



Statewide Communications Interoperability Plan

State of New York



December 31, 2011



Record of Change

Change Number	Revision Date(s)	Summary of Revisions	Change Date	Administrator
1	September 3, 2007	<ul style="list-style-type: none">▪ Included a matrix template for New York State region-specific information in Appendix B-1.▪ Included the Urban Area Security Initiative (UASI) Tactical Interoperable Communication (TIC) Plans in Appendices F and G.▪ Implemented verbiage, formatting, and cross-reference revisions throughout the document.	September 4, 2007	Travis C. LePage (NYSTEC)
2	September 11, 2007	<ul style="list-style-type: none">▪ Information captured from the three (3) regional meetings is incorporated in the Plan.▪ Implemented verbiage, formatting, and cross-reference revisions throughout the document.	September 11, 2007	Travis C. LePage (NYSTEC)
3	September 16, 2007	<ul style="list-style-type: none">▪ Included the PSIC Grant Program allocation information in Section 1.1.▪ Added PSIC/SCIP Program management information in Section 3.▪ Included New York State-specific information (e.g., labor markets, etc.) in Section 3.1.2.▪ Included participating-agency information in Section 3.1.3. A master PSIC/SCIP meeting attendance roster is being prepared.▪ Included the SCIP Program scope, objectives, and schedule.▪ Added the SCIP program strategy to Section 4.▪ Included the SCIP Interim Governance Board documents in Section 5 and Appendix I.▪ Included the PSIC/SCIP Program meeting outcome documents in Appendices C, D, and E.▪ Implemented verbiage, formatting, and cross-reference revisions throughout the document.	September 17, 2007	Travis C. LePage (NYSTEC)
4	September 16-20, 2007	<ul style="list-style-type: none">▪ Removed the Urban Area Security Initiative (UASI) Tactical Interoperable Communication (TIC) Plans in Appendices F and G.▪ Uplifted the content from SCIP Draft Version Three (3) into a new document template.▪ Included information on New York State Presidential	September 20, 2007	Travis C. LePage (NYSTEC)



State Communications Interoperability Plan



Change Number	Revision Date(s)	Summary of Revisions	Change Date	Administrator
		Declarations. <ul style="list-style-type: none"> ▪ Included UASI POC information. ▪ Included countywide interoperable communications plans. ▪ Included a master list of PSIC/SCIP Program meeting attendees. ▪ Included the New York City and Buffalo, New York Tactical Interoperability Communications Scorecards. ▪ Included a memorandum on the New York State Statewide Interoperability Executive Committee (SIEC). ▪ Included a memorandum on the permanent Governance Board. ▪ Included a memorandum on PSIC Grant Program funding. ▪ Included a Statewide listing of fire departments by county. ▪ Included a list of Statewide EMS providers by county. ▪ Included New York State Executive Order Number 26. ▪ Included the definition of a public safety entity. ▪ Included the Interim Governance Board meeting results document. ▪ Included the State Hazard Identification and Ranking document. ▪ Included the County of Monroe Strategic Vision and Interoperable Communications Plan. ▪ Included a PSIC/SCIP Program implementation plan and next steps. ▪ Included the SCIP review and change control procedure. ▪ Included information regarding Critical Infrastructure (CI) and Key Resources (KRs). 		
5	September 20-26, 2007	<ul style="list-style-type: none"> ▪ Included information in Section 2.1 on Critical Infrastructure (CI) and Key Resources (KRs) in the State of New York. ▪ Revised the content in Sections 1 and 2 (Introduction and Background). ▪ Revised the content in Section 13. ▪ Included additional information in Section 2.1 pertaining to interoperability initiatives. ▪ Included the New York State Emergency Management Office (SEMO) NIMS and multi-agency coordination information in 	September 27, 2007	Travis C. LePage (NYSTEC)



State Communications Interoperability Plan



Change Number	Revision Date(s)	Summary of Revisions	Change Date	Administrator
		<p>Section 2.1.2.</p> <ul style="list-style-type: none">▪ Included SEMO mutual aid and training and exercise information in Section 7.▪ Included training and exercise program information in Section 8.▪ Included a revised meeting-results document in Appendix D.▪ Implemented revisions in Section 2.1; 2.8; 2.1.5; 2.17.1.▪ Included information on the RPC 8, 30, and 55 700-MHz plans in Section 5.▪ Included a revised PSIC Grant Funding Memorandum in Section 15.▪ Included the New York State Division of Military and Naval Affairs (DMNA) input in Appendix N.▪ Revised the typeset and repaginated the entire document.▪ Implemented verbiage, formatting, and cross-reference revisions throughout the document.		
6	September 27, 2007	<ul style="list-style-type: none">▪ Implemented a revised PSIC letter in Section 12.	September 27, 2007	Travis C. LePage (NYSTEC)
7	October 29 – November 30, 2007	<ul style="list-style-type: none">▪ Restructured and rewrote the SCIP in accordance with the preliminary review results provided by the Department of Homeland Security (DHS) Office of Emergency Communications (OEC).	November 30, 2007	Travis C. LePage (NYSTEC)
8	March 7 -12, 2008	<ul style="list-style-type: none">▪ Revised Sections (including the associated subsections of) 1.2, 2.6.8, 3.3, 4.2, 4.3, 4.4, and 10 in response to the evaluation remarks provided by the OEC.	March 12, 2008	Travis C. LePage (NYSTEC)
9	May 6, 2009	<ul style="list-style-type: none">▪ Included the Project 25 (P25) information in Section 5.4.1.▪ Updated the document acronyms Section.	May 6, 2009	Travis C. LePage (NYSTEC)
10	December 31, 2010	<ul style="list-style-type: none">▪ Three Year update of all sections	December 31, 2010	Christina L. Porter (OIEC)
11	December 31, 2011	<ul style="list-style-type: none">▪ Update Section 5; revised links	December 31, 2011	Christina L. Porter (OIEC)



State Communications Interoperability Plan



GLOSSARY

Acronym	Definition
<i>800-MHz</i>	<i>FCC channels allocated for public-safety use in the 801- to 860-MHz range.</i>
<i>8CALL90, 8-TAC91 through 8TAC94</i>	<i>Interoperability frequency pairs that are reused across the Nation. 8CALL90 is commonly referred to as a "hailing" channel used by out-of-area public-safety members trying to contact local responders.</i>
<i>AAR</i>	<i>After Action Reports</i>
<i>ACU</i>	<i>Automatic Calling Unit. Audio bridge used in fixed and mobile configurations. Requires radio from each connected communications system. Gateway device used to link disparate radio systems.</i>
<i>AOC</i>	<i>Agency Operations Center</i>
<i>APCO</i>	<i>Association of Public-Safety Communications Officials</i>
<i>Audio Bridge</i>	<i>Connects four-wire audio from disparate radio systems to provide interoperability.</i>
<i>BARS</i>	<i>Box Alarm Receiving System</i>
<i>BIA</i>	<i>Bureau of Indian Affairs</i>
<i>CAB</i>	<i>Compliance Assessment Bulletin</i>
<i>CAD</i>	<i>Computer-Aided Dispatch</i>
<i>CAI</i>	<i>Common Air Interface</i>
<i>CAP</i>	<i>Compliance Assessment Program</i>
<i>CASM</i>	<i>Communications Assets Survey and Mapping Tool</i>
<i>CEMP</i>	<i>Comprehensive Emergency Management Plan</i>
<i>CI/KR</i>	<i>Critical Infrastructure and Key Resources</i>
<i>CNYRICC</i>	<i>Central New York Regional Interoperable Communications Consortium</i>
<i>COML</i>	<i>Communications Unit Leader</i>
<i>COMT</i>	<i>Communications Unit Technician</i>
<i>Console Patching</i>	<i>Ability to connect 2 or more radio channels through a dispatch console</i>
<i>COTS</i>	<i>Commercial Off the Shelf</i>
<i>COW</i>	<i>Cell on Wheels</i>
<i>CP</i>	<i>Command Post</i>
<i>CRN</i>	<i>Citywide Radio Network</i>
<i>CSF</i>	<i>Critical Success Factor</i>
<i>DCJS</i>	<i>New York State Department of Criminal Justice Services</i>
<i>DHS</i>	<i>U.S. Department of Homeland Security</i>
<i>DHSES</i>	<i>NYS Division of Homeland Security and Emergency Services</i>
<i>DMNA</i>	<i>New York State Division of Military and Naval Affairs</i>
<i>DOD</i>	<i>Department of Defense</i>



State Communications Interoperability Plan



Acronym	Definition
<i>DOH</i>	<i>Department of Health</i>
<i>DoITT</i>	<i>New York City Department of Information Technology and Telecommunications</i>
<i>DPC</i>	<i>New York State Disaster Preparedness Commission</i>
<i>DSP</i>	<i>New York State Division of State Police</i>
<i>EAS</i>	<i>Emergency Alert System</i>
<i>ECTP</i>	<i>Emergency Communications Transformation Project</i>
<i>EDACS</i>	<i>Enhanced Digital Access Communications System</i>
<i>EEG</i>	<i>Exercise Evaluation Guides</i>
<i>EMAC</i>	<i>Emergency Management Assistance Compact</i>
<i>EMS</i>	<i>Emergency Medical Services</i>
<i>EOC</i>	<i>Emergency Operations Center</i>
<i>ERS</i>	<i>Emergency Response System</i>
<i>FBI</i>	<i>Federal Bureau of Investigation</i>
<i>FCC</i>	<i>Federal Communications Commission</i>
<i>FDNY</i>	<i>Fire Department of New York City</i>
<i>FEMA</i>	<i>Federal Emergency Management Agency</i>
<i>GPRS</i>	<i>General Packet Radio Service</i>
<i>GPS</i>	<i>Global Positioning System</i>
<i>HISN</i>	<i>Homeland Security Information Network</i>
<i>HSEEP</i>	<i>Homeland Security Exercise and Evaluation Program</i>
<i>IAN</i>	<i>Incident Area Network</i>
<i>IBET</i>	<i>Integrated Border Enforcement Teams</i>
<i>IC</i>	<i>Industry Canada</i>
<i>ICC</i>	<i>Interagency Communications Committee</i>
<i>ICS</i>	<i>Incident Command System</i>
<i>ICTAP</i>	<i>Interoperable Communications Technical Assistance Program, a technical assistance program designed to enhance interoperable communications between local, State, and federal emergency responders and public-safety officials.</i>
<i>IECGP</i>	<i>Interoperable Executive Committee Grant Program</i>
<i>IJ</i>	<i>Investment Justification</i>
<i>IMAT</i>	<i>Incident Management Assistance Team</i>
<i>ITAC</i>	<i>Conventional mutual aid channel, 800 MHz</i>
<i>LMR</i>	<i>Land Mobile Radio</i>
<i>LOC</i>	<i>Letter of Concurrence</i>
<i>MAC</i>	<i>Multi-Agency Coordination</i>



State Communications Interoperability Plan



Acronym	Definition
<i>MCS</i>	<i>Multi-Agency Coordination System</i>
<i>MHz</i>	<i>Abbreviation for megahertz. 5 MHz = 5,000,000 Hz or 5,000 kHz.</i>
<i>MOU</i>	<i>Memorandum of Understanding</i>
<i>MSA</i>	<i>Metropolitan Statistical Areas</i>
<i>MTA</i>	<i>Metropolitan Transportation Authority</i>
<i>Mutual-Aid</i>	<i>Personnel, equipment, or services provided to another jurisdiction.</i>
<i>NADB</i>	<i>National Asset Database</i>
<i>NEMA</i>	<i>National Emergency Management Association</i>
<i>NENA</i>	<i>National Emergency Number Association</i>
<i>NGO</i>	<i>Nongovernmental Organization</i>
<i>NIMS</i>	<i>National Incident Management System</i>
<i>NIST</i>	<i>National Institute of Standards and Technology</i>
<i>NPSPAC</i>	<i>National Public-Safety Planning Advisory Committee for public-safety channels in the 806- to 824-MHz band. These channels are currently impacted by interference from some cellular providers, primarily Nextel. The FCC is in the process of rebanding (reallocating) frequencies in this band to eliminate the interference.</i>
<i>NPSTC</i>	<i>National Public Safety Telecommunications Council</i>
<i>NYCT</i>	<i>New York City Transit</i>
<i>NYMAC</i>	<i>New York City Metropolitan Advisory Committee</i>
<i>NYPD</i>	<i>New York City Police Department</i>
<i>NYS DOT</i>	<i>New York State Department of Transportation</i>
<i>NYS PP</i>	<i>New York State Park Police</i>
<i>NYSLETC</i>	<i>The New York State Law Enforcement Telecommunications Committee</i>
<i>OCICS</i>	<i>Onondaga County Interoperable Communications System</i>
<i>OCS</i>	<i>Office of Cyber Security</i>
<i>OCT</i>	<i>Office of Counter Terrorism</i>
<i>OEM</i>	<i>Office of Emergency Management</i>
<i>OFPC</i>	<i>Office of Fire Prevention and Control</i>
<i>OFT</i>	<i>New York State Office for Technology</i>
<i>OG&T</i>	<i>Office of Grants and Training</i>
<i>OHS</i>	<i>New York State Office of Homeland Security</i>
<i>OIC</i>	<i>Office for Interoperability and Compatibility</i>
<i>OIP</i>	<i>Office of Infrastructure Protection</i>
<i>OSC</i>	<i>New York State Office of the State Comptroller</i>
<i>OSI</i>	<i>Open Systems Interconnection</i>
<i>OTA</i>	<i>Over The Air</i>



State Communications Interoperability Plan



Acronym	Definition
<i>P 25</i>	<i>Project 25</i>
<i>PANYNJ</i>	<i>Port Authority of New York/New Jersey</i>
<i>PATH</i>	<i>Port Authority Trans Hudson</i>
<i>PDA</i>	<i>Personal Data Assistant</i>
<i>PMO</i>	<i>Project Management Office</i>
<i>PN</i>	<i>Public Notice</i>
<i>POC</i>	<i>Point of Contact</i>
<i>POTS</i>	<i>Plain Old Telephone Service</i>
<i>PSAP</i>	<i>Public Safety Answering Point</i>
<i>PSIC</i>	<i>Public Safety Interoperability Committee</i>
<i>PTT</i>	<i>Push-to-Talk</i>
<i>RCMP</i>	<i>Royal Canadian Mounted Police</i>
<i>RF</i>	<i>Radio Frequency</i>
<i>RPC</i>	<i>Regional Planning Committee</i>
<i>RPUC</i>	<i>Regional Plan Update Committee</i>
<i>SAFECOM</i>	<i>Oversees all initiatives and projects pertaining to public-safety communications and interoperability. Managed by DHS, it is the first national program designed by public-safety for public-safety and works cooperatively with more than 50,000 local and state public-safety agencies.</i>
<i>SCIP</i>	<i>Statewide Communications Interoperability Plan</i>
<i>SDoC</i>	<i>Supplier's Declaration of Compliance</i>
<i>SDR</i>	<i>Software Defined Radio</i>
<i>SEOC</i>	<i>State Emergency Operations Center</i>
<i>SIEC</i>	<i>Statewide Interoperability Executive Committee</i>
<i>SME</i>	<i>Subject Matter Experts</i>
<i>SOP</i>	<i>Standard Operating Procedure</i>
<i>SOW</i>	<i>Statement of Work</i>
<i>SPAWAR</i>	<i>Space and Naval Warfare</i>
<i>SWN</i>	<i>New York State Statewide Wireless Network</i>
<i>Talkgroup</i>	<i>Term usually used with trunked radio systems. A talkgroup is a predefined list of radios/users assigned a unique ID that allows them to communicate with each other over the trunked radio system.</i>
<i>TIA</i>	<i>Telecommunications Industry Association (TIA)</i>
<i>TIC Plan</i>	<i>Tactical Interoperable Communications Plan</i>
<i>TLMR</i>	<i>Trunked Land Mobile Radio</i>
<i>TRP</i>	<i>Transportable Radio Platform</i>



State Communications Interoperability Plan

<i>Acronym</i>	<i>Definition</i>
<i>UASI</i>	<i>Urban Areas Security Program intended to create a sustainable national model program to enhance security and overall preparedness to prevent, respond to, and recover from acts of terrorism.</i>
<i>UAWG</i>	<i>Urban Area Working Group</i>
<i>UCP</i>	<i>Unified Command Plan</i>
<i>UHF</i>	<i>Ultra High Frequency – Range of 300 to 3,000 MHz. For public-safety LMR, usually refers to two bands. 380 to 460 MHz (low) and 460 to 512 MHz (high).</i>
<i>UPS</i>	<i>Uninterruptible Power Supply</i>
<i>VHF</i>	<i>Very High Frequency – For public-safety LMR, usually refers to VHF High Band with a range of 136 to 164 MHz. VHF Low Band has a frequency range below 100 MHz.</i>
<i>VoIP</i>	<i>Voice over Internet Protocol</i>
<i>WAP</i>	<i>Wireless Access Points</i>
<i>WiFi</i>	<i>IEEE 802.11 standards related to wireless data transfer</i>
<i>WLAN</i>	<i>Wireless Local Area Network</i>



State Communications Interoperability Plan



This page intentionally left blank.



