-300: Intermediate ICS or equivalent (FY07 Requirement)* |
| Federal/State/Local/Tribal/Private Sector & Non-governmental personnel to include:<br>*Command and general staff*, select department heads with multi-agency coordination system responsibilities, area commanders, emergency managers, and multi-agency coordination system/emergency operations center managers. | • FEMA IS-700: NIMS, An Introduction<br>• FEMA IS-800: National Response Framework (NRF), An Introduction*<br>• ICS-100: Introduction to ICS or equivalent<br>• ICS-200: Basic ICS or equivalent<br>• *ICS-300: Intermediate ICS or equivalent (FY07 Requirement)*<br>• *ICS-400: Advanced ICS or equivalent (FY07 Requirement)* |

## APPENDIX D: LIST OF ACRONYMS

| | |
|---|---|
| AAR | After Action Report |
| APCO | Association of Public Safety Communications Officials |
| APR | Annual Progress Report |
| AUXCOMM | Auxiliary Communications |
| BIA | Bureau of Indian Affairs |
| BIT | Bureau of Information and Telecommunications |
| CASM | Communications Asset Survey and Mapping |
| CFOG | Communications Field Operations Guide |
| COML | Communications Unit Leader |
| COMT | Communications Unit Technician |
| COMU | Communications Unit |
| DHS | U.S. Department of Homeland Security |
| DOH | Department of Health |
| EMS | Emergency Medical Services |
| EMT | Emergency Medical Technician |
| EOC | Emergency Operations Center |
| FCC | Federal Communications Commission |
| FirstNet | First Responder Network Authority |
| ICS | Incident Command System |
| INT | Interagency |
| MHz | Megahertz |
| LMR | Land Mobile Radio |
| MOU | Memorandum of Understanding |
| NCIC | National Criminal Information Center |
| NCSWIC | National Council of Statewide Interoperability Coordinators |
| NECP | National Emergency Communications Plan |
| NENA | National Emergency Number Association |
| NG911 | Next Generation 911 |
| NGO | Non-Governmental Organization |
| NIMS | National Incident Management System |

| | |
|---|---|
| NPSBN | Nationwide Public Safety Broadband Network |
| NRF | National Response Framework |
| NTIA | National Telecommunications and Information Administration |
| NWS | National Weather Service |
| OEC | Office of Emergency Communications |
| OEM | Office of Emergency Management |
| P25 | Project 25 |
| PIO | Public Information Officer |
| PPD | Presidential Policy Directive |
| PSAP | Public Safety Answering Point |
| PSTN | Public Switched Telephone Network |
| RF | Radio Frequency |
| RFI | Radio Frequency Interference |
| RIC | Regional Interoperability Council |
| RPC | Regional Planning Committee |
| SCIP | Statewide Communication Interoperability Plan |
| SDLETS | South Dakota Law Enforcement Telecommunications System |
| SDPSCC | South Dakota Public Safety Communications Council |
| SLIGP | State and Local Implementation Grant Program |
| SOP | Standard Operating Procedure |
| SPOC | Single Point of Contact |
| SRC | State Radio Communications |
| STR | Strategic Technology Reserve |
| SWIC | Statewide Interoperability Coordinator |
| TA | Technical Assistance |
| TICP | Tactical Interoperable Communications Plan |
| UASI | Urban Area Security Initiative |
| UHF | Ultra High Frequency |
| UPS | Uninterruptable Power Supply |
| VHF | Very High Frequency |