NEW HAMPSHIRE STATEWIDE COMMUNICATION INTEROPERABILITY PLAN

October 2022

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LETTER FROM THE STATEWIDE INTEROPERABILITY COORDINATOR

Greetings,

As the Statewide Interoperability Coordinator (SWIC) for New Hampshire, I am pleased to present to you the 2022 New Hampshire Statewide Communication Interoperability Plan (SCIP). The SCIP represents the State's continued commitment to improving emergency communications interoperability and supporting the public safety practitioners throughout the State. In addition, this update meets the requirement of the current U.S. Department of Homeland Security grant guidelines.

Representatives from the New Hampshire Statewide Interoperability Executive Committee collaborated to update the SCIP with actionable and measurable goals and objectives that have champions identified to ensure completion. These goals and objectives focus on Governance, Technology and Cybersecurity, and Funding. They are designed to support our State in planning for emerging technologies and navigating the ever-changing emergency communications landscape. They also incorporate the SAFECOM/National Council of SWICs (NCSWIC) State Interoperability Markers which describe New Hampshire's level of interoperability maturity by measuring progress against 25 markers.

As we continue to enhance interoperability, we must remain dedicated to improving our ability to communicate among disciplines and across jurisdictional boundaries. With help from public safety practitioners statewide, we will work to achieve the goals set forth in the SCIP and become a nationwide model for statewide interoperability.

Sincerely,

John Stevens
New Hampshire Statewide Interoperability Coordinator
New Hampshire Department of Safety, Division of Emergency Services and Communications

INTRODUCTION
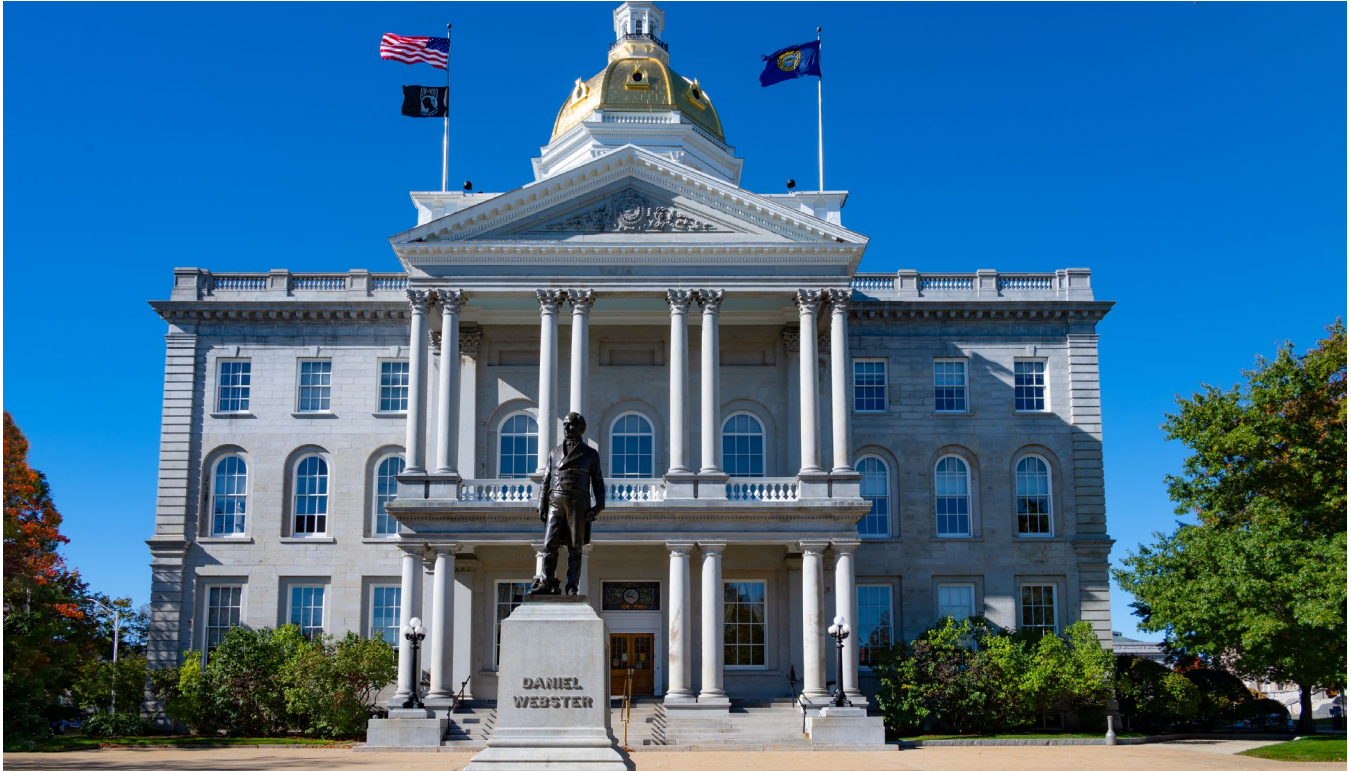
The SCIP is a one-to-three-year strategic planning document that contains the following components:

- **Introduction** – Provides the context necessary to understand what the SCIP is and how it was developed. It also provides an overview of the current emergency communications landscape.
- **Vision and Mission** – Articulates New Hampshire's vision and mission for improving emergency and public safety communications interoperability over the next one-to-three-years.
- **Governance** – Describes the current governance mechanisms for communications interoperability within New Hampshire as well as successes, challenges, and priorities for improving it. The SCIP is a guiding document and does not create any authority or direction over any state or local systems or agencies.
- **Technology and Cybersecurity** – Outlines public safety technology and operations needed to maintain and enhance interoperability across the emergency communications ecosystem.
- **Funding** – Describes the funding sources and allocations that support interoperable communications capabilities within New Hampshire along with methods and strategies for funding sustainment and enhancement to meet long-term goals.
- **Implementation Plan** – Describes New Hampshire's plan to implement, maintain, and update the SCIP to enable continued evolution of and progress toward the State's interoperability goals.

The Emergency Communications Ecosystem consists of many inter-related components and functions, including communications for incident response operations, notifications and alerts and warnings, requests for assistance and reporting, and public information exchange. The primary functions are depicted in the 2019 National Emergency Communications Plan.[1]

The Interoperability Continuum, developed by the Department of Homeland Security's SAFECOM program and shown in Figure 1, serves as a framework to address challenges and continue improving operable/interoperable and public safety communications.[2] It is designed to assist public safety agencies and policy makers with planning and implementing interoperability solutions for communications across technologies.
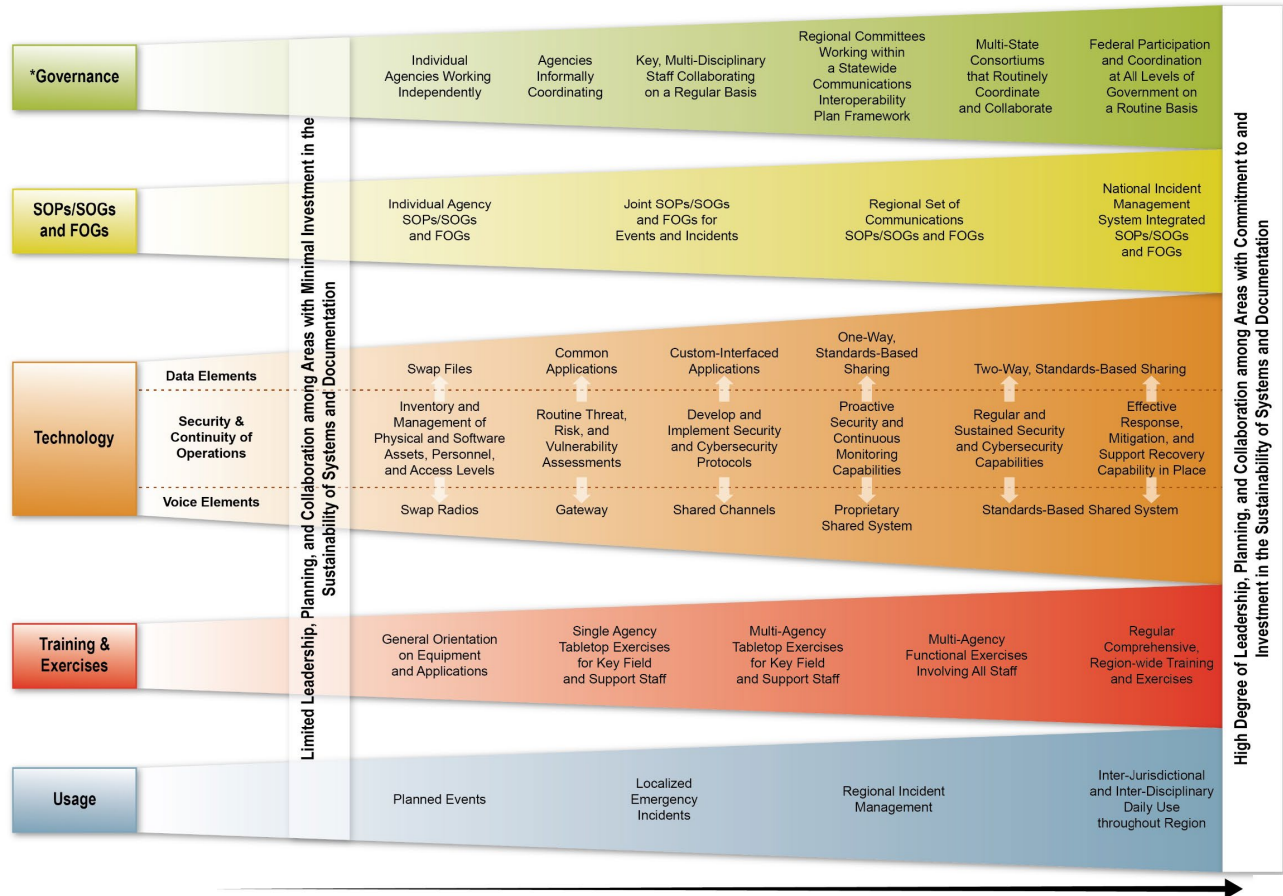

Figure 1: Interoperability Continuum

Interoperability and Emergency Communications Overview

Interoperability is the ability of emergency response providers and relevant government officials to communicate across jurisdictions, disciplines, and levels of government as needed and as authorized. Reliable, timely communications among public safety responders and between public safety agencies and citizens is critical to effectively carry out public safety missions, and in many cases, saving lives.

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[1] 2019 National Emergency Communications Plan
[2] Interoperability Continuum Brochure

Traditional voice capabilities, such as land mobile radio (LMR) and landline 9-1-1 services have long been and continue to be critical tools for communications. However, the advancement of internet protocol-based technologies in public safety has increased the type and amount of information responders receive, the tools they communicate with, and complexity of new and interdependent systems. Emerging technologies increase the need for coordination across public safety disciplines, communications functions, and levels of government to ensure emergency communications capabilities are interoperable, reliable, and secure.

An example of this evolution is the transition of public-safety answering points (PSAPs) to Next Generation 9-1-1 (NG9-1-1) technology that will enhance sharing of critical information in real-time using multimedia—such as pictures, video, and text — among citizens, PSAP operators, dispatch, and first responders. While potential benefits of NG9-1-1 are tremendous, implementation challenges remain. Necessary tasks to fully realize these benefits include interfacing disparate systems, developing training and standard operating procedures (SOPs) and ensuring information security.

VISION AND MISSION

This section describes New Hampshire's vision and mission for improving emergency and public safety communications interoperability:

Vision:

Enhance statewide interoperable communications using sustainable and reliable public safety systems

Mission:

Strengthen the reliability and sustainability of interoperable public safety communications statewide

GOVERNANCE

The New Hampshire Statewide Interoperability Executive Committee (SIEC) is the centralized interoperable communications planning and implementation body in the State. The SIEC's three working groups on radio frequency, operations, and data communications meet monthly, while the SIEC itself meets once a quarter. The SIEC also has two subcommittees, one for Communications Unit Leaders (COMLs) and one for Communications Unit Technicians (COMTs). The Statewide Interoperability Coordinator falls under the Department of Public Safety, Division of Emergency Services and Communications.

Conversations during the SCIP workshop revealed the need to add communications injects in trainings and exercises, increase interoperability with bordering communities and the surrounding region, expand mandatory interoperability training and exercises statewide, and increase outreach and education on emergency communications.

The following table outlines goal and objectives related to Governance:

Governance	
Goal	**Objectives**
1. Continue to evolve existing governance structures to meet emerging technologies and communications needs	1.1 Identify and assign emerging technologies and communications needs to the various working groups and subcommittees
	1.2 Ensure continued cross representation of the SIEC, 9-1-1 Commission, and SECC
	1.3 Increase attendance at SIEC meetings
	1.4 Ensure the policies and procedures of the SIEC develop with emerging technologies and challenges

TECHNOLOGY AND CYBERSECURITY

Land Mobile Radio

The State of New Hampshire houses a mix of Motorola and Harris systems with a Very-High Frequency (VHF) Project 25 (P25) system statewide. The Cities of Manchester and Nashua are on an 800-Megahertz (MHz) system, and the Town of Merrimack will soon join this system. New Hampshire utilizes the H Bank for interoperability. The State also utilizes Mutualink as a data-sharing solution.

Since New Hampshire is an VHF heavy state, it is often difficult for users to obtain new or additional frequencies. Standardization of equipment across the State is also a challenge. Some agencies have VHF single-band radios, while others have 800 MHz single-band radios. The State would like to provide all-band radios statewide, create additional infrastructure for the LMR system, engage in lifecycle planning for radio purchasing, establish a statewide hailing channel, and standardize equipment across the State.

9-1-1/Next Generation 9-1-1

The Bureau of Emergency Communications under the Division of Emergency Services and Communications operates the State's 9-1-1 system. The 9-1-1 Commission sets policy for the Bureau of Emergency Communications and includes representation from 16 organizations. The State has two primary PSAPs, both with text-to-9-1-1 capabilities. The State would like to see increased regional standardization of 9-1-1/Next Generation 9-1-1 (NG9-1-1) technologies and capabilities.

Broadband

To date, AT&T/FirstNet has at least one Band 14 (dedicated to public safety) tower in 180 of 234 communities statewide. The State meets with RAN engineers quarterly to look at the infrastructure development and to provide suggestions on needs. There is a large statewide fiber network primarily used by the education sector and public broadcasting companies.

New Hampshire will continue to promote FirstNet statewide, as well as increase training and exercises for FirstNet resources and subscriber units. Increased broadband infrastructure is needed across the State, especially in the counties of Cheshire, Sullivan, and Grafton. Standardization and interoperability between different push-to-talk (PTT) applications continues to

be a challenge across the State and nationwide. The State would also like to see an increase in in-building coverage and the creation of policies and procedures for bringing your own device onto the system.

Alerts and Warnings

The State Emergency Communications Committee (SECC) administers the New Hampshire alerts and warnings program, although it has limited authority. The SECC is updating the State's alerts and warnings plan, which was last updated in the year 2000. Seven agencies are authorized to activate the Emergency Alerting System (EAS) in New Hampshire: New Hampshire State Police, the Office Homeland Security and Emergency Management, the National Weather Service, Grafton County, the City of Lebanon, the City of Nashua, and the Town of Bedford. The NH Alerts platform is powered by CodeRED. The State has never launched an Integrated Public Alert and Warning System (IPAWS) alert.

Looking ahead, the State would like to increase training and exercises for EAS/Wireless Emergency Alerts (WEA), share best practices on alerts and warnings across the State, conduct outreach and education of alerts and warnings capabilities, and recommend technologies and applications for local alerting.

Cybersecurity

The New Hampshire Cyber Integration Center (NHCIC) is the unified state center for coordinating cybersecurity between and among executive branch agencies and departments. The State of New Hampshire, in partnership with the Multi-State Information Sharing and Analysis Center (MS-ISAC), participates in state cybersecurity alert determinations. However, emergency communcations has their own information technology team.

The SIEC looks to increase coordination between the emergency communications community, the MS-ISAC and the NHCIC, and to educate these bodies on emergency communications needs. It also looks to enhance education and awareness of cyber threats and resources, increase trainings and exercises on cybersecurity, develop a cybersecurity-focused best practices list, and maintain interoperability while securing systems.

Technology and cybersecurity goals and objectives include the following:

Technology and Cybersecurity	
Goal	Objectives
2. Maintain and support existing public safety communications; evaluate and adopt emerging technologies	2.1 Utilize subject matter experts (SMEs) from all sources to leverage existing and emerging technologies
	2.2 Continue outreach and education efforts to share at the local, county, regional, State, and Federal level
	2.3 Recommend policies and procedures for the acquisition and use of all interoperable resources
	2.4 Identify and implement a hailing/duress frequency that is monitored 24/7/365
3. Support the Division of Emergency Services and Communications in their pursuit	3.1 Collaborate with the Department of Safety on NG9-1-1 related information

Goal	Objectives
of emerging technologies (ex. NG9-1-1)	
4. Promote the adoption of broadband to expand emergency response capabilities	4.1 Monitor the availability of mission-critical push to talk
	4.2 Continue to meet regularly with AT&T FirstNet to pursue additional coverage options and monitor progress
	4.3 Monitor and evaluate capabilities and services of available carriers
	4.4 Evaluate and recommend a suite of applications for public safety responders
	4.5 Establish agreement with AT&T FirstNet on deployable notification procedures
	4.6 Looking at specific areas with challenges to connectivity (ex. 3 Western counties that border Vermont)
5. Support the SECC, EAS, and other alerts and warnings in their pursuit of existing and emerging technologies	5.1 Maintain a dialogue with the SECC
	5.2 Open a dialogue with other alerting authorities across the state
	5.3 Create guidelines on proper alerts and warnings distribution and implement training and exercises
6. Support Training and Exercises at the local, regional, and state level	6.1 Identify sources of training and opportunities for exercises to include the collection and analysis of AARs and shared with ESF-2
	6.2 SWIC to work closely with Homeland Security and Emergency Management (HSEM) to be part of exercises with communications injects
7. Promote the integration of cybersecurity into the emergency communications ecosystem	7.1 Begin a dialogue on cybersecurity awareness across the state
	7.2 Increase training and exercises on cybersecurity
	7.3 Coordinate and leverage CISA and other cybersecurity resources

FUNDING

As in years past, funding to replace existing technology and adopt emerging technology remains a challenge for New Hampshire agencies. There are multiple grant systems and funding sources that exist across the State, which are not always coordinated when emergency communications equipment and technology are purchased. The SIEC would like to increase coordination between these systems and sources, tie compliance around emergency communications to grant opportunities, include standardization procedures and policies to state purchasing contracts, and engage in innovative and sustainable funding opportunities.

IMPLEMENTATION PLAN

Each goal and its associated objectives have a timeline with a target completion date, and one or multiple owners that will be responsible for overseeing and coordinating its completion. Accomplishing goals and objectives will require the support and cooperation from numerous individuals, groups, or agencies, and will be added as formal agenda items for review during regular governance body meetings. The Cybersecurity and Infrastructure Security Agency's (CISA) Interoperable Communications Technical Assistance Program (ICTAP) has a catalog[3] of technical assistance (TA) available to assist with the implementation of the SCIP. TA requests are to be coordinated through the SWIC.

New Hampshire's implementation plan is shown in the table below.

Goals	Objectives	Owners	Completion Date
1 Continue to evolve existing governance structures to meet emerging technologies and communications needs	1.1 Identify and assign emerging technologies and communications needs to the various working groups and subcommittees	SWIC, SIEC	Ongoing
	1.2 Ensure continued cross representation of the SIEC, 9-1-1 Commission, and SECC		
	1.3 Increase attendance at SIEC meetings		
	1.4 Ensure the policies and procedures of the SIEC develop with emerging technologies and challenges		
2 Maintain and support existing public safety communications; evaluate and adopt emerging technologies	2.1 Utilize subject matter experts (SMEs) from all sources to leverage existing and emerging technologies	SIEC, public safety agencies, DESC	Ongoing
	2.2 Continue outreach and education efforts to share at the local, county, regional, State, and Federal level		Ongoing
	2.3 Recommend policies and procedures for the acquisition and use of all interoperable resources		Ongoing
	2.4 Identify and implement a hailing/duress frequency that is monitored 24/7/365		September 2024
3 Support the Division of Emergency Services and Communications in their pursuit of emerging technologies (ex. NG9-1-1)	3.1 Collaborate with the Department of Safety on NG9-1-1 related information	DESC	Ongoing/In Progress
4 Promote the adoption of broadband to expand emergency response capabilities	4.1 Monitor the availability of mission-critical push to talk	SIEC, SWIC, SPOC, FirstNet Authority	Ongoing
	4.2 Continue to meet regularly with AT&T FirstNet to pursue additional coverage options and monitor progress		Ongoing

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[3] Emergency Communications Technical Assistance Planning Guide

Goals	Objectives	Owners	Completion Date
	4.3 Monitor and evaluate capabilities and services of available carriers		Ongoing
	4.4 Evaluate and recommend a suite of applications for public safety responders		Ongoing
	4.5 Establish agreement with AT&T FirstNet on deployable notification procedures		September 2023
	4.6 Looking at specific areas with challenges to connectivity (ex. 3 Western counties that border Vermont)		Ongoing
5 Support the SECC, EAS, and other alerts and warnings in their pursuit of existing and emerging technologies	5.1 Maintain a dialogue with the SECC	ESF-2 coordinator, DESC	Ongoing
	5.2 Open a dialogue with other alerting authorities across the state		September 2023
	5.3 Create guidelines on proper alerts and warnings distribution and implement training and exercises		September 2024
6 Support Training and Exercises at the local, regional, and state level	6.1 Identify sources of training and opportunities for exercises to include the collection and analysis of AARs and shared with ESF-2	ESF-2 coordinator, SWIC, HSEM	Ongoing
	6.2 SWIC to work closely with Homeland Security and Emergency Management (HSEM) to be part of exercises with communications injects		
7 Promote the integration of cybersecurity into the emergency communications ecosystem	7.1 Begin a dialogue on cybersecurity awareness across the state	HSEM, SWIC, CISA, CISO, DESC	September 2023
	7.2 Increase training and exercises on cybersecurity		Ongoing
	7.3 Coordinate and leverage CISA and other cybersecurity resources		September 2023 and ongoing
8 Relicense the 700 MHz spectrum	8.1 Relicense 700 MHz frequencies to provide ubiquitous coverage for airborne assets to communicate with dispatch centers and ground units.	DESC	December 2023

APPENDIX A: STATE MARKERS

In 2019, CISA supported States and Territories in establishing an initial picture of interoperability nationwide by measuring progress against 25 markers. These markers describe a State or Territory's level of interoperability maturity. Below is New Hampshire's assessment as of 09/08/2022, of their progress against the markers.

Marker	Best Practices / Performance Markers	Initial	Defined	Optimized
1	**State-level governing body established (e.g., SIEC, SIGB).** Governance framework is in place to sustain all emergency communications	Governing body does not exist, or exists and role has not been formalized by legislative or executive actions	Governing body role established through an executive order	Governing body role established through a state law
2	**SIGB/SIEC participation.** Statewide governance body is comprised of members who represent all components of the emergency communications ecosystem.	Initial (1-2) Governance body participation includes: ☐ Communications Champion/SWIC ☐ LMR ☐ Broadband/LTE ☐ 9-1-1 ☐ Alerts, Warnings and Notifications	Defined (3-4) Governance body participation includes: ☐ Communications Champion/SWIC ☐ LMR ☐ Broadband/LTE ☐ 9-1-1 ☐ Alerts, Warnings and Notifications	Optimized (5) Governance body participation includes: ☒ Communications Champion/SWIC ☒ LMR ☒ Broadband/LTE ☒ 9-1-1 ☒ Alerts, Warnings and Notifications
3	**SWIC established.** Full-time SWIC is in place to promote broad and sustained participation in emergency communications.	SWIC does not exist	Full-time SWIC with collateral duties	Full-time SWIC established through executive order or state law
4	**SWIC Duty Percentage.** SWIC spends 100% of time on SWIC-focused job duties	SWIC spends >1, <50% of time on SWIC-focused job duties	SWIC spends >50, <90% of time on SWIC-focused job duties	SWIC spends >90% of time on SWIC-focused job duties
5	**SCIP refresh.** SCIP is a living document that continues to be executed in a timely manner. Updated SCIPs are reviewed and approved by SIGB/SIEC.	No SCIP OR SCIP older than 3 years	SCIP updated within last 2 years	SCIP updated in last 2 years and progress made on >50% of goals
6	**SCIP strategic goal percentage.** SCIP goals are primarily strategic to improve long term	<50% are strategic goals in SCIP	>50%<90% are strategic goals in SCIP	>90% are strategic goals in SCIP

Marker	Best Practices / Performance Markers	Initial	Defined	Optimized
	emergency communications ecosystem (LMR, LTE, 9-1-1, A&W) and future technology transitions (5G, IoT, UAS, etc.). (Strategic and non-strategic goals are completely different; strategy -- path from here to the destination; it is unlike tactics which you can "touch"; cannot "touch" strategy)			
7	**Integrated emergency communication grant coordination.** Designed to ensure state/territory is tracking and optimizing grant proposals, and there is strategic visibility how grant money is being spent.	No explicit approach or only informal emergency communications grant coordination between localities, agencies, SAA and/or the SWIC within a state/territory	SWIC and/or SIGB provides guidance to agencies and localities for emergency communications grant funding but does not review proposals or make recommendations	SWIC and/or SIGB provides guidance to agencies and localities for emergency communications grant funding and reviews grant proposals for alignment with the SCIP. SWIC and/or SIGB provides recommendations to the SAA
8	**Communications Unit process.** Communications Unit process present in state/territory to facilitate emergency communications capabilities. Check the boxes of which Communications positions are currently covered within your process: ☒ COML ☒ COMT ☒ ITSL ☒ RADO ☒ INCM ☒ INTD ☒ AUXCOM ☒ TERT	No Communications Unit process at present	Communications Unit process planned or designed (but not implemented)	Communications Unit process implemented and active

Marker	Best Practices / Performance Markers	Initial	Defined	Optimized
9	**Interagency communication.** Established and applied interagency communications policies, procedures, and guidelines.	Some interoperable communications SOPs/SOGs exist within the area and steps have been taken to institute these interoperability procedures among some agencies	Interoperable communications SOPs/SOGs are formalized and in use by agencies within the area. Despite minor issues, SOPs/SOGs are successfully used during responses and/or exercises	Interoperable communications SOPs/SOGs within the area are formalized and regularly reviewed. Additionally, NIMS procedures are well established among agencies and disciplines. All needed procedures are effectively utilized during responses and/or exercises.
10	**TICP (or equivalent) developed.** Tactical Interoperable Communications Plans (TICPs) established and periodically updated to include all public safety communications systems available	Regional or statewide TICP in place	Statewide or Regional TICP(s) updated within past 2-5 years	Statewide or Regional TICP(s) updated within past 2 years
11	**Field Operations Guides (FOGs) developed.** FOGs established for a state or territory and periodically updated to include all public safety communications systems available	Regional or statewide FOG in place	Statewide or Regional FOG(s) updated within past 2-5 years	Statewide or Regional FOG(s) updated within past 2 years
12	**Alerts & Warnings.** State or Territory has Implemented an effective A&W program to include Policy, Procedures and Protocol measured through the following characteristics: (1) Effective documentation process to inform and control message origination and distribution (2) Coordination of alerting plans and procedures with neighboring jurisdictions (3) Operators and alert originators receive periodic training (4) Message origination, distribution, and correction procedures in place	<49% of originating authorities have all of the four A&W characteristics	>50%<74% of originating authorities have all of the four A&W characteristics	>75%<100% of originating authorities have all of the four A&W characteristics

Marker	Best Practices / Performance Markers	Initial	Defined	Optimized
13	**Radio programming.** Radios programmed for National/Federal, SLTT interoperability channels and channel nomenclature consistency across a state/territory.	<49% of radios are programed for interoperability and consistency	>50%<74% of radios are programed for interoperability and consistency	>75%<100% of radios are programed for interoperability and consistency
14	**Cybersecurity Assessment Awareness.** Cybersecurity assessment awareness. (Public safety communications networks are defined as covering: LMR, LTE, 9-1-1, and A&W)	Public safety communications network owners are aware of cybersecurity assessment availability and value (check yes or no for each option) ☐ LMR ☐ LTE ☐ 9-1-1/CAD ☐ A&W	Initial plus, conducted assessment, conducted risk assessment. (Check yes or no for each option) ☒ LMR ☒ LTE ☒ 9-1-1/CAD ☒ A&W	Defined plus, Availability of Cyber Incident Response Plan (check yes or no for each option) ☐ LMR ☐ LTE ☐ 9-1-1/CAD ☐ A&W
15	**NG9-1-1 implementation.** NG9-1-1 implementation underway to serve state/territory population.	Working to establish NG9-1-1 governance through state/territorial plan. • Developing GIS to be able to support NG9-1-1 call routing. • Planning or implementing ESInet and Next Generation Core Services (NGCS). • Planning to or have updated PSAP equipment to handle basic NG9-1-1 service offerings.	More than 75% of PSAPs and Population Served have: • NG9-1-1 governance established through state/territorial plan. • GIS developed and able to support NG9-1-1 call routing. • Planning or implementing ESInet and Next Generation Core Services (NGCS). • PSAP equipment updated to handle basic NG9-1-1 service offerings.	More than 90% of PSAPs and Population Served have: • NG9-1-1 governance established through state/territorial plan. • GIS developed and supporting NG9-1-1 call routing. • Operational Emergency Services IP Network (ESInet)/Next Generation Core Services (NGCS). • PSAP equipment updated and handling basic NG9-1-1 service offerings.
16	**Data operability/interoperability.** Ability of agencies within a region to exchange data on demand, and needed, and as authorized. Examples of systems would be CAD to CAD, Chat, GIS, Critical Incident Management Tool, Web EOC	Agencies are able to share data only by email. Systems are not touching or talking.	Systems are able to touch but with limited capabilities. One-way information sharing.	Full system to system integration. Able to fully consume and manipulate data.

Marker	Best Practices / Performance Markers	Initial	Defined	Optimized
17	**Future Technology/Organizational Learning.** SIEC/SIGB is tracking, evaluating, implementing future technology (checklist)	☒ LMR to LTE Integration ☐ 5G ☐ IoT (cameras) ☐ UAV (Smart Vehicles) ☒ UAS (Drones) ☒ Body Cameras ☒ Public Alerting Software ☒ Sensors ☐ Autonomous Vehicles ☒ MCPTT Apps	☐ Wearables ☐ Machine Learning/Artificial Intelligence/Analytics ☒ Geolocation ☒ GIS ☒ Situational Awareness Apps- common operating picture applications (i.e., Force Tracking, Chat Applications, Common Operations Applications)	☐ HetNets/Mesh Networks/Software Defined Networks ☐ Acoustic Signaling (Shot Spotter) ☒ ESInet ☐ 'The Next Narrowbanding' ☐ Smart Cities
18	**Communications Exercise objectives.** Specific emergency communications objectives are incorporated into applicable exercises Federal/state / territory-wide	Regular engagement with State Training and Exercise coordinators	Promote addition of emergency communications objectives in state/county/regional level exercises (target Emergency Management community). Including providing tools, templates, etc.	Initial and Defined plus mechanism in place to incorporate and measure communications objectives into state/county/regional level exercises
19	**Trained Communications Unit responders.** Communications Unit personnel are listed in a tracking database (e.g., NQS One Responder, CASM, etc.) and available for assignment/response.	<49% of public safety agencies within a state/territory have access to Communications Unit personnel who are listed in a tracking database and available for assignment/response	>50%<74% of public safety agencies within a state/territory have access to Communications Unit personnel who are listed in a tracking database and available for assignment/response	>75%<100% of public safety agencies within a state/territory have access to Communications Unit personnel who are listed in a tracking database and available for assignment/response
20	**Communications Usage Best Practices/Lessons Learned.** Capability exists within jurisdiction to share best practices/lessons learned (positive and/or negative) across all lanes of the Interoperability Continuum related to all components of the emergency communications ecosystem	Best practices/lessons learned intake mechanism established. Create Communications AAR template to collect best practices	Initial plus review mechanism established	Defined plus distribution mechanism established

Marker	Best Practices / Performance Markers	Initial	Defined	Optimized
21	**Wireless Priority Service (WPS) subscription.** WPS penetration across state/territory compared to maximum potential	<9% subscription rate of potentially eligible participants who signed up WPS across a state/territory	>10%<49% subscription rate of potentially eligible participants who signed up for WPS a state/territory	>50%<100% subscription rate of potentially eligible participants who signed up for WPS across a state/territory
22	**Outreach.** Outreach mechanisms in place to share information across state	SWIC electronic communication (e.g., SWIC email, newsletter, social media, etc.) distributed to relevant stakeholders on regular basis	Initial plus web presence containing information about emergency communications interoperability, SCIP, trainings, etc.	Defined plus in-person/webinar conference/meeting attendance strategy and resources to execute
23	**Sustainment assessment.** Identify interoperable component system sustainment needs;(e.g., communications infrastructure, equipment, programs, management) that need sustainment funding. (Component systems are emergency communications elements that are necessary to enable communications, whether owned or leased - state systems only)	< 49% of component systems assessed to identify sustainment needs	>50%<74% of component systems assessed to identify sustainment needs	>75%<100% of component systems assessed to identify sustainment needs
24	**Risk identification.** Identify risks for emergency communications components. (Component systems are emergency communications elements that are necessary to enable communications, whether owned or leased. Risk Identification and planning is in line with having a communications COOP Plan)	< 49% of component systems have risks assessed through a standard template for all technology components	>50%<74% of component systems have risks assessed through a standard template for all technology components	>75%<100% of component systems have risks assessed through a standard template for all technology components
25	**Cross Border / Interstate (State to State) Emergency Communications.** Established capabilities to enable emergency communications across all components of the ecosystem.	Initial: Little to no established: ☐ Governance ☐ SOPs/MOUs ☐ Technology ☐ Training/Exercises ☐ Usage	Defined: Documented/established across some lanes of the Continuum: ☒ Governance ☒ SOPs/MOUs ☒ Technology ☒ Training/Exercises ☒ Usage	Optimized: Documented/established across all lanes of the Continuum: ☐ Governance ☐ SOPs/MOUs ☐ Technology ☐ Training/Exercises ☐ Usage

APPENDIX B: ACRONYMS

Acronym	Definition
AAR	After-Action Report
AUXCOMM/AUXC	Auxiliary Emergency Communications
A&W	Alerts and Warnings
CASM	Communication Assets Survey and Mapping
CISA	Cybersecurity and Infrastructure Security Agency
COML	Communications Unit Leader
COMT	Communications Unit Technician
COMU	Communications Unit Program
COOP	Continuity of Operations Plan
ESInet	Emergency Services Internal Protocol Network
FOG	Field Operations Guide
GIS	Geospatial Information System
HSEM	Homeland Security and Emergency Management
ICTAP	Interoperable Communications Technical Assistance Program
INCM	Incident Communications Center Manager
INTD	Incident Tactical Dispatcher
ITSL	Information Technology Service Unit Leader
LMR	Land Mobile Radio
MHz	Megahertz
MOU	Memorandum of Understanding
MS-ISAC	Multi-State Information Sharing and Analysis Center
NECP	National Emergency Communications Plan
NG9-1-1	Next Generation 9-1-1
NHCIC	New Hampshire Cyber Integration Center
PSAP	Public Safety Answering Point
RADO	Radio Operator
SCIP	Statewide Communication Interoperability Plan
SECC	State Emergency Communications Committee
SIEC	Statewide Interoperability Executive Committee
SOP	Standard Operating Procedure
SWIC	Statewide Interoperability Coordinator
TA	Technical Assistance
TERT	Telecommunications Emergency Response Team
TICP	Tactical Interoperable Communications Plan
WPS	Wireless Priority Service