Executive Overview



State Communications Interoperability Plan



Creation of a Statewide Communications Interoperability Plan (SCIP) is a requirement of Section I.C.5 of the Homeland Security Grant Program (HSGP), which states: “*By the end of 2007, each state¹ must develop and adopt a statewide communications interoperability plan.*”

The New York State SCIP was developed in coordination with, and with the support of, the Division of Homeland Security and Emergency Services (DHSES) by the Office of Interoperable and Emergency Communications (OIEC).

This SCIP, updated for 2011, documents and assesses the current status of interoperable Public Safety Communications in the State of New York and defines the vision, mission, strategy, and comprehensive action plan to achieve short- and long-term interoperable communications objectives to improve the State’s ability to support daily operations and respond to natural and manmade disasters.

New York realizes that interoperability is not necessarily an indicator of adequate operability. Operability, the ability for members of a first responder agency to communicate effectively with each other and dispatch personnel during normal and emergency operations, means access to a system that has adequate coverage, capacity and reliability across the entire jurisdiction of the agency during both normal and emergency operations, especially with regard to LMR. Interoperability refers to the ability of emergency responders to work seamlessly with other systems or products without special effort. Both are critical to the ability of first responders to perform their missions.

It is broadly understood that Communications Interoperability serves as a vital tool for public safety and public service professionals, whether they are responding to a major incident, conducting a task force operation, or coordinating responses to daily events. This capability can provide life-saving support and can streamline response coordination efforts under a myriad of circumstances, including incidents that employ emergency responders from multiple agencies or jurisdictions. To maximize such a capability, New York State recognizes that an agency must be operable before it can be interoperable across agencies and jurisdictions.

The 2011 New York SCIP was prepared in accordance with the terms and conditions of the Public Safety Interoperable Communications (PSIC) Grant Program, according to DHS-OEC requirements, and SAFECOM guidelines, and encompassed both the grant program and development of an approved SCIP.

The principal goals of the SCIP are to:

- 1) Document the current (as-is) interoperable communications status among all public safety and public service agencies/entities in New York State, including federal, state, local, and tribal bodies;
- 2) Identify gaps as they relate to public safety and public service interoperable communications statewide;
- 3) Define a statewide communications interoperability vision that remains current;

¹ As defined in the Homeland Security Act of 2002, the term “state” is defined as “any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any possession of the United States”.



State Communications Interoperability Plan



- 4) Formulate a strategy to realize that vision;
- 5) Identify and prioritize a list of objectives and Critical Success Factors required to achieve those objectives; and
- 6) Establish metrics to monitor and measure performance.

The issue of interoperability is not whether government agencies can communicate, but whether they can communicate in a way that enhances their collective impact on daily operations and in responding to natural and manmade disasters. Agencies in New York State have a basic ability to communicate. Their capability to communicate between agencies in real time, over wide areas is limited, but improving. The State of New York SCIP's original Project Team identified a diverse assortment of interoperable communications gaps during the SCIP information-gathering phase of the project. A summary of these findings includes (but is not limited to) the following:

- Lack of federal, state, and local funding for improving public safety interoperable communications;
- Lack of dedicated public safety radio spectrum and interoperability channels;
- Limited or no international, interstate, interregional, interagency, and intra-agency, interoperable communications;
- Coverage gaps in many localities due to inadequate systems;
- Outmoded technologies;
- Lack of affordable in-building coverage and underground communications technologies;
- Licensing obstacles;
- 800-MHz rebanding compliance;
- Narrowband compliance;
- Lack of multi-jurisdictional and multi-agency SOPs;
- Lack of integrated training and exercise programs;
- Cross-border communications issues with Canada; and
- Disparate Public Safety Answering Points (PSAPs).

The SCIP represents a fluid document that is flexible to encompass multiple options for interoperability and broad enough to allow for multiple solutions. As technology progresses, so does this document to meet the needs of its users. Although a home rule state, compliance with the SCIP document benefits its users. Many counties and agencies are at different phases of interoperability, but it is expected that the SCIP document can assist at any phase of their process.

The SCIP briefly describes the status of interoperability across much of New York. However, due to the sensitivity of some material, certain information will not appear in the document, but may be asked for and given with proper authorization and permission from the owner. Requests can be sent to the Office of Interoperable and Emergency Communications.

Summary of SCIP Contents

Section 1: *Background and Preliminary Steps*, provides an overview of the tremendous size and diversity of New York State, in term of demographics, terrain, and weather. The State



State Communications Interoperability Plan



ranges from sprawling urban areas to small rural communities to mountainous areas. The section also identifies project stakeholders, the existing (as-is) public safety interoperable communications environment, defines the scope and schedule of the Program, identifies the primary Point of Contact (POC) for the planning and development of the State of New York SCIP, and establishes the Statewide Interoperability Coordinator (SWIC).

Section 2: *Strategy* identifies the State of New York's vision, mission, strategy, and comprehensive action plan to achieve short and long-term interoperable communications objectives to improve the State's ability to support daily operations and respond to natural and manmade disasters.

Section 3: *Methodology* identifies the process the State of New York employs to conduct project outreach activities and obtain multidisciplinary input from jurisdictions throughout the State and to identify, verify, and assess the existing (as-is) public safety interoperable communications environment statewide. It also includes the State's plan to continually identify new stakeholders, adapt to the changing needs of existing stakeholders, and to obtain support for interoperable communications initiatives beyond 2013 and its plan to continually obtain and incorporate multidisciplinary input from jurisdictions throughout the State into the SCIP. Finally, the practices defined in the five (5) UASI TIC Plans are incorporated into the SCIP goals and objectives.

Section 4: *Governance* defines the structure in place and its roles, authority, and responsibilities in administering the State of New York Grants Program and SCIP implementation and maintenance.

Section 5: *Technology* identifies the State of New York's comprehensive plan to develop a statewide inventory of deployable interoperable communications assets, the integration of legacy systems, and a technology roadmap to improve interoperable communications statewide.

Section 6: *Standard Operating Procedures* reviews the existing State, county, and local SOPs and the process the State of New York will implement to integrate disparate SOPs to form regional and statewide procedural platforms for use during daily operations and in responding to natural and manmade disasters.

Section 7: *Training and Exercises* provides an overview of the State's existing training and exercise programs and identifies a plan to expand multi-jurisdictional training and exercises utilizing interoperable communication systems and National Incident Management System (NIMS)-compliant SOPs.

Section 8: *Usage* describes how interoperable communications technologies and practices are used by public safety and first responders today and identifies the State of New York's plan to ensure consistent usage of interoperable communications systems, the application of SOPs during day-to-day operations, and the initiatives to improve usage statewide.

Section 9: *Funding* defines the process the State of New York shall employ to administer public safety interoperable communications grant funds and the financial responsibilities of the State and awardees for ongoing operations and maintenance of products and services procured using grant funds.

Section 10: *Implementation* outlines the State of New York's project management methodology, performance measurement plan, and implementation strategy for products and services procured via future funding programs.



State Communications Interoperability Plan

The appendices provide supplemental information that supports the contents of the SCIP.

We are deeply grateful to Mr. Vincent R. Stile, past Acting Statewide Interoperability Coordinator, for his leadership and expertise. Mr. Stile was a member of the Suffolk County Police Department and served as officer-in-charge of the police radio technical section for 14 years. Vincent was elected to the APCO Board of Officers in 2000, and became President in 2003 where he successfully chaired APCO Project 26, a local frequency spectrum project which acquired the use of TV Channel 16 for the New York City Metropolitan area. Mr. Stile is Chairman Emeritus of the National Public Safety Telecommunications Council (NPSTC). He has served as secretary and chair of the Tri-State Regional Planning Update Committee, better known as FCC Region 8. He has also testified before Congress on spectrum and regulatory matters.

Under Mr. Stile's direction, the State Communications Interoperability Plan became a document providing support and education to interoperability personnel throughout the State and beyond. New York State was fortunate to have the guidance of Mr. Stile during the early years of the SCIP.



State Communications Interoperability Plan



This page intentionally left blank.



Table of Contents



State Communications Interoperability Plan



Table of Contents

1.	BACKGROUND AND PRELIMINARY STEPS.....	2
1.1	STATE DESCRIPTIVE INFORMATION	2
1.1.1	<i>Demographics.....</i>	2
1.1.2	<i>Regions.....</i>	2
1.1.3	<i>Overview of Public Safety Services in the State of New York.....</i>	4
1.1.4	<i>Physical Description</i>	5
1.1.5	<i>Significant Geographic Features.....</i>	6
1.1.6	<i>Critical Infrastructure</i>	6
1.1.7	<i>Major Roads and Waterways.....</i>	7
1.1.8	<i>Metropolitan Areas.....</i>	7
1.1.9	<i>Major Events</i>	8
1.1.10	<i>Climate.....</i>	8
1.1.11	<i>Temperature.....</i>	8
1.1.12	<i>Precipitation</i>	9
1.1.13	<i>Snowfall.....</i>	9
1.1.14	<i>Floods.....</i>	10
1.1.15	<i>Winds and Storms.....</i>	10
1.1.16	<i>Presidential Declarations.....</i>	11
1.1.17	<i>State of New York Characteristics and Public Safety Communications.....</i>	11
1.2	SCIP STAKEHOLDERS	11
1.3	SCIP PRIMARY POINT OF CONTACT.....	11
1.4	OFFICE OF THE STATEWIDE INTEROPERABILITY COORDINATOR.....	12
1.5	CURRENT INTEROPERABLE COMMUNICATIONS ENVIRONMENT	13
1.5.1	<i>Overview.....</i>	13
1.5.2	<i>Public Safety Spectrum Usage.....</i>	15
1.5.3	<i>Existing Statewide Emergency Management Protocols and Practices</i>	16
1.5.4	<i>Public Safety Interoperable Communications Planning and Coordination.....</i>	19
1.6	SIGNIFICANT INTEROPERABLE COMMUNICATIONS CONSTRAINTS	20
2.	STRATEGY.....	24
2.1	STATE OF NEW YORK INTEROPERABLE COMMUNICATIONS VISION	24
2.1.1	<i>Mission.....</i>	24
2.1.2	<i>Scope.....</i>	24
2.1.3	<i>Goals</i>	25
2.1.4	<i>Short-Term Objectives.....</i>	26
2.1.5	<i>Planning and Coordination.....</i>	26
2.1.6	<i>Acquisition.....</i>	27
2.1.7	<i>Training.....</i>	28
2.1.8	<i>Operations and Maintenance</i>	28
2.2	STRATEGIC COMPONENTS	29
2.2.1	<i>Coordination with Neighboring States.....</i>	29
2.2.2	<i>Data Interoperability</i>	31
2.2.3	<i>Restoration of Communications.....</i>	33
2.2.4	<i>NIMS Compliance.....</i>	34
2.2.5	<i>Coordination with Major Metropolitan areas and Mass-Transit Systems.....</i>	34
2.2.6	<i>Administration and Maintenance of the SCIP.....</i>	38
3.	METHODOLOGY.....	38
3.1	SCIP STAKEHOLDER OUTREACH	38
3.1.1	<i>Tribal Nation Correspondence.....</i>	38



State Communications Interoperability Plan



3.2	MEETINGS AND INFORMATION GATHERING	39
3.3	INCORPORATION OF THE UASI TIC PLAN PRACTICES.....	39
3.4	ONGOING SCIP STAKEHOLDER OUTREACH	39
3.4.1	<i>Authority</i>	39
3.4.2	<i>SCIP Stakeholder Outreach Goals</i>	40
3.4.3	<i>SCIP Stakeholder Outreach Methodology</i>	40
3.4.4	<i>Expected Outcomes</i>	42
3.5	ALL-INCLUSIVE APPROACH	42
4.	GOVERNANCE.....	44
4.1	AUTHORITY	44
4.2	STRUCTURE.....	44
4.3	GOVERNANCE BOARD CHARTER	45
4.4	PERMANENT GOVERNANCE BOARD IMPLEMENTATION	45
4.4.1	<i>Background</i>	45
4.4.2	<i>Implementation</i>	45
4.5	GOVERNANCE BOARD MEETINGS.....	45
5.	TECHNOLOGY	47
5.1	STATEWIDE INVENTORY OF CRITICAL COMMUNICATIONS ASSETS	47
5.1.1	<i>Action Plan</i>	47
5.2	INTEGRATION OF LEGACY SYSTEMS	48
5.2.1	<i>Action Plan</i>	48
5.3	TECHNOLOGY ACQUISITION AND IMPLEMENTATION.....	49
5.3.1	<i>Project 25</i>	49
5.3.2	<i>Public Safety Answering Point (PSAP) Technologies</i>	51
5.4	INTEROPERABILITY CHANNELS.....	51
5.4.1	<i>National Interoperability Channels</i>	51
5.4.2	<i>New York State Interoperability Channels</i>	51
5.5	PUBLIC SAFETY BROADBAND.....	52
5.5.1	<i>700 MHz</i>	52
5.5.2	<i>4.9 GHz</i>	52
5.6	INFRASTRUCTURE SHARING	52
5.7	EQUIPMENT CACHES.....	52
5.8	STATE COMMUNICATIONS SUPPORT	53
5.8.1	<i>Planned Acquisitions</i>	53
5.9	PSIC GRANT OVERVIEW.....	55
5.10	STATEWIDE INTEROPERABILITY ACROSS ALL PUBLIC SAFETY FREQUENCIES	55
5.11	STRATEGIC TECHNOLOGY RESERVE	56
5.11.1	<i>STR Methodology</i>	56
5.11.2	<i>Expected Results</i>	57
5.11.3	<i>Technologies</i>	57
5.11.4	<i>Administration of the STR</i>	58
6.	STANDARD OPERATING PROCEDURES.....	61
6.1	SOP STATUS SUMMARY	61
6.2	EXISTING SOPs	61
6.2.1	<i>Mutual-Aid Agreements</i>	62
6.3	DEVELOPMENT OF A SOP PORTFOLIO	62
6.3.1	<i>Action Plan</i>	63
6.3.2	<i>NIMS-Compliant SOP Platform</i>	64
7.	TRAINING AND EXERCISES	67



State Communications Interoperability Plan



7.1	MULTI-JURISDICTIONAL/MULTI-DISCIPLINARY TRAINING.....	67
7.1.1	<i>Integration of Interoperable Communications Practices</i>	68
7.2	STATEWIDE COMMUNICATIONS TRAINING	69
7.3	EXERCISES	69
7.4	TRAINING AND EXERCISE GOALS AND OBJECTIVES.....	69
7.4.1	<i>Training Goal</i>	69
7.4.2	<i>Exercise Goal</i>	70
7.4.3	<i>Exercise Goal</i>	70
7.4.4	<i>Exercise Goal</i>	70
7.5	SCIP IMPLEMENTATION ACTION PLAN	71
8.	USAGE	73
8.1	BACKGROUND	73
8.1.1	<i>Regional Incident Management</i>	73
8.2	ACTION PLAN	74
9.	FUNDING	77
9.1	MONETARY AWARDS.....	77
9.2	MONETARY ADMINISTRATION	79
9.3	PSIC PROJECT IMPLEMENTATION	79
9.4	INTEROPERABLE EMERGENCY COMMUNICATIONS GRANT PROGRAM (IECGP)	79
10.	IMPLEMENTATION	82
10.1	SHORT-TERM GOALS	82
10.2	PROJECT MANAGEMENT METHODOLOGY	84
10.3	PERFORMANCE MEASUREMENT SYSTEM	84
10.3.1	<i>Implementation Plan</i>	84
10.4	STAKEHOLDER COMMUNICATIONS	85
10.4.1	<i>Leadership Team Communications</i>	85
10.4.2	<i>Chain of Command</i>	85
10.4.3	<i>Stakeholder Communications</i>	86
10.5	CONTINUOUS IMPROVEMENT PLAN	86

List of Appendices

Appendix A, Links Cited in SCIP.....	90
Appendix B, NYS Executive Order 26	92
Appendix C, Governance Charter	94
Appendix D, New York State Project 25 (P25) Numbering Standard.....	101
Appendix E, Guidelines for Licensing and Use of Interoperability and State Plan Channels	110

List of Figures

Figure 1, Map of New York State Counterterrorism Zones	3
Figure 2, SAFECOM Interoperability Continuum	13
Figure 3, Data Interoperability Operations Pyramid	32



List of Tables

Table 1, Zones and Jurisdictions..... 3
Table 2, Planning and Coordination Milestone.....26
Table 3, Acquisition Milestone27
Table 4, Training Milestone28
Table 5, Operations and Maintenance Milestone28
Table 6, FCC Regions within New York State40
Table 7, Legacy System Integration Tasks.....49
Table 8, Standard Operating Procedures63
Table 9, Interoperable Communications Systems Training71
Table 10, Usage Milestones.....74
Table 11, Governance Implementation.....82
Table 12, SOP Implementation.....82
Table 13, Technology Implementation83
Table 14, Training and Exercise Implementation.....83
Table 15, Usage Implementation.....83



State Communications Interoperability Plan



This page intentionally left blank.



Compliance Matrix



State Communications Interoperability Plan



Criteria	Description	Section
1. Background and Preliminary Steps		
1.1	Provide an overview and background information on the state and its regions. Include geographic and demographic information.	1.1.1 through 1.1.17
1.2	List all agencies and organizations that participated in developing the plan. (List them according to the categories recommended for a communications interoperability committee in the All-Inclusive Approach section above.)	Appendix
1.3	Identify the point of contact. DHS expects that each state will have a full-time interoperability coordinator. The coordinator should not represent or be affiliated with any one particular discipline and should not have to balance the coordinator duties with other responsibilities.	1.3, 1.4
1.4	Describe the communications and interoperability environment of the current emergency-response effort.	1.5
1.5	Include a problem definition and possible solutions that address the challenges identified in achieving interoperability within the SAFECOM Interoperability Continuum.	1.6
1.6	Identify any Tactical Interoperability Communications Plans in the state.	1.5.3.2
1.7	Set the scope and timeframe of the plan.	2.1.2, 2.1.4
2. Strategy		
2.1	Describe the strategic vision, goals, and objectives for improving emergency response interagency wireless communications statewide, including how they connect with existing plans within the state.	2
2.2	Provide a strategic plan for coordination with neighboring states. If applicable, include a plan for coordination with neighboring countries.	2.2
2.3	Provide a strategic plan for addressing data interoperability in addition to voice interoperability.	2.2.2
2.4	Describe a strategy for addressing catastrophic loss of communication assets by developing redundancies in the communications interoperability plan.	2.2.3, 11.2.1
2.5	Describe how the plan is, or will become, compliant with the National Incident Management System (NIMS) and the National Response Plan.	2.2.4, 6.3.2, 7
2.6	Describe a strategy for addressing communications interoperability with the safety and security elements of the major transit systems, intercity bus service providers, ports, and passenger rail operations within the state.	2.2.5
2.7	Describe the process for periodic review and revision of the state plan.	2.2.6



State Communications Interoperability Plan



Criteria	Description	Section
3. Methodology		
3.1	Describe the method by which multi-jurisdictional, multi-disciplinary input was provided from all regions of the state. For an example of a methodology that ensures input from all regions, see the Statewide Communication Interoperability Plan, or SCIP, methodology developed by SAFECOM.	3.1
3.2	Define the process for continuing to have local input and for building local support of the plan.	3.4, 10.4, 10.5
3.3	Define how the TICPs were incorporated into the statewide plan.	3.3
3.4	Describe the strategy for implementing all components of the statewide plan.	2, Specifically 2.1.5 through 2.1.8, 10
4. Governance		
4.1	Identify the executive or legislative authority for the governing body of the interoperability effort.	4
4.2	Provide an overview of the governance structure that will oversee development and implementation of the plan. Illustrate how it is representative of all of the relevant emergency-response disciplines and regions in the state.	4
4.3	Provide the charter for the governing body, and use the charter to state the principles, roles, responsibilities, and processes.	Appendix
4.4	Identify the members of the governing body and all its committees. (List them according to the categories recommended for a communications interoperability committee in the All-Inclusive Approach section above.)	4.2, Appendix
5. Technology		
5.1	Include a statewide capabilities assessment (or a plan for one) which includes critical communications equipment and related interoperability issues. At a minimum, this should include types of radio systems, data- and incident-management systems, the manufacturer, and frequency assignments for each major emergency-responder organization within the state. Ultimately more detailed information will be required to complete the documentation of a migration strategy. States may use the Communications Asset Survey and Mapping (CASM) tool to conduct this assessment.	5.1, 5.1.1
5.2	Describe plans for continuing support of legacy systems, and developing interfaces among disparate systems, while migrating to newer technologies.	5.2 through 5.8
5.2.1	Describe the migration plan for moving from existing technologies to newly procured technologies.	5.4



State Communications Interoperability Plan



Criteria	Description	Section
5.2.2	Describe the process that will be used to ensure that new purchases comply with the statewide plan, while generally allowing existing equipment to serve out its useful life.	5.4 through 5.8
6. Standard Operating Procedures (SOPs)		
6.1	Include an assessment of current local, regional, and state operating procedures that support interoperability.	6.1 through 6.2.1.1
6.2	Define the process by which the state, regions, and localities will develop, manage, maintain, upgrade, and communicate standard operating procedures (SOPs), as appropriate.	6.3
6.3	Identify the agencies included in the development of the SOPs, and the agencies expected to comply with the SOPs.	6.3.1.1
6.4	Demonstrate how the SOPs are NIMS-compliant in terms of the Incident Command System (ICS) and preparedness.	6.3.2, 7.1
7. Training and Exercises		
7.1	Define the process by which the state will develop, manage, maintain, and upgrade, or coordinate as appropriate, a statewide training and exercises program.	7
7.2	Describe the process for offering and requiring training and exercises, as well as any certification that will be needed.	7
7.3	Explain how the process ensures that training is cross-disciplinary.	7
8. Usage		
8.1	Describe the plan for ensuring regular usage of the relevant equipment and the SOPs needed to improve interoperability.	8
9. Funding		
9.1	Identify committed sources of funding, or the process for identifying and securing short- and long-term funding.	9.1
9.2	Include a plan for the development of a comprehensive funding strategy. The plan should include a process for identifying ongoing funding sources, anticipated costs, and resources needed for project management and leveraging active projects.	9.2
10. Implementation		
10.1	Describe the prioritized action plan with short- and long-term goals for achieving the objectives.	10.1
10.2	Describe the performance measures that will allow policy makers to track the progress and success of initiatives.	10.2, 10.3
10.3	Describe the plan for educating policy makers and practitioners on interoperability goals and initiatives.	10.4



State Communications Interoperability Plan



Criteria	Description	Section
10.4	Describe the roles and opportunities for involvement of all local, state, and tribal agencies in the implementation of the statewide plan.	3.4, 10.4, 10.5
10.5	Establish a plan for identifying, developing, and overseeing operational requirements, SOPs, training, technical solutions, and short- and long-term funding sources.	10.5
10.6	Identify a POC responsible for implementing the plan.	1.3, 1.4
10.7	Describe critical success factors for implementation of the plan.	10.1
11. PSIC Requirements		
11.1	Describe how public safety agencies will plan and coordinate, acquire, deploy, and train on interoperable communications equipment, software, and systems that: utilize reallocated public safety - the public safety spectrum in the 700-MHz frequency band; enable interoperability with communication systems that can utilize reallocated public safety spectrum for radio communications; or otherwise improve or advance the interoperability of public safety communications systems that utilize other public safety spectrum bands	5.10
11.2	Describe how a strategic technology reserve (STR) will be established and implemented to pre-position or secure interoperable communications in advance for immediate deployment in an emergency or major disaster.	5.11
11.3	Describe how local and tribal government entities' interoperable communications needs have been included in the planning process and how their needs are being addressed.	3, 4, 10.5
11.4	Describe how authorized non-governmental organizations' interoperable communications needs have been included in the planning process and how their needs are being addressed (if applicable).	3, 4, 10.5



State Communications Interoperability Plan



This page intentionally left blank.



1. Background and Preliminary Steps



1. BACKGROUND AND PRELIMINARY STEPS

1.1 State Descriptive Information²

1.1.1 Demographics

New York State consists of 62 counties which are further divided into a total of 62 cities, 932 towns, and 554 villages. A total of 1,065 local governments operate across the state.

New York State has an estimated population of 19,378,102, roughly 15.9% of the population of the United States. The State encompasses approximately 47,200 square miles, with an average of 411 persons per square mile versus a national average of 87 persons per square mile. The State's population density is approximately 21% higher than the national average.

Non-New Yorkers tend to think that New York State's demography is dominated by New York City. However, approximately 38% of the state's population resides north of the New York metropolitan area, in a region known as "Upstate." In fact, if Upstate New York were itself a state, it would be the nation's 13th largest. New York's Adirondack Park is the largest state park in the United States. It is larger than the Yellowstone, Yosemite, Grand Canyon, Glacier and Olympic National Parks combined.

Demographics also show that New York State has a substantial rural component. The U.S. Census Bureau reports that, in 2008, New York State was home to 36,400 farms. Another statistic that illustrates the rural flavor of substantial stretches of Upstate New York is that 20 of the state's counties have a lower population density than the national average.

The State remains an attractive destination for immigrants. Nearly 4.2 million New York State residents, or 21.3% of the population, are foreign-born. From 1990 to 2006, the state welcomed more than 1.3 million new immigrants as permanent residents. New York State is second only to California in having the largest number of foreign-born residents. In fact, 28.5% of New Yorkers speak a language other than English at home, compared to the national percentage of 19.6%.

New York State is home to 268 colleges and universities, which have a total enrollment of approximately 1,128,847 students, and conferred 225,522 degrees in 2002-2003.

1.1.2 Regions

There are many regional classifications in the State of New York which are defined depending on the function or purpose they serve. For example, State agencies are comprised of different geographic regions based on their operational needs. Furthermore, the State of New York has three (3) Federal Communications Commission (FCC) Regional Planning Committees (RPCs).

² Source: U.S. Census Bureau, 2010.

State Communications Interoperability Plan

For the purposes of emergency management, the State of New York utilizes the zones depicted in Figure 1 and listed in Table 1, which follow.

Figure 1, Map of New York State Counterterrorism Zones



Table 1, Zones and Jurisdictions

Zone Number	Counties within the Zone
Zone 1	Nassau, Suffolk
Zone 2	Bronx, Kings, New York, Queens, Richmond
Zone 3	Putnam, Westchester
Zone 4	Orange, Rockland, Sullivan
Zone 5	Albany, Fulton, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington
Zone 6	Broome, Chenango, Cortland, Delaware, Otsego, Tompkins, Tioga
Zone 7	Hamilton, Herkimer, Madison, Oneida, Onondaga, Oswego
Zone 8	Jefferson, Lewis, St. Lawrence
Zone 9	Clinton, Essex, Franklin
Zone 10	Genesee, Orleans, Wyoming



State Communications Interoperability Plan



Zone 11	Cayuga, Livingston, Monroe, Ontario, Seneca, Wayne, Yates
Zone 12	Chemung, Schuyler, Steuben
Zone 13	Allegany, Cattaraugus, Chautauqua
Zone 14	Columbia, Dutchess, Greene, Ulster

The New York State Library provides a full Internet listing of all cities, towns, villages and districts in New York State, with references to the counties in which they are located. Please visit <http://www.nysl.nysed.gov/genealogy/townlist.htm> for additional information.

1.1.3 Overview of Public Safety Services in the State of New York

According to the latest census (2004) figures from the federal Bureau of Justice Statistics, New York State has 543 state and local law-enforcement agencies employing nearly 95,000 officers, second only to California. Of any state, New York has the highest number of local law-enforcement agencies (422) and local officers (72,495).

New York State is also home to 865 fire districts. The latest statistics (2003) provided by the New York State Fire Reporting System show that 1,857 fire departments and fire brigades operate on federal, State, and local levels throughout the State. These include more than 150,000 first responders, with 96,593 of these being volunteer firefighters. Fire protection in New York State is complex, with many options. Fire protection may be provided directly by a municipality, arranged under contract with a municipality, or provided by an independently governed fire district. Fire departments may have all-paid or "career" members, all volunteer, or a combination of paid employees and volunteer members. Firefighters may work for a municipal fire department, be appointed as fire department members by fire district commissioners, or be members of a not-for-profit fire corporation.

According to statistics provided by the New York State Department of Health in 2010, the State also is home to 1,122 ambulance services and 785 non-transporting first-response services, which cited a total of 1,907 EMS agencies in New York State.

Police and fire protection services are provided routinely through the towns across New York State, but most cities and villages also provide such services. County sheriff's departments also provide law enforcement. Please refer to a listing of EMS and fire service agencies in the State of New York at <http://www.health.ny.gov/nysdoh/ems/counties/map.htm> and <http://www.dhSES.ny.gov/ofpc/#1>. Additionally, the New York State Division of Criminal Justice Services (DCJS) maintains a complete listing of law enforcement agencies in the State of New York. Please visit <http://www.criminaljustice.ny.gov> for additional information.

For purposes of communications planning in the realm of public safety, officials in New York State who spearhead planning for local systems primarily serve in county government and are most typically department heads in charge of Emergency Services. For the SCIP effort, local input was solicited primarily at the county level, with county officials relaying information from the State to localities, and vice versa.



1.1.4 Physical Description

New York State contains approximately 47,200 square miles of area, inclusive of 1,637 square miles of inland water, but exclusive of the boundary-water areas of Long Island Sound, New York Harbor, Lake Ontario, and Lake Erie. The State of New York is divided into 62 separate counties and 11 district regions. These counties and regions are home to the 62 cities, 932 towns and 554 villages that comprise New York State.

The principal highland regions of the state are the Adirondacks in the northeast and the Appalachian Plateau (Southern Plateau) in the south. The latter Plateau is subdivided by the deep channel of Seneca Lake, which extends from the lake plain of Lake Ontario southward to the Chemung River Valley into the Western and Eastern Plateaus. The Western Plateau extends from the eastern Finger Lakes across the hills of southwestern New York to the narrow lake plain bordering Lake Erie; the Eastern Plateau extends from the eastern Finger Lakes to the Hudson River Valley and includes the Catskill Mountains.

A minor highland region occurs in southeastern New York where the Hudson River has cut a valley between the Palisades on the west, near the New Jersey border, and the Taconic Mountains on the east, along the Connecticut and Massachusetts border. Just west of the Adirondacks and the upper Black River Valley in Lewis County is another minor highland known as the Tug Hill Plateau.

Much of the eastern border of the state consists of a long, narrow lowland region which is occupied by Lake Champlain, Lake George, and the middle and lower portions of the Hudson Valley. Another lowland region, the Great Lakes Plain, on the northern and western boundaries of the state adjoins the St. Lawrence River, Lake Ontario, and Lake Erie. This latter region is widest south of the eastern end of Lake Ontario, but does narrow to a width of less than 5 miles in the western portion of the state. A third lowland region, which contains Oneida Lake and a deep valley cut by the Mohawk River, connects the Hudson Valley and the Great Lakes Plain. Long Island, which is a part of the Atlantic Coastal Plain, comprises the fourth lowland region of the state.

Approximately 40% of New York State has an elevation of more than 1,000 feet above sea level. In northwestern Essex County, confined to an area of 500 or 600 square miles, are a number of peaks with elevations ranging from 4,000 to 5,000 feet or more. The highest point, Mount Marcy, reaches a height of 5,344 feet above sea level. Nearby Mount MacIntyre ranges to a height of 5,112 feet. With the exception of the Blue Ridge of North Carolina and the White Mountains of New Hampshire, these are the loftiest mountains in eastern North America.

The Appalachian Plateau merges variously into the Great Lakes Plain of western New York with gradual- to steep-sloping terrain. The valleys of the Finger Lakes, which resemble the appearance of outstretched fingers on the hand, extend southward from the Great Lakes Plain. Other prominent lakes in the state include Lake George in the central part of the eastern boundary, Oneida Lake in the central New York between Syracuse and Rome, and Chautauqua Lake in the extreme southwest. Sacandaga and Pepacton Reservoirs are sizeable manmade bodies of water in the eastern portion of the State. Innumerable smaller lakes and ponds dot the landscape, with more than 1,500 in the Adirondack region alone.

Rivers of New York State may be divided into those that are tributary to the Great Lakes and St. Lawrence River and those that flow in a general southward direction. The first group includes



State Communications Interoperability Plan



rivers such as the Genesee, Oswego, Black, Oswegatchie, Grass, Raquette, Saranac, and Ausable. The Chemung, Susquehanna, Delaware, and Hudson River systems, which are part of the Atlantic slope drainage, and the Allegheny River, which is part of the Ohio Basin drainage, comprise the second group.

1.1.5 Significant Geographic Features

As previously stated, New York State is home to several mountain ranges, the most prominent being the Adirondack and Catskill ranges. The Southern Tier of New York is very rugged and runs into the Allegheny mountain chain. In addition, New York has several rivers traversing the State, the most notable being the Hudson and the Mohawk. The mountainous areas of New York are home to many glacial lakes, and New York borders two of the Great Lakes — Lakes Ontario and Erie. New York also has two open water ports to the Atlantic Ocean in the form of the Harbor of New York and the St. Lawrence Seaway. New York has 178 State Parks and historical sites across the State.

Additionally, New York State has an extensive (in excess of 400 miles) border with Canada. Twelve New York counties border Canada and share areas of interoperability.

1.1.6 Critical Infrastructure

Due to the sensitive nature of this information, a detailed list of Critical Infrastructure (CI) and Key Resources (KRs) in the State of New York is not included in the SCIP. Please refer to the summary below and contact the New York State Office of Cyber Security and Critical Infrastructure Coordination (CSCIC) for more information (<http://www.dhSES.ny.gov/ocs/>).

Critical infrastructure refers to systems, assets, places, or things, whether physical or virtual, so vital to the state that the disruption, incapacitation, or destruction of such systems, assets, places, or things could jeopardize the health, safety, welfare, or security of the state, its residents, or its economy.

In order to manage and report on the critical infrastructure of the nation, the Office of Infrastructure Protection (OIP) in the DHS has been developing and maintaining a National Infrastructure Protection Plan (NIPP). The goal of the NIPP is to build a safe, more secure and more resilient America by enhancing protection of the nation's CIKR to prevent, deter, neutralize or mitigate the effects of deliberate efforts by terrorists to destroy, incapacitate, or exploit them; and to strengthen national preparedness, timely response and rapid recovery in the event of an attack, natural disaster or other emergency. More information on the NIPP can be found at: http://www.dhs.gov/xlibrary/assets/NIPP_Plan.pdf.

Critical infrastructure and key resources are located throughout New York State. As previously stated, New York has more than 19 million people living in 62 counties, 62 cities, 554 villages, and 932 towns. Moreover, the State has a vast border with Canada. Notable critical infrastructure icons are too many to name, but a few examples are the Statue of Liberty, the Empire State Building, Grand Central Terminal, the State Capitol, Niagara Falls, the State's six (6) operating nuclear power plants, and international bridges.



1.1.7 Major Roads and Waterways

New York State has 112,000 miles of roadway traversing it. In addition to local county, village, and city roads, New York has 17 US Routes, nine two-digit Interstates and 15 three-digit Interstates. These roadways serve not only the interior borders of New York State, but also provide a gateway to neighboring states, as well as Canada. Sections of several of these roadways comprise the New York State Thruway, which crosses the State from New York City to Buffalo and continues into the Commonwealth of Pennsylvania, with spurs to the New Jersey Turnpike, Garden State Parkway, Massachusetts Turnpike, and I-84 and the Merrit Parkway in Connecticut. Several of these roadways lead over bridges into major metropolitan areas serving the island of Manhattan and Long Island, as well as the Niagara Frontier. The New York State Canal System is designated as the nation's 23rd National Heritage Corridor and considered one of America's most treasured historical resources. Established on December 21, 2000, the Erie Canalway National Heritage Corridor incorporates all four of New York's navigable canals, sections of the original Erie Canal, and more than 200 municipalities along the Canal Corridor. This navigable waterway provides passage to both commercial and private watercraft connecting inland waterways to open ocean gateways. The Canalway is enhanced by various navigable rivers, the Great Lakes, and smaller lakes and rivers, all of which provide significant transportation and economic resources to both large and small municipal centers.

1.1.8 Metropolitan Areas

New York State includes 12 Metropolitan Statistical Areas (MSAs). The State's 12 MSAs, and the counties they incorporate, are:

Albany – Schenectady – Troy: Albany, Rensselaer, Saratoga, Schenectady, and Schoharie Counties.

Binghamton: Broome and Tioga Counties.

Buffalo – Niagara Falls: Erie and Niagara Counties.

Elmira: Chemung County.

Glens Falls: Warren and Washington Counties.

Ithaca: Tompkins County

Kingston: Ulster County.

New York – Northern New Jersey – Long Island:

- *Nassau – Suffolk Metropolitan Division:* Nassau and Suffolk Counties.
- *New York – White Plains – Wayne, NY-NJ Metropolitan Division:* Bronx, Kings, New York, Putnam, Queens, Richmond, Rockland and Westchester Counties.

Poughkeepsie – Newburgh – Middletown: Dutchess and Orange Counties.

Rochester: Livingston, Monroe, Ontario, Orleans, and Wayne Counties.

Syracuse: Madison, Onondaga and Oswego Counties.

Utica-Rome: Herkimer and Oneida Counties.



1.1.9 Major Events

New York State is home to several professional sports teams in the New York City and Buffalo areas. World-class horse racing and wagering is held yearly at Saratoga, Belmont, and Vernon Downs. Watkins Glen is the site of NASCAR circuit events. National Winter Olympics training and event facilities are located in Lake Placid. The US Open tennis championship takes place in Queens and boasts over 600 male and female professional players. The 192-member United Nations General Assembly gathers every September to discuss world issues. In 2009, New York state parks hosted over 56 million visitors. The Empire State Games and Special Olympics are held yearly, as well as many local competitions leading to State-level games. In 2011, New York City approximately 50.2 million people will have visited New York City. In addition to the State Fair in Syracuse, which takes place yearly in the early fall, almost every county and several localities hold their own fairs in the late summer and early autumn. Some of the better-known parades are hosted in New York City on Thanksgiving Day and St. Patrick's Day. New York is home to many musical events. New York City's theater district is the site of large-scale productions on Broadway and off. Saratoga Springs is the summer home of the New York City Ballet and Philadelphia Orchestra, in addition to many other national and international performers. While attendance at these events varies, attendance for any single event can be 10,000 or more over several days.

1.1.10 Climate

The SCIP contains detailed information on the State's climate due to the substantial impact temperature, precipitation, wind, storms, and other weather disturbances have on public safety operations.

The climate of New York State is representative of the humid continental type which prevails in the northeastern United States. A tremendous amount of climatic diversity exists across the state depending on differences in latitude, character of the topography, and proximity to large bodies of water. Different areas of the state experience copious amounts of snowfall and freezing temperatures in winter and heavy rains in the spring. While the climate is generally temperate in the summer, natural disasters such as floods, hurricanes, and tornados are possible.

1.1.11 Temperature

Many atmospheric and physiographic controls on the climate result in a considerable variation of temperature conditions over New York State. The average annual mean temperature ranges from about 40° in the Adirondacks to near 55° in the New York City area. In January, the average mean temperature is approximately 16° in the Adirondacks and St. Lawrence Valley, but increases to about 26° along Lake Erie and in the lower Hudson Valley and to 31° on Long Island. The highest temperature of record in New York State was 108° at Troy on July 22, 1926. The record coldest temperature was -52° at Stillwater Reservoir (northern Herkimer County) on February 9, 1934 and also at Old Forge (also northern Herkimer County) on February 18, 1979. Some 30 communities have recorded temperatures of -40° or colder, most of them occurring in the northern one-half of the state, and the remainder in the Western Plateau Division and in localities just south of the Mohawk Valley.



The winters are long and cold in the Plateau Divisions of the state. Winter temperatures are moderated considerably in the Great Lakes Plain of western New York. The moderating influence of Lakes Erie and Ontario is comparable to that produced by the Atlantic Ocean in the southern portion of the Hudson Valley. The summer climate is cool in the Adirondacks, Catskills, and higher elevations of the Southern Plateau. The New York City area and lower portions of the Hudson Valley have rather warm summers by comparison, with some periods of high, uncomfortable humidity. The remainder of New York State enjoys pleasantly warm summers, marred by only occasional, brief intervals of sultry conditions. Summer daytime temperatures usually range from the upper 70s to mid-80s over much of the State, producing an atmospheric environment favorable to many athletic, recreational, and other outdoor activities.

The moderating effect of Lakes Erie and Ontario on temperatures assumes practical importance during the spring and fall seasons. The lake waters warm slowly in the spring, which tends to slow the warming of the atmosphere over adjacent land areas. Plant growth is thereby retarded, allowing a great variety of freeze-sensitive crops, especially tree and vine fruits, to reach critical early stages of development when the risk of freeze injury is minimized or greatly reduced. In the fall season, the lake waters cool more slowly than the land areas and thus serve as a heat source. The cooling of the atmosphere at night is moderated or reduced, the occurrence of freezing temperatures is delayed, and the growing season is lengthened for freeze-sensitive crops and vegetables.

1.1.12 Precipitation

Moisture for precipitation in New York State is transported primarily from the Gulf of Mexico and Atlantic Ocean through circulation patterns and storm systems of the atmosphere. Distribution of precipitation within the state is greatly influenced by topography and proximity to the Great Lakes or Atlantic Ocean.

New York State has a fairly uniform distribution of precipitation during the year. There are no distinctly dry or wet seasons that are regularly repeated on an annual basis.

The amount and distribution of precipitation are normally sufficient for the maintenance of the State's water resources for municipal and industrial supplies, transportation, and recreation. Rainfall is usually adequate during the growing season for economic crops, lawns, gardens, shrubs, forests, and woodlands. Severe droughts are rare, but deficiencies of precipitation may occur from time to time, which cause at least temporary concern over declining water supplies and moisture stress in crops and other vegetation. In some years, a pronounced shortage of precipitation during the spring or fall months results in a considerable fire hazard in the State's woodlands.

1.1.13 Snowfall

The climate of New York State is marked by abundant snowfall. With the exception of the Coastal Division, the state receives an average seasonal amount of 40 inches or more. The average snowfall is greater than 70 inches over some 60 percent of New York's area. The moderating influence of the Atlantic Ocean reduces the snow accumulation to 25 to 35 inches in the New York City area and on Long Island. About one-third of the winter season precipitation



in the Coastal Division occurs from storms, which also yield at least 1 inch of snow. The great bulk of the winter precipitation in upstate New York comes as snow.

1.1.14 Floods

Appreciable damage due to flooding usually occurs every year in one or more localities in New York State. Floods that arise from a variety of causes have been recorded in all seasons. The greatest potential and frequency for flooding occurs in the early spring when substantial rains combine with rapidly melting snow to produce a heavy runoff. In northern New York, the normally colder early spring temperatures are conducive to a slower rate of snowmelt. In combination with other factors, major spring floods have been less frequent along streams draining into the St. Lawrence River. Ice jams sometimes contribute to serious flooding in localized areas.

Damaging floods are caused at other times of the year by prolonged periods of heavy rainfall. In combination with heavy showers and thundershowers, the rugged terrain of the Adirondacks and Southern Plateau is conducive to occasional severe flash floods on smaller streams. The metropolitan New York City area and other heavily urbanized areas of the state are becoming increasingly subject to severe flooding of highways, streets, and low-lying ground. Replacement of the natural soil cover with cement, asphalt, and other impervious materials encourages such floods from rains of not more than moderately heavy intensity, that formerly were easily absorbed.

The shores of Long Island, especially those facing the Atlantic Ocean, are subject to tidal flooding during storm surges. Winds generated by hurricanes and great coastal storms may drive tidal waters well inland, causing extensive property damage and beach erosion.

1.1.15 Winds and Storms

The prevailing wind is generally from the west in New York State. A southwest component becomes evident in winds during the warmer months, while a northwest component is characteristic of the colder one-half of the year. Occasionally, well-developed storm systems moving across the continent or along the Atlantic coast are accompanied by very strong winds, which cause considerable property damage over wide areas of the State. A unique effect of strong cyclonic winds from the southwest is the rise of water to abnormally high levels at the northeastern end of Lake Erie.

Thunderstorms occur on an average of about 30 days a year throughout the State. Destructive winds and lightning strikes in local areas are common with the more vigorous warm-season thunderstorms. Hail occurs with more-severe thunderstorms, but extensive, crippling losses to property and crops are rare.

Tornadoes are not common. About three or four of these storms strike limited, localized areas of New York State in most years. The paths of destruction, mostly in rural, semi-rural, or wooded areas, are usually short and narrow. Tornadoes generally occur between late May and late August.

Storms of freezing rain occur on one or more occasions during the winter season and often affect a wide area of the state in any one incident. While such storms are usually limited to a thin but dangerous coating of ice on highways, sidewalks, and exposed surfaces, crippling



destruction of utility lines, transmission towers, and trees over an extensive portion of the state may result on rare occasions.

Hurricanes and tropical storms periodically cause serious and heavy losses in the vicinity of Long Island and southeastern upstate New York.

The greatest storm hazard in terms of area and number of people affected is heavy snow. During heavy snow squall, surface visibility is reduced to zero. Blizzard conditions of heavy snow, high winds, and rapidly falling temperature occur occasionally, but are much less characteristics of New York's climate than in the plains of Midwestern United States.

1.1.16 Presidential Declarations

Since 1954, New York State has had 83 Presidential Declarations, including 63 Major Disasters and 21 Emergencies. Four (4) declarations were for events occurring in 2011. This information is accurate as of December 31, 2011. Specific information can be found at <http://www.fema.gov/news/disasters.fema>.

1.1.17 State of New York Characteristics and Public Safety Communications

As detailed in the previous sections, the demographic makeup, geography, critical infrastructure, urban and rural areas, and climate of New York State present the public safety and public service communities with significant challenges in keeping the State safe and secure.

1.2 SCIP Stakeholders

Recognizing these unique challenges and the diverse needs, requirements, and expectations of the project stakeholders, the State of New York employed an all-inclusive approach in planning, developing, and revising the SCIP. Members from the emergency service, Emergency Medical Service (EMS), fire service, law enforcement, tribal nation, military, and federal communities were instrumental in developing the initial SCIP document.

In an effort to further assess the status of existing interoperable communications and to establish a continuous improvement/maturity model, the State of New York, Statewide Interoperability Coordinator, who also serves as Director of the Office of Interoperable and Emergency Communications (OIEC), will implement an ongoing outreach initiative to identify and integrate NGO, federal, military, and additional tribal nation stakeholders into the SCIP Program. Please refer to Section 3.4, Ongoing SCIP Stakeholder Outreach, for further information.

1.3 SCIP Primary Point of Contact

The primary POC for the planning and development of the SCIP is:

Robert M. Barbato
Statewide Interoperability Coordinator (SWIC)
New York State Division of Homeland Security and Emergency Services
Office of Interoperable and Emergency Communications
Phone/FAX: 518-322-4911 / 518-322-4975
E-mail: DHSESOIEC@dhses.ny.gov



1.4 Office of the Statewide Interoperability Coordinator

Created in 2010 through Executive Law 26, Section 717, as part of the Division of Homeland Security and Emergency Services (DHSES), the Office of Interoperable and Emergency Communications (OIEC) is the principal state agency for all interoperable and emergency communications issues and oversees and directs the development, coordination and implementation of policies, plans, standards, programs and services related to interoperable and emergency communications, including those related to land mobile radio communications.

As defined by New York law, the Director of OIEC also serves as the Statewide Interoperability Coordinator (SWIC) and chair of the Statewide Interoperable and Emergency Communication Governance Board (SIGB).

The Office of Interoperable and Emergency Communications will be solely responsible for the implementation and maintenance of the SCIP, for the administration of the projects selected for implementation under the PSIC Grant Program Investment Justifications (IJs), and for provisioning ongoing services in support of the State's public safety interoperable communications vision, mission, and objectives.

1.5 Current Interoperable Communications Environment

1.5.1 Overview

Interoperability varies greatly across the SAFECOM Interoperability Continuum throughout the State of New York and even within single jurisdictions. Please refer to Figure 2, SAFECOM Interoperability Continuum, for progress of interoperability development.



Interoperability Continuum

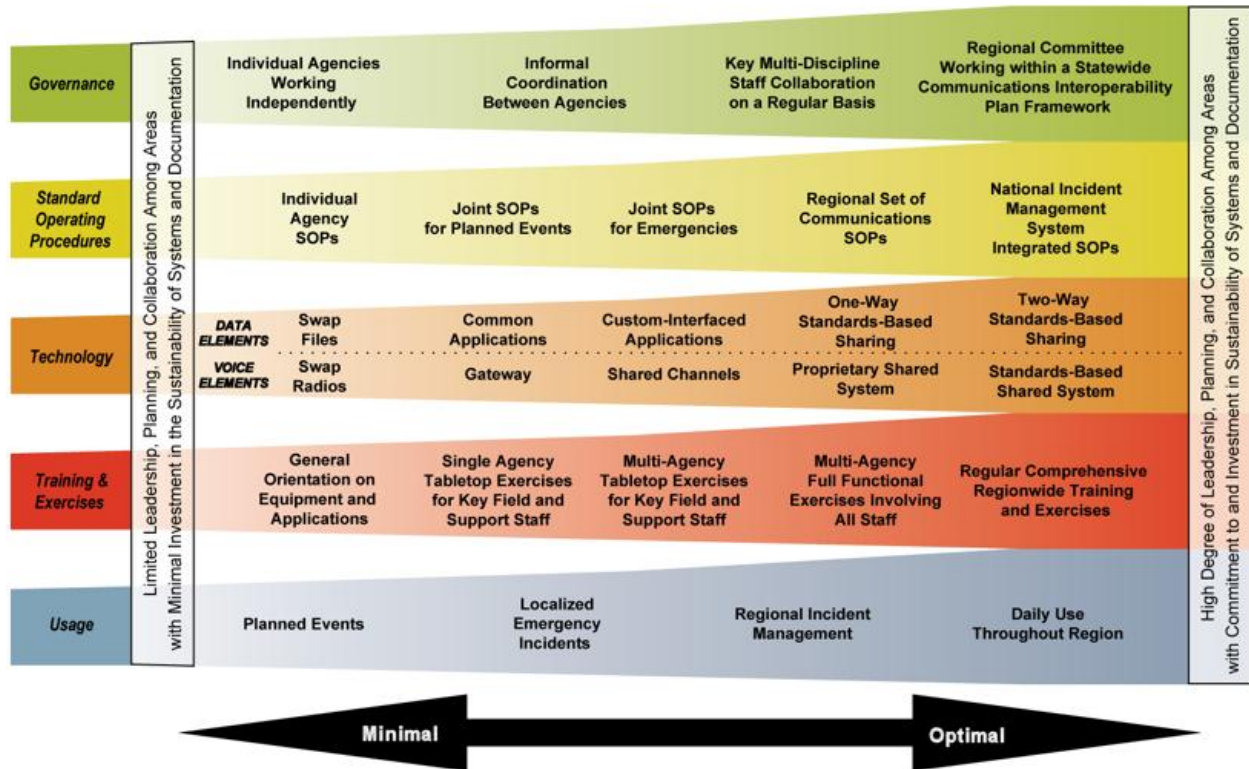


Figure 2, SAFECOM Interoperability Continuum

The Interoperability Continuum is a tool designed to aid the emergency response community and local, tribal, state, and Federal policy makers and ensure they address critical elements for success as they plan and implement interoperability solutions. These elements include (1) governance, (2) standard operating procedures, (3) technology, (4) training and exercises, and (5) usage of interoperable communications. This tool (the Continuum) was established to depict the core facets of interoperability according to the stated needs and challenges of the emergency response community. The Continuum will aid emergency response practitioners and policy makers in their short- and long-term interoperability efforts.



1.5.1.1 Governance

At the state, county, and local levels, multi-jurisdictional and multidisciplinary governance bodies carry out interoperable communications planning and coordination. In both large metropolitan areas and on a countywide basis, formal governance structures exist. For instance, the New York City Interagency Communications Committee (ICC) meets quarterly to review and revise the Urban Area Security Initiative (UASI) Tactical Interoperable Communications (TIC) Plan. Working with representatives from Connecticut and New Jersey, the ICC facilitates the distribution of multi-jurisdictional and multidisciplinary information regarding interoperability. Further, counties in Western and Central New York State have established joint interoperable communications planning committees, some involving the American Red Cross and educational institutions. All UASI's perform regular TIC Plan exercises to ensure familiarity and compliance with their TIC Plan procedures.

Standard Operating Procedures

The State of New York has adopted the National Incident Management System (NIMS) as the State's command and control protocol for use in coordinating the State's response to natural and manmade disasters. The NIMS Multi-agency Coordination System (MCS) establishes a structure for public safety and first responders at all levels of government to coordinate resources during incident response situations. Further, the State of New York had five (5) UASI regions with established TIC plans. Only New York City remains an active UASI. In addition to the NIMS MCS and UASI TIC plans, a variety of SOPs exist at the state, county, local, and individual agency level. For example, a Comprehensive Emergency Management Plan has been prepared by the state Disaster Preparedness Commission (DPC) as required by New York State Executive Law, Article 2-B.

There are few integrated multi-jurisdictional and multidisciplinary SOPs. Across the State, a small percentage of the SOPs are fully NIMS compliant.

1.5.1.2 Technology

Technical interoperability generally ranges from superior to adequate in New York City and other large metropolitan areas and from adequate to poor in many of the least-populated locales. The State's largest metropolitan areas have the most robust radio systems with the greatest interoperability capabilities. However, many of these areas face difficulties ranging from outmoded technologies through disparate equipment to an insufficient number of frequencies. In many locales, interoperability only exists within agencies. In other locales, only department heads are able to communicate across disciplines. Some counties use radio gateway devices during incidents and events, while others deploy mobile communications vehicles or utilize console patches.

Many counties rely on a 911 center to relay communications. In some localities, only a single agency can communicate with other jurisdictions. For instance, the fire department is the only local agency capable of interoperability in the Seneca Indian Nation, and its capabilities are limited. Due to limited capabilities in many jurisdictions, interoperability between agencies or jurisdictions is often confined to leadership personnel. Some locales must rely on cellular telephones for inter-jurisdictional communications. Interoperability between jurisdictions is extremely limited in some areas, and non-existent in many.



1.5.1.3 Training and Exercises

The maturity level of training and exercise programs varies throughout the State; with the New York State Division of Homeland Security and Emergency Services (DHSES) having the most comprehensive system in place. Most counties conduct single-agency and single-jurisdictional training and exercise programs. Most of the county local agency programs do not adhere to the established application area standards and lack a standardized credentialing program. A small percentage of the training and exercise programs carried out by counties and agencies comply with the NIMS Incident Command System (ICS) and Homeland Security Exercise and Evaluation Program (HSEEP) standards. The five (5) former UASI regions in the State of New York engage in training and exercise programs in accordance with their TIC plans. Each of the five UASI's TIC plans have been evaluated with successful conclusions.

1.5.1.4 Usage

The regular usage of technical and operational interoperable communications practices varies. State agencies, including the Division of Homeland Security and Emergency Services, utilize a portfolio of interoperable communications practices daily. Large metropolitan areas — including New York City, the City of Buffalo, and the City of Rochester — utilize interoperable communications practices for planned events and localized emergency incidents. Few state, county, and local agencies engage in regional incident management on a daily basis. Please refer to Section 8 Usage for further details.

1.5.2 Public Safety Spectrum Usage

New York State operates on the interoperability frequency of 155.370-MHz in carrier-squelch mode. This frequency was introduced by the New York State Law Enforcement Telecommunications Committee (NYSLETC) for the purpose of emergency radio communication and is utilized by most law-enforcement agencies in the State. The NYSLETC interoperability channel serves as a backbone for law-enforcement interoperability, particularly for agencies not able to make the switch to higher-band frequencies. The 155.370-MHz frequency is used in carrier-squelch mode in order to allow the many users to monitor and transmit without having to switch squelch tones when using the frequency. This simplex frequency currently operates at a 15-kHz bandwidth and will need to be readjusted to the narrowband configuration by the year 2013, per FCC regulations. In addition to the 155.370-MHz frequency, State fire service agencies operate on a 45.88-MHz statewide interoperability channel.

A number of larger agencies throughout the State have migrated to the 800-MHz radio band and are compliant with the use of the interoperability channels assigned to the Band. The International Calling Channel (8CALL 90) and the four (4) tactical channels (8TAC 91 through 8TAC 94) are dedicated channels assigned by the FCC for emergency interoperable communications. These channels operate on a tone-coded squelch that normally operates in conventional radio mode.

The 800-MHz trunked radio system in Suffolk County will be cross-banded with neighboring Nassau County utilizing the 500-MHz band. With this cross-band capability, law-enforcement field units will be able to communicate seamlessly between counties, thereby enhancing their ability to work collaboratively. In Central New York, five counties are working on UHF band to combine independent yet fully functioning networks. Regional Planning Committee Region 8 is exploring the use of broadband for public safety.



State Communications Interoperability Plan



Interoperable communications in the New York Metropolitan area is not limited to law enforcement, since an operational 482- to 488-MHz radio band is used for multi-discipline, multi-jurisdictional purposes. Interoperable communications take place on six (6) channels in this frequency range. The six (6) channels are used strictly for communications interoperability. Firefighters, emergency medical services, police, and the New York City Department of Transportation are interconnected at various levels of command. During a natural or manmade disaster, these agencies interoperate according to NIMS procedures.

Localities must continue to use a wide variety of radio technologies and frequencies. Among the frequencies and technologies utilized throughout the State are VHF Low Band, UHF High Band, UHF, 800-MHz, 400-MHz, 155-MHz, microwave, fiber-loop, cross-patching, repeater systems, gateways, mobile communications vehicles, ACUs, General Packet Radio Service (GPRS) mobile data, and cellular air cards.

1.5.3 Existing Statewide Emergency Management Protocols and Practices

1.5.3.1 NIMS MCS

Various emergencies or disaster situations occur in the State. Depending on the nature and/or location of the event, the hazard may be relatively routine in nature, or may pose a variety of response issues and concerns that have serious implications. Local government is typically the first line of defense in response to an emergency. The response generated by local government may be adequate to remedy the situation, or the event may overwhelm some or all of the resources at the local level. State assistance supplements local efforts. While State agencies possess a wealth of resources and response capabilities that can be applied to the situation in support of local government, some events or elements may overwhelm the capabilities of the State and require federal assistance for effective response and recovery. Further, depending on the event, some emergencies may warrant an immediate federal presence before State and/or local resources are exhausted.

Regardless of the scenario, the State has a methodology and structure in place to effectively and efficiently interoperate with all levels of government. In doing so, the State maintains a high degree of commitment to prevent or minimize property damage, protect and save lives, and provide for all citizens who are or may be threatened by an emergency or who become victims of any disaster. These services are coordinated to the maximum extent with comparable activities of local governments, other states, the federal government, and voluntary/private entities.

In 2003, via the Homeland Security Presidential Directive Number Five (5), President George W. Bush directed the Secretary of Homeland Security to develop the NIMS. The NIMS integrates effective practices in emergency preparedness and response into a comprehensive national framework for incident management. In 2006, former Governor George E. Pataki signed Executive Order Number 26.1, identifying the NIMS as the State's command and control policy for use in coordinating the State's response to emergencies. The NIMS enables responders at all levels to work together more effectively to manage domestic incidents — no matter what the cause, size, or complexity. Please refer to Appendix B for New York State Executive Order Number 26.



State Communications Interoperability Plan



Under the principles of ICS, a variety of direction and control components may be utilized to manage and coordinate the State's resources in an efficient and effective manner and to provide interoperability between local and federal response organizations. The objectives in responding to an emergency will be unique to the event, as incident-specific objectives will vary based on the incident.

The following list provides an overview of the various components that the State is able to utilize in managing or coordinating its resources:

State EOC: The State Emergency Operations Center (SEOC) is located in Albany, New York. The SEOC is the primary location from which response and short-term recovery activities are coordinated. When activated, the SEOC's coordinative functions are managed by NYS DHSES. Should the SEOC become unusable, operations are relocated to an alternate SEOC. Activities conducted in support of local government are coordinated through various means, including local emergency operations centers.

Command and Multi-Agency Coordination: Unified State response and short-term recovery activities are coordinated through the SEOC. In smaller incidents, the State's response is coordinated by DHSES, on behalf of the Chairman of the Disaster Preparedness Commission or by a State agency for those events where responses are discipline-specific to the agency. This authority may be delegated to others utilizing ICS principles. In larger incidents, the State may utilize a Unified Command Plan (UCP) to manage the State's response. Agency representation in an activated UCP is based on the hazard and the impact on the State. Further, in major incidents, the State brings together a Multi-Agency Coordination System (MACS) group to define the executive policies in coordinating the State's response.

The MACS is comprised of executive-level agency representatives of the State Disaster Preparedness Commission or individuals delegated with the authority to speak on behalf of their agencies. The MACS serves as a policy-making authority in the State's response and provides executive direction in:

- Developing incident goals;
- Prioritizing incidents;
- Ensuring agency resources inventory lists are current;
- Determining specific incident and agency resource requirements;
- Allocating resources to incidents based on priorities;
- Resolving issues of agency overlap;
- Anticipating future agency/regional resource needs;
- Communicating MACS outcomes back to agencies; and
- Providing necessary liaisons with other coordinating facilities and agencies as appropriate.

The agencies represented in the MACS are based on the type of incident and the statutory obligations of the agencies involved. MACS policies and strategies are disseminated to the response organization via briefings, action plans, electronic media, or other appropriate means. Activities and tactics conducted in support of the MACS are coordinated through the activated functional group(s) and agency representatives, and to the forward operating locations (i.e.,



State Communications Interoperability Plan



area command or incident command post) of State agencies. The following resource pools are assigned to support the MACS:

- **Local Emergency Operations Center (EOCs):** Local EOCs are activated as needed per the county emergency manager and the chief elected official of that jurisdiction. State Agency staff can be utilized to support an activated EOC by working through their respective regional offices or via the command structure in place at the State level. Many State agencies utilize regional offices and provide support to local EOCs, as appropriate.
- **Agency Operations Center:** Several State agencies incorporate the use of an Agency Operations Center (AOC) to assist in coordinating resources in support of State response activities. The AOCs are agency-specific and serve as the focal point for a State agency to respond to agency-specific resource requests and to directly control the resources that fall under the purview of that agency. The AOCs include agency-specific ICS structures to manage supplies, equipment, personnel, and situational information in support of the overall incident-management structure.
- **Area Command:** The State may establish an area command to coordinate State response and short-term recovery activities. In establishing an area command, the State may pursue a formal delegation of authority to coordinate response operations in a jurisdiction. In coordination with the goals and objectives established by the MAC, the area command structure will set broad overall objectives for the impacted area and coordinate the development of individual incident objectives and strategies as well as establish priorities and allocate critical resources under the authority of the area command. In coordinating the response, the area command structure will allow the incident commanders as much latitude as possible in implementing their respective incident action plans.
- **State Incident Management Assistance Team:** The State of New York has available a trained and experienced Type II All-Hazard Incident Management Assistance Team (IMAT) under the auspices of DPC. The NYS IMAT is a State resource designed to assist emergency management and incident command personnel in ensuring a prompt, efficient, and organized response to emergencies and disasters by providing a team of personnel who are highly trained in advising on the implementation of the incident command system or in establishing and implementing the incident command system. The NYS IMAT is coordinated by DHSES and is comprised of personnel from various State, county, and local entities. The NYS IMAT specializes in emergency management response and recovery at the State, county, and local levels. The team is also familiar with Federal Emergency Management Agency (FEMA) programs and has interfaced with various national and state incident-management teams. The capabilities of the NYS IMAT enable it to have the training, background, and experience to be flexible enough to effectively function in many situations, including a field assignment at an incident command post or at a State, county, or local EOC.

1.5.3.2 UASI Tactical Interoperable Communications (TIC) Plans

As previously indicated, until July 2010, the State of New York had five (5) UASI regions. NYC is a Tier I and the only remaining active UASI. Tier II UASIs were Albany, Buffalo, Rochester and Syracuse. Each UASI formed an Urban Area Working Group (UAWG) that included localities to further work towards strengthening the region.



All UASI regions completed TIC plans, which continue to be maintained and updated regularly. New York City's TIC Plan is titled the New York City Urban Area Tactical Interoperable Communications Plan. The New York City Office of Emergency Management (NYC OEM) chairs the Urban Area Working Group (UAWG) that developed the plan. UASIs took an inclusive regional approach and involved contiguous jurisdictions, mutual aid partners, port authorities, rail and transit authorities, campus law enforcement, state agencies, Citizen Corps Council(s), and MMRS jurisdictions in their program activities. DHSES and the OIEC established a working relationship with all UASIs and continue to provide assistance during exercises and evaluations for the NYC UASI and for the four (4) former UASIs. TIC Plan exercises are evaluated by the OIEC and the Statewide Interoperable and Emergency Communication Governance Board.

New York received the following UASI allocations in FY 2010: New York City Area: \$151,579,096; Albany Area: \$1,011,141; Buffalo Area: \$5,544,750; Rochester Area: \$2,314,601; and Syracuse Area: \$1,010,475.

1.5.4 Public Safety Interoperable Communications Planning and Coordination

1.5.4.1 Regional Planning Committees

The State of New York has three (3) active FCC Regional Planning Committees (RPCs); RPC 8, 30, and 55. All three New York RPCs maintain a common web site at: <http://www.dhSES.ny.gov/oiec/committees>.

The mission of the RPCs is to:

Plan, coordinate, and administer public safety radio frequencies so that first responders can communicate free of interference, enabling them to better serve and protect our residents in times of need.

RPC 8

The RPC 8 700-MHz Committee encompasses the following areas of downstate New York and northern New Jersey.

New York State Counties: Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland Suffolk, Sullivan Ulster, and Westchester; and

New Jersey Counties: Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, and Warren;

In addition to the above, RPC 8 800-MHz NPSPAC Committee further includes the following four (4) counties in the State of Connecticut: Fairfield, Litchfield, Middlesex, and New Haven.

Region 30 RPC

The RPC 30 700-MHz and 800-MHz NPSPAC Committees encompass the following 31 counties in eastern upstate New York: Albany, Broome, Cayuga, Chenango, Clinton, Columbia, Cortland, Delaware, Essex, Franklin, Fulton, Green, Hamilton, Herkimer, Jefferson, Lewis, Madison, Montgomery, Oneida, Onondaga, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, St. Lawrence, Tioga, Tompkins, Warren, and Washington.



Region 55 RPC

The RPC 55 700-MHz and 800-MHz NPSPAC Committees encompass the following 17 counties in western upstate New York: Allegany, Cattaraugus, Chautauqua, Chemung, Erie, Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Wyoming, and Yates.

Current RPC Activities

The three (3) above-mentioned hold quarterly meetings to plan, coordinate, and administer public safety and first responder communications in the 700-MHz, 800-MHz NPSPAC, and 4.9-GHz frequency bands. In addition to the quarterly meetings, each RPC has established subcommittees that meet on an as-needed basis to address region and application-area-specific issues (e.g., 800-MHz rebanding, 700-MHz restructuring, 4.9-GHz technologies, etc.).

700-MHz

- RPCs 8, 30, and 55 have approved plans to administer the narrowband General-Use Channels in the 769-775-MHz and 799-806-MHz bands.

800-MHz NPSPAC

- RPCs 8, 30, and 55 have FCC-approved plans to administer the 800-MHz NPSPAC Channels. Each RPC has an active Regional Plan Update Committee (RPUC) to maintain and update the 800-MHz NPSPAC plans as necessary. Current initiatives include the 800-MHz rebanding program and coordinating usage plans with adjacent regions.

4.9-GHz

- RPC 8 and 30 have active 4.9-GHz Working Groups and established 4.9-GHz guidelines. Numerous agencies in the RPC 8 and 30 geographic regions hold 4.9-GHz licenses and utilize the Band for Incident Area Network (IAN) applications. Further, multiple 4.9-GHz projects are underway throughout the Regions.

Training and Exercises

- Communications Leader (COML) and Communications Technician (COMT) training is underway. Local governments are being educated about the benefits of Communications Assets and Mapping (CASM) as a tool for shared interoperability as well as narrowbanding and the 2013 deadline. TICP plans for local governments, to satisfy NECP goals 2 and 3, are in process.

1.6 Significant Interoperable Communications Constraints

As cited in Section 1.5, Current Interoperable Communications Environment, the existing (as-is) state of public safety interoperable communications varies significantly throughout the State. Although the variations are most drastic between the large metropolitan areas and lesser-populated regions of Central, Northern, and Western New York State, the following critical interoperable communication constraints (listed ascending in rough order of magnitude) are common across regions:

- Lack of federal, state, and local funding for improving public safety interoperable communications;
- Lack of dedicated public safety radio spectrum and interoperability channels;



State Communications Interoperability Plan

- Limited or no international, interstate, interregional, interagency, and intra-agency, interoperable communications;
- Coverage gaps in many localities due to inadequate systems;
- Outmoded technologies;
- Lack of affordable in-building coverage and underground communications technologies;
- Licensing obstacles;
- 800-MHz rebanding compliance;
- Narrowband compliance;
- Lack of multi-jurisdictional and multi-agency SOPs;
- Lack of integrated training and exercise programs;
- Cross-border communications issues with Canada; and
- Disparate Public Safety Answering Points (PSAPs).

The State recognizes and places significant emphasis on the fact that, in order to achieve long-term meaningful and measurable improvements in public safety interoperable communications, gaps must be closed in each of these identified areas. Further, the State recognizes that the result of closing some identified gaps may create new interoperable communications gaps. Thus, the SCIP vision, mission, strategy, and comprehensive action plan defined in Section 2 is designed to address both short- and long-term interoperable communications objectives to improve the State's ability to support daily operations and respond to natural and manmade disasters.



State Communications Interoperability Plan



This page intentionally left blank.



2. Strategy



2. STRATEGY

As a result of performing statewide communications capabilities assessments and holding stakeholder focus-group forums, the State of New York has accomplished the following objectives:

- Established a 2010 baseline of the existing (as-is) status of public safety operable and interoperable communications;
- Defined a statewide communications interoperability vision that remains current;
- Formulated a strategy to realize that vision;
- Identified and prioritized a list of objectives and Critical Success Factors (CSFs) required to achieve those objectives; and
- Established metrics to monitor and measure performance.

2.1 State of New York Interoperable Communications Vision

The State of New York will have the right people, procedures, technology, and training programs to communicate anytime, anywhere, and with anyone to satisfy the unique needs, requirements, and expectations of first responders, public safety, and public service personnel during day-to-day operations and during natural and manmade disasters to ensure critical services are delivered to those in need.

2.1.1 Mission

To realize the State of New York Interoperable Communications Vision, resources shall be focused and objectives prioritized to support following mission statement:

The State of New York will provide guidance and support to municipalities throughout the State to assist them in securing and delivering the most effective resources in the form of interoperable communications equipment, guidelines, training, and funding to first responders, public safety, and public service personnel for day-to-day operations and during natural and manmade disasters.

2.1.2 Scope

The scope and objectives of this, the December 31, 2011 edition of the SCIP, cover the updated PSIC period of performance of December 31, 2010 through December 31, 2011. The State of New York, via the Office of the Interoperable and Emergency Communications (hereinafter “the State”), has defined the long-term scope, objectives, and schedule for improving interoperable public safety communications beyond 2013.

In reviewing the State of New York Interoperability Baseline, the State has determined that, in order to achieve short-term meaningful and measurable improvements in public safety interoperable communications, the scope of the activities to be undertaken shall be focused in the five (5) following areas:

- Planning and coordination;
- Acquisition;



- Deployment;
- Operations and Maintenance; and
- Training, Exercises and Evaluation.

2.1.3 Goals

Within the five (5) focus areas, the State identified goals in the subsections that follow to improve public safety interoperable communications capabilities across the SAFECOM Continuum.

2.1.3.1 Governance

- Leverage the existing governance bodies at the state, county, tribal and local levels to plan, administer, and coordinate interoperable communications initiatives; and
- Implement clear roles, responsibilities, and reporting relationships between the Office of Interoperable and Emergency Communications, the Statewide Interoperable and Emergency Communication Governance Board (SIGB) and other governance bodies.

2.1.3.2 SOPs

- Continued improvement of the baseline of existing SOPs and training and exercise programs;
- Review, improve, and refine existing SOPs and emergency readiness exercise programs among jurisdictions to more closely align with and support agile incident response;
- Continued testing and implementation of an integrated platform of SOPs and emergency readiness exercise programs statewide; and
- Implement a process audit and process improvement program to regularly evaluate and improve SOPs and emergency readiness exercises.

2.1.3.3 Technology

Acquire, test, and implement technology solutions that:

- Enable seamless communications across all public safety frequency bands;
- Provide flexibility in tailoring the features and functionalities to satisfy the unique operational needs of fire, EMS, and police first responders;
- Are designed and hardened adequately to withstand the harsh conditions in which first responders work;
- Interoperate with commercial off-the-shelf (COTS) devices (e.g., PDAs, pagers, cell phone, laptops);
- Are equipped with GPS location identification hardware, software, and logging devices;
- Support one-to-one and one-to-many (command/broadcast) communications methods; and
- Operate via various communications technology delivery platforms (e.g., WiFi, WiMAX, cellular, LMR conventional and trunking mode, etc.).



State Communications Interoperability Plan



2.1.3.4 Training and Exercises

- Integrate efforts with the Division of Homeland Security and Emergency Services' plan to implement and administer multi-jurisdictional and multidisciplinary training and exercise programs;
- Leverage the existing training and exercise components of the NIMS MCS and UASI TIC plans to develop fully NIMS-compliant training and exercise programs; and
- Implement international, interstate, and intrastate training and exercise programs.

2.1.3.5 Usage

- Develop, implement, and continuously improve an all-hazards command and control structure that pools resources from the federal, state, local, and tribal bodies to execute daily operations and to respond to natural and manmade disasters.

2.1.4 Short-Term Objectives

Based on the existing (as-is) state of governance, SOPs, technology, training and exercises, and usage, the State has identified the critical activities, milestones, and objectives listed in Tables 2 through 5 to realize the short-term goals.

2.1.5 Planning and Coordination

Table 2, Planning and Coordination Milestone

Milestone	Planned Date
Standard Operating Procedures (SOPs) Project Completed	12/31/2014

Activities	Planned Start	Planned Finish	Objectives
Develop a Baseline of Existing SOPs	12/01/2010	12/31/2012	Develop a statewide baseline of existing SOPs. Each State agency, county emergency manager, or agency administrator shall verify that the baseline is at least 85% complete for his/her respective agency or county.
Conduct Analysis of the Baseline SOPs to Identify Integration Opportunities	09/01/2012	06/01/2013	Identify how disparate SOPs may be integrated to form regional and statewide SOPs for incident response. DHS and NIMS criteria shall be employed to define the integrated SOPs.
Develop a Statewide NIMS-Compliant SOP Platform	06/01/2013	12/31/2013	The output of this activity shall be a unified portfolio of NIMS-compliant SOPs segmented into incident response modules.
Test and Implement the NIMS-Compliant SOP Platform	01/01/2014	09/30/2014	Test and verify the conformance of the unified portfolio of NIMS-compliant SOPs during incident response exercises. For the SOP platform to be deemed compliant, 100% of the exercises conducted must pass.



State Communications Interoperability Plan



Refine the SOPs that Comprise the NIMS-Compliant Platform	10/01/2014	12/31/2014	The output of the activity shall be a refined platform of NIMS-compliant SOPs based on the results of the conformance tests.
Perform Revalidation Testing of the NIMS-Compliant Platform	01/01/2015	04/30/2015	Revalidate the refined NIMS-compliant SOP platform. For the SOP platform to be deemed compliant, 100% of the exercises conducted must pass.

2.1.6 Acquisition

Table 3, Acquisition Milestone

Milestone	Planned Date
Consideration of various Interoperable Communication Systems	09/30/2012

Activities	Planned Start	Planned Finish	Objectives
Problem Refined / Statement of Work	12/01/2011	03/31/2012	1) Clearly define interoperable communications constraints (problem definitions or gaps), and 2) Develop a Statement of Work (SOW) that shall include a Needs Assessment, Product Scope Description, and Statement of Strategic Importance.
Conduct Current Feasibility Analysis	04/01/2012	04/30/2012	Conduct a feasibility analysis of the projects proposed in the SOW. Relevant metrics and weighting criteria shall be employed to evaluate the feasibility of the projects.
Reassess a Current System Analysis	05/01/2012	09/30/2012	Conduct an analysis of existing interoperable communications assets and their impact on any proposed new projects considered.



State Communications Interoperability Plan



2.1.7 Training

Table 4, Training Milestone

Milestone	Planned Date
Ongoing Interoperable Communications Systems Training	12/31/2012

Activities	Planned Start	Planned Finish	Objectives
Conduct and Manage COML and COMT Training Courses for Public Safety First Responders	10/01/2011	10/31/2012	Provide opportunities for COML and COMT training for Public Safety First Responders.
Conduct Multi-Jurisdictional Training and Exercises	01/01/2012	12/31/2012	Conduct multi-jurisdictional training and exercises utilizing the interoperable communication system(s) and NIMS-compliant SOPs, as proposed under NECP Goal #2.
Develop Training and Exercise Documentation	06/01/2012	12/31/2012	Prepare, distribute, and archive training and exercise plans, schedules, outcomes, and records. The documentation shall be prepared in accordance with DHS and NIMS standards.

2.1.8 Operations and Maintenance

Table 5, Operations and Maintenance Milestone

Milestone	Planned Date
PSIC Funded Equipment Period of Performance Closes	09/30/2012

Activities	Planned Start	Planned Finish	Objectives
System Operations	11/27/2009	09/30/2012	Initiate and sustain operations of PSIC-funded equipment and systems during the period of performance. Equipment and systems will be required to perform at 99.999% reliability and availability.
System Administration	11/27/2009	09/30/2012	Initiate and sustain administrative services for PSIC-funded equipment and systems during the period of performance.
System Maintenance	11/27/2009	09/30/2012	Initiate and sustain maintenance services for PSIC-funded equipment and systems during the period of performance. Equipment and systems will be required to adhere to an established Mean Time to Repair (MTTR).



State Communications Interoperability Plan



System Provisioning	11/27/2009	09/30/2012	Initiate and sustain provisioning services for PSIC-funded equipment and systems during the period of performance.
---------------------	------------	------------	--

2.2 Strategic Components

Additional strategic components of the State’s interoperable communications plan include:

- Coordinating resources with neighboring states and Canada;
- Data interoperability;
- Restoring communications capabilities following a disaster;
- NIMS compliance;
- Coordination with major metropolitan areas and mass transit systems; and
- Maintenance of the SCIP.

2.2.1 Coordination with Neighboring States

The State of New York is actively engaged in public safety interoperable communications regulatory and policymaking activities with its adjacent states and Canada. Most of the operational coordination is done by the border area local public safety agencies, the New York State Division of State Police (DSP), and the Integrated Border Enforcement Teams (IBET).

2.2.1.1 Coordination with Neighboring States

The State of New York is effective at leading and coordinating interstate public safety communications activities with the neighboring states in matters of policy and technology. New York, along with Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, Rhode Island and Vermont are working together to preplan and coordinate emergency communications interoperability systems use, policies, procedures, and standards in anticipation of large-scale natural or manmade disasters. They are coordinating efforts by:

- Quarterly conference calls, at regularly scheduled dates and times, held between the states’ respective Departments of Public Safety and Homeland Security and other state, regional, or local organizations that have operational or functional responsibilities during large scale natural or manmade disasters;
- Semi-annual meetings, rotating between the member states, for the express purpose of defining and refining adjacent-state interoperability needs. These meetings regarding adjacent-state interoperability are separate and distinct meetings on the sole topic of adjacent-state interoperability;
- Email list servers to provide distribution of documents and reports;
- Key contacts list for the purpose of ensuring quick activation of interoperable systems;
- Memoranda of Understanding (MOU) to provide for clear understanding of adjacent-state roles and responsibilities; and
- Drills and exercises to ensure that established policies and procedures are tested.



2.2.1.2 Coordination with Canada

New York State has in excess of 400 miles of border with our Canadian neighbors. A majority of the population of Canada is within the first 75 miles north of the US/Canadian border and most operational coordination is done by the border area local public safety agencies, the New York State Division of State Police, and the Integrated Border Enforcement Teams (IBET).

Canada is in the early stages of conducting RF coverage studies, on a band by band level along the border of both countries. The existing communications that occur at the border is due to necessity, but many public safety agencies are unsure of the legalities associated with cross-border interoperability. Much emphasis is placed on updating 40 to 60-year old treaties and agreements in order to match modern needs and technology. Most agree that public safety is the priority and updates to treaties need to reflect what operational realities of the public safety realm. Efforts are underway to address coverage shortfalls in both the short and long term.

United States use of the VHF and UHF interoperability channels (VCALL/VTAC/UCALL/UTAC) has been limited by existing Canadian use along the border for some time. Two roadblocks to use of the channels are that licensing will require studies prior to requests for implementation; and under Canadian law, the first application in time is the first served (i.e. an existing Canadian user will not be preempted by an interoperable channel need). In the long term, Canada is hoping to clear at least some channels in some regions to provide some harmonization with the United States for the US national interoperability channels. This may have a negative impact on the proposed Border Interoperability Demonstration Project (BIDP).

The 800 MHz interoperability channels to be addressed in the impending revision of the US/Canadian border treaty should not present a significant problem to the United States. The 700 MHz interoperability channels are to be fully harmonized between the US and Canada in the new revised treaty, which should allow full use of these channels for interoperability. Canadian TV use on 64/69 is still a problem in some areas, but should be cleared by August 31, 2012.

The following issues are before the Canadian Government for consideration that will affect future US/Canadian border concerns:

- Canada has not yet addressed the 700 MHz broadband issue but will make it a subject to public comment in Canada before being finalized;
- Canada does not mandate narrowbanding, but does request it of licensees in some congested area;
- Canada is interested in both the SWIC and CASM programs and how they can be implemented in Canada;
- Formalize nation-wide governing body between the US & Canada to harmonizing interoperability frequencies at their borders;
- Identify interoperability channels across the entire US/Canadian border;
- Establish formal and legal process for sharing currently licensed & unlicensed frequencies at the border;
- Establish more training and exercises with cross-border agencies at all levels;
- Amend the US/Canadian 1952 Treaty to allow a foreign public safety agency to hold a foreign radio license; and
- Amend the same 1952 Treaty to emphasize the inclusion of portable radios.



State Communications Interoperability Plan

New York representatives serve as lead international and interstate communications advisors for both the National Public Safety Telecommunications Council (NPSTC) and the Association of Public Safety Communications Officials (APCO). For over a decade, the State of New York has worked closely with the Radio Advisory Board of Canada (RABC). State representatives also coordinate public safety interoperable communications activities with several Canadian public safety entities including the Royal Canadian Mounted Police (RCMP). Further, the State of New York works closely with Industry Canada (IC) on a variety of cross-border public safety interoperable communications issues.

Section 6, Standard Operating Procedures, addresses how the State will integrate the existing international and interstate public safety interoperable communications coordination plans to form a common platform of SOPs and emergency readiness exercise programs.

2.2.2 Data Interoperability

The Office of Interoperable and Emergency Communications and the three (3) FCC RPCs are developing a technology roadmap to plan for and implement a statewide interoperable data communications platform. The objective of the roadmap is to define a comprehensive plan to address interoperable data communications for day-to-day, mutual, and disaster operations.

The statewide data interoperability roadmap is being designed based on the needs, requirements, and expectations of the public safety community during day-to-day, mutual, and disaster-response operations. Please refer to Figure 3, Data Interoperability Operations Pyramid.³⁴

³ Adopted from the FCC RPC 8 4.9-GHz Working Group Guidelines, May 2005

⁴ The abbreviation "PHY" refers to the Physical Layer of the Open Systems Interconnection (OSI) model.

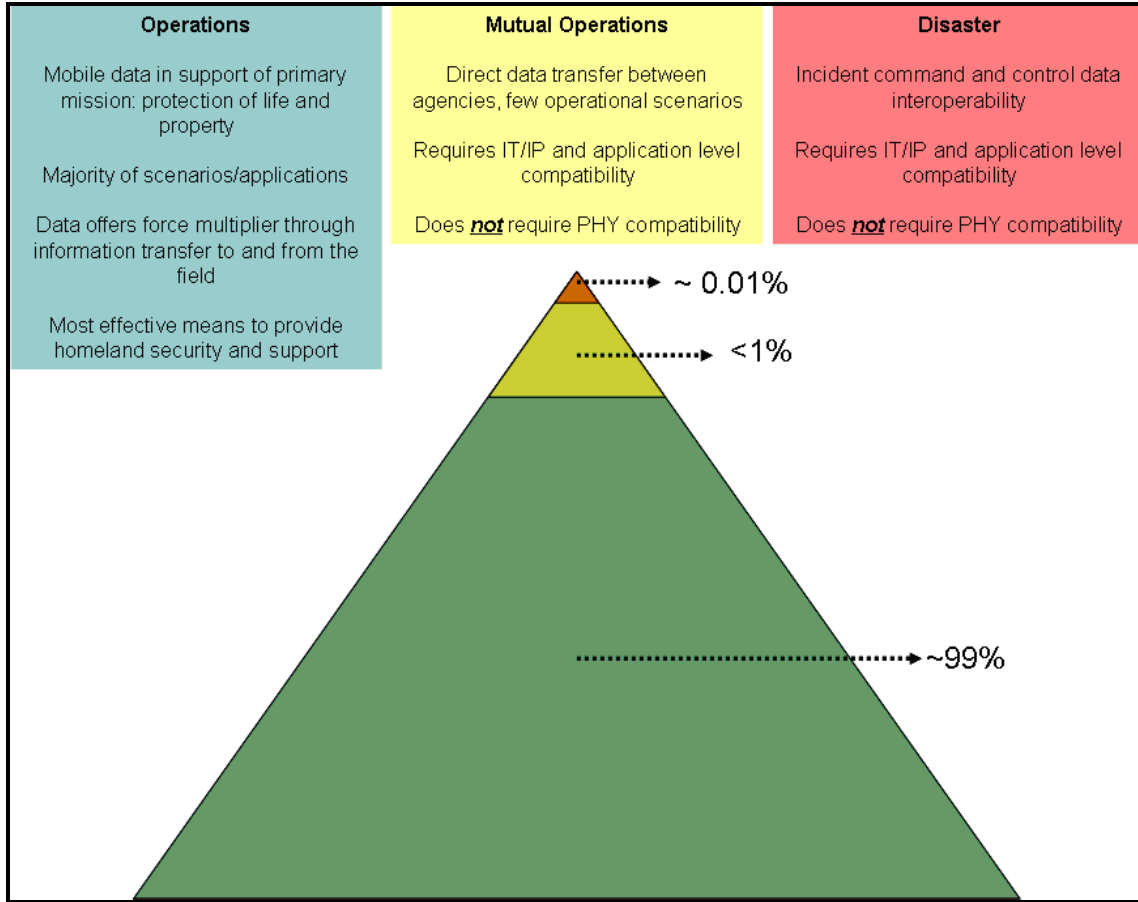


Figure 3, Data Interoperability Operations Pyramid

Appearing in the lower tier of the pyramid, the “Operations” level encompasses the vast majority of data applications. At this level, data applications provide support for the primary mission of protecting life and property.

The “Mutual Operations” layer appears in the middle tier of the pyramid. In this, a very small fraction (<1%) of data applications require direct agency-to-agency data transfer. However, in order to achieve interoperable data communications at this level, network and Internet Protocol (IP) compatibility is required.

The “Disaster” operations level appears in the highest tier of the pyramid. This layer represents the smallest number of cases and applications. During disaster operations, the State recognizes the need to activate an incident command and control structure to manage data communications and spectrum resources.

2.2.2.1 Vision for the Statewide Interoperable Data Communications Platform

A data communications platform is envisioned to provide users in federal, state, local, and tribal communities with access to common sets of information in a common way. The platform will consist of two (2) key components: shared databases and shared applications.

Users will be able to roam into any geographic region of the State and will have access to their common set of applications and data. Further, the data systems will have proper backups, maintenance, and security applied to them at all times. The common set of applications and



databases will be shared by all users having similar needs to know. It is anticipated that most of the resources supporting the system will be centrally located, but will have redundant, mirrored backup sites. The applications will be created such that multiple agencies could host their own databases within a partition of the shared database.

Further, the data communications platform will provide a common Computer-Aided Dispatch (CAD) system that can be partitioned and shared among agencies. It is envisioned that the integrated CAD system will provide:

- Sharing common incident records;
- Common map interfaces (e.g., “intelligent maps” depicting available resources and other mission-critical information);
- Application interface and capabilities that permit first responders to submit and retrieve incident reports directly to and from the integrated CAD in real time via laptops, PDAs, etc.;
- Access to shared universal databases (e.g., license plate and warrant databases); and
- Access to agency-specific databases that are searchable from the field.

2.2.3 Restoration of Communications

2.2.3.1 Background and Authority

State Executive Law Article 2-B, Section 21 identifies the State Disaster Preparedness Commission (DPC) and states that the DPC shall coordinate the State’s emergency management and response programs. The section also identifies 30 State agencies or offices and one volunteer organization, the American Red Cross, which shall participate in emergency management activities. Section 22 of Article 2-B identifies the roles and responsibilities of the Disaster Preparedness Commission and includes the preparation of State disaster plans; directing State disaster operations and coordinating those with local government operations; and coordinating with federal, state and private recovery efforts. The DHSES is authorized to serve as the administrative arm of the Disaster Preparedness Commission.

The development of the State Comprehensive Emergency Management Plan (CEMP)⁵ signaled a new approach by the State to address all-hazards emergency preparedness, response and recovery. The CEMP contains three (3) distinct, but interconnected, volumes.

Volume 1 – All-Hazard Mitigation Plan;

Volume 2 – Response and Short-Term Recovery; and

Volume 3 – Long-Term Recovery Plan.

2.2.3.2 Strategy

The Disaster Preparedness Commission in conjunction with Office of Interoperability and Emergency Communications will define an integrative process to align the CEMP practices with the SCIP initiatives.

⁵ The current version of CEMP documents can be found at:
<http://www.dhSES.ny.gov/oem/planning/documents/Planning-Guide.pdf>



2.2.3.3 How PSIC Grant Funds Will Aide in Restoring Communications

Under the PSIC Grant Program, the State of New York will be procuring five (5) mobile communications vehicles and a cache of interoperable communications equipment. This will enable the State to restore public safety communications following a natural or manmade disaster. Specifically, this will:

- Enable the restoration of State, county, and local legacy systems and interfaces during natural and manmade disasters; and
- Support the coordination and execution of incident response activities with Canada and the neighboring states and Territories.

2.2.4 NIMS Compliance

The Office of the Interoperable and Emergency Communications and the Statewide Interoperable and Emergency Communication Governance Board (SIGB) continue to develop a unified portfolio of NIMS-compliant SOPs segmented into incident response modules and unified portfolio of NIMS-compliant training and exercise programs.

As the NIMS-compliant SOPs and training and exercise programs are planned, developed, implemented, and tested, the SWIC/Director of the OIEC shall refine the SCIP to adhere to the portfolio.

2.2.5 Coordination with Major Metropolitan areas and Mass-Transit Systems

2.2.5.1 Overview

Major upgrades are being implemented to improve public safety interoperable communications with the State's mass-transit systems. In the wake of 9/11, the owners of these systems, most notably the Metropolitan Transportation Authority (MTA) and the Port Authority of New York and New Jersey (PANYNJ), have undertaken major communications systems upgrades in order to modernize their radio systems. One of the major lessons learned during 9/11 was the need to enhance interoperability among agencies responding to a crisis and serving the public.

The PANYNJ has undertaken steps to ensure that its officers can communicate with public safety partners. As part of the rebuilding of Ground Zero, the Port Authority solicited inputs and requirements from a host of public safety organizations, including the FBI, Secret Service, the MTA, New York City Police Department (NYPD), Fire Department of New York City (FDNY). By building a robust, scalable, and survivable communications system, the Port Authority's goal is to ensure that its personnel can communicate during a disaster.

Other New York City metropolitan-area agencies are also exploring ways to ensure that their personnel can communicate across departmental and agency lines. New York City Transit (NYCT) is expanding and enhancing its 800-MHz trunked radio systems to provide interoperable communications capabilities throughout the New York City subway system. While no system or process is perfect, these agencies know firsthand the importance of communicating with each other.



2.2.5.2 City of New York Urban Area Interoperable Communications

Description of Systems

The technologies employed by agencies operating in the New York City urban area support day-to-day and mission-critical interoperable communications. These technologies consist of a variety of land-mobile radio (LMR) systems and solutions including but not limited to conventional, trunked, and point-to-point radio systems, dispatch consoles with patch capabilities, mobile data systems, and fixed and mobile audio bridges and gateways that operate across VHF, UHF, and 800-MHz frequency bands.

The Command and Control regional wide-area interoperability system operates in the UHF frequency. This system is considered the City of New York's primary interoperable network for first responders and is currently expanding throughout the region. First responders including PANYNJ Police Department and the MTA Police Department have access to this system. In addition, the VHF Federal Interoperable Channel is capable of patching to the regional wide-area UHF channels.

A number of 800-MHz trunked radio systems are in use throughout the region by first responders within the five (5) boroughs of the City of New York, as well as nearby communities in the counties of Westchester, Nassau, and Suffolk, each having dedicated Command and Control talk-groups to support local, state, and federal agencies in addition to private health-care and public-works organizations.

Additionally, the urban area supports several National Law Enforcement channels, and New York State Police Mutual Aid Rapid Deployment and NPSPAC mutual-aid channels (8CALL 90 and 8TAC 91 through 8TAC 94), which are accessible at dispatch and PSAPs throughout the region.

Initiatives

The following interoperable communications initiatives are currently underway in the New York City urban area:

NYCWiN

The City of New York established a broadband wireless data network designed to improve first-response capabilities by supporting secure mobile and fixed applications. The Citywide Interoperable Video System (CIVS) allows transmission of video from the incident scene to Command Centers providing real-time information. Utilizing the NYCWiN network, CIVS feeds to any agency and to mobile units in order to provide the ability to view incidents from multiple perspectives in real-time, assessing situations for remote dispatch and providing improved incident command to field supervisors and bridges to critical emergency-management links across all City public safety agencies. The network provides multiple jurisdictions access to real-time video, rapid database lookup, the exchange of rich graphical information, and Automatic Vehicle Location (AVL) applications.

Emergency Communications Transformation Project (ECTP)

In May 2009, the first phase of integrated call taking operations between the Police and Fire Departments was successfully implemented across the City's 9-1-1 system. Unified Call Taking streamlines the call-taking process to reduce call handling time for fire calls and allow first



State Communications Interoperability Plan



responders to reach New Yorkers in an emergency more quickly. To affect some 180,000 fire-related calls per year, Unified Call Taking is among the significant accomplishments of the City's Emergency Communications Transformation Program (ECTP), which is designed to centralize and integrate the call taking and dispatch operations among the Police Department, Fire Department, and Emergency Medical Services. ECTP's next major milestone will be the opening of the Public Safety Answering Center (PSAC 1) in Brooklyn. That facility – which for the first time will combine the call-taking and dispatching operations of the Police and Fire Departments – was fully-staffed by fall 2009. Long-term plans include a fully redundant, load-balanced backup facility to enhance the reliability and resiliency of backup centers for police and fire services. ECTP will upgrade the system to carrier-grade telephone switches and modern call-taking/dispatch equipment required to operate the PSAC. Key systems and support infrastructures, including console installation and the integration of computer and radio-system testing will be installed for police and fire services.

MTA-New York City Transit Interoperable Radio Network

The City is also working jointly with the MTA and NYCT to develop a plan, methodology, and approach for design, implementation, testing and acceptance of the MTA-New York City Transit Interoperable Radio Network.

Community Oriented Policing Services (COPS)

NYPD continues to expand the New York City metropolitan UHF radio channels to provide wide-area coverage several miles outside of the City limits. The radio network will provide three (3) public safety command-and-control radio channels throughout the Region for voice interoperability communications.

NYC OEM Watch Command Interoperable Communications Initiatives

Operating 24 hours a day, seven days a week, the Office of Emergency Management's Watch Command works with field responders to serve as the central notification point for federal, state, and local agencies during emergencies; maintaining communication with surrounding jurisdictions and the NYS Emergency Management Office. Responsibilities include monitoring radio frequencies and computer-aided dispatch systems for the Police and Fire departments, surveying 911 calls and NYC emergency response units, tracking New York City weather conditions and disseminating information to NYC agencies, providing field responders communication and logistical support during emergencies, and deploying interagency command.

Westchester County UHF Trunked System

Westchester County deployed a UHF narrowband trunked radio system. This system included the installation of radio hardware in all first-line EMS and fire-service equipment, police headquarters, the County bus transportation system, and in the eleven (11) EMS receiving hospitals in the County. For the first time ever, the 62 fire-service agencies, 45 EMS providers, 44 law-enforcement PSAPs and eleven (11) EMS receiving hospitals can communicate with one another.

The County is building the UHF NPSTC nationwide mutual-aid system within the County. This will enhance and expand the existing NPSTC systems of current New York City Urban Area partners.



Nassau County UHF Trunked System

Twenty-four sites utilize 16 transmit (simulcast)/receive and 8 receive only channels and 30 voice channels. Radio coverage specifications provide 97% portable outdoor coverage and 95% portable indoor coverage at a 15 dB building loss. Sites will be connected by microwave rated at 5 "9s", 99.999% reliability, as opposed to leased lines prone to down time. Sites will have emergency backup generators; capable of 120 hours (5 days) run times. Towers and brackets are rated Category 3 hurricane resistant (130 mph). Digital/Trunked/Encrypted lines will make it nearly impossible to scan the system. Radios will not be able to be programmed without a system key. Local Village police departments have been invited to join the system and will be assigned their own talk groups that will be easily programmed into their corresponding precincts. Through Motobridge, the system will be able to communicate with any local disparate systems such as Suffolk, NYPD, Federal agencies and local Fire Districts.

National Public-Safety Advisory Committee (NPSPAC) and New York City Metropolitan Advisory Committee (NYMAC) Channel Expansion

Suffolk County extended and enhanced the coverage areas for both the 800-MHz NPSPAC mutual-aid channels and the NYMAC interoperable channels by implementing additional sites and a voted receiver system.

PANYNJ Initiatives

The PANYNJ is improving public safety interoperable communications within the Port Authority Trans Hudson (PATH) railroad system. The PATH is a critical interstate transit route between Manhattan and its neighboring urban communities and suburban commuter railroads in New Jersey. The system will enhance the build-out of the 800-MHz trunked radio system by resolving the lack of coverage between above- and below-ground voice communications. The enhancement addresses a critical gap among fire services and law-enforcement agencies throughout the PATH system. In addition to the PANYNJ Police Department's 800-MHz system, two (2) UTAC and two (2) ITAC frequencies will be coordinated for interoperable communications.

Working with the City of New York Department of Health and Mental Hygiene, the Office of the Chief Medical Examiner and NYC Department of Information Technology (DoITT), the PANYNJ will monitor and activate repeater 800 MHz tactical channels in compliance with the NYC TIC Plan.

DoITT World Trade Center Emergency Communications

DoITT is coordinating the NYC's wireless communications infrastructure requirements for incorporation into the reconstruction plans for the World Trade Center site. The requirements will include all of the facilities that must be provisioned to enable effective emergency response capabilities by the City at the site. This will encompass the City's requirements for resilient radio coverage in-buildings, above-ground and below-surface. As the project continues, the City will be working jointly and intensively with the State, Port Authority and key stakeholders responsible for site development.

The project goals include establishing a detailed, long-term public safety interoperable radio communications blueprint for the WTC entire site, including the Freedom Tower, other buildings, memorials and public spaces that meets the City's needs for public safety



State Communications Interoperability Plan

communications. As part of the process, the City will be required to prepare, document, and communicate emergency radio system requirements. This project will require the development of an extensive design strategy by the City, based on complex engineering studies.

2.2.5.3 Urban Area SCIP Coordination

The State of New York has designated the SWIC/Director of the Office of Interoperable and Emergency Communications and the Statewide Interoperable and Emergency Communication Governance Board (SIGB) as the primary liaisons in coordinating public safety interoperable communications initiatives with the major metropolitan areas and major transit systems in the large urban areas (i.e., NYC) and with transit systems in other urban areas, including Albany, Buffalo, Rochester and Syracuse, New York.

2.2.6 Administration and Maintenance of the SCIP

The Office of Interoperable and Emergency Communications will be responsible for maintaining the SCIP. The SCIP may be revised on a semiannual basis, as determined by the SWIC/Director of the OIEC.

As part of the review cycle, all changes and/or additions to the SCIP will be approved by the Statewide Interoperable and Emergency Communication Governance Board (SIGB) and the Commissioner of the Division of Homeland Security and Emergency Services as being compliant with federal policies and the established policies of the State. Any revisions to the SCIP will be announced to all stakeholders via email, facsimile, and/or direct mailings from the Office of Interoperable and Emergency Communications.

The State of New York will utilize the Homeland Security Information Network (HSIN) to collaborate and share SCIP documents and resources throughout the lifecycle of the project. Further, HSIN will be utilized as the configuration management (documentation and change control) tool for the SCIP.



3. Methodology



3. METHODOLOGY

This section provides information on the following topics:

- The process the State of New York employed to conduct project-outreach activities and obtain multidisciplinary input from jurisdictions throughout the State;
- The process the State of New York employed to identify, verify, and assess the existing (as-is) public safety interoperable communications environment statewide
- The State's plan to continually identify new stakeholders, adapt to the changing needs of existing stakeholders, and to obtain support for interoperable communications initiatives beyond 2013;
- How the practices defined in the existing UASI TIC Plans are incorporated into the SCIP goals and objectives; and
- The State's plan to continually obtain and incorporate multidisciplinary input from jurisdictions throughout the State into the SCIP;
- How the practices defined in the five (5) UASI TIC Plans are incorporated into the SCIP goals and objectives.

3.1 SCIP Stakeholder Outreach

The State of New York, through the SWIC and the Office of Interoperable and Emergency Communications continues to conduct all-encompassing stakeholder outreach to notify the public safety, public service, NGO, tribal nation, military, and federal government communities of the SCIP Program. This stakeholder outreach ensures that all potential stakeholders are:

- Notified and kept informed about the project;
- Invited to update meetings; and
- Invited to participate in updating the SCIP.

An original master communication distribution list was generated based on data obtained from:

- The three (3) State of New York FCC RPC distribution lists;
- The State of New York County Interoperability and Emergency Communications List;
- State, county, and local municipality emergency service, EMS, fire service, and law enforcement websites;
- The New York State Division of Military and Naval Affairs (DMNA) database;
- The national Bureau of Indian Affairs (BIA) listing of tribal nations by state; and
- Distribution lists generated from regularly scheduled SCIP meetings.

3.1.1 Tribal Nation Correspondence

Tribal nations are informed of updates and meeting regarding the SCIP through the regularly scheduled meetings of the FCC RPCs. Regional Taskforce Managers inform the following tribal nations: Allegany Reservation; Cattaraugus Reservation; Cayuga Nation of Nations; Oneida



Indian Nation; Oneida Indian Nation Police; Onondaga Indian Nation; Onondaga Nation Tribal Council; Poospatuck Tribe; Powhatan Renape Nation; Seneca Nation of Indians; Shinnecock Indian Nation Tribal Office; St. Regis Mohawk Reservation; Tonawanda Band of Senecas; Tonawanda Seneca Nation; and the Tuscarora Nation.

3.2 Meetings and Information Gathering

The State of New York holds SCIP update meetings in the three (3) FCC RPC regions. The State utilized these established committee regions to encourage participation from stakeholders in each of the State's 62 counties. Meetings are also held as part of the Division of Homeland Security and Emergency Services outreach efforts throughout the State.

The State of New York is in the process of establishing a new SCIP Website to include meeting minutes and presentations, and serves as a central clearinghouse for all SCIP-related resources.

3.3 Incorporation of the UASI TIC Plan Practices

The five former (5) UASI TIC Plans were consulted to develop the current baseline of public safety interoperable communications in the State of New York. Specifically, the following practice areas defined in the TIC Plans are included in the SCIP short- and long-term objectives:

- Governance;
- Interoperability equipment;
- Policies and procedures for interoperable equipment;
- Plans for tactical communications during incidents; and
- NIMS Communications unit leader and technician training.

3.4 Ongoing SCIP Stakeholder Outreach

3.4.1 Authority

The State of New York, via the SWIC and the Office of the Interoperability and Emergency Communications and under the authority of the Statewide Interoperability and Emergency Communication Governance Board, is charging the Regional Taskforce Managers⁶ and the OIEC with the responsibility of conducting public safety interoperable communications outreach activities with state, county, local, tribal nation, NGO, federal, and military communities. Table 6, FCC Regions within New York State, identifies the regions for which each of the three (3) managers are responsible.

⁶ The three (3) Regional Taskforce Managers are identified as the chairpersons of FCC RPC Regions 8, 30 and 55.



Table 6, FCC Regions within New York State

Region	Counties within the Region
8	Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland Suffolk, Sullivan Ulster, and Westchester ⁷
30	Albany, Broome, Cayuga, Chenango, Clinton, Columbia, Cortland, Delaware, Essex, Franklin, Fulton, Green, Hamilton, Herkimer, Jefferson, Lewis, Madison, Montgomery, Oneida, Onondaga, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, St. Lawrence, Tioga, Tompkins, Warren, and Washington
55	Allegany, Cattaraugus, Chautauqua, Chemung, Erie, Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Schuylar, Seneca, Steuben, Wayne, Wyoming, and Yates

3.4.2 SCIP Stakeholder Outreach Goals

The goals of the SCIP outreach program are to:

- Obtain and incorporate multidisciplinary input from jurisdictions throughout the State; and
- Identify new stakeholders, adapt to the changing needs of existing stakeholders, and obtain support for interoperable communications initiatives beyond 2013.

The overarching goal of the SCIP Stakeholder Outreach program is to achieve greater participation and support from public safety, public service, NGO, tribal-nation, military, and federal-government communities for interoperable communications initiatives.

3.4.3 SCIP Stakeholder Outreach Methodology

To achieve stakeholder outreach goals, participation will be sought and information solicited from the public safety and public service communities using the following a four (4) pronged approach:

- 1) FCC RPC meetings facilitated by the OIEC;
- 2) Regional Task Force meetings facilitated by the Regional Taskforce Managers;
- 3) Focus group meetings with international (i.e., Canada), national bodies (e.g., FCC, NTIA, DHS, NPSTC, APCO, etc.) and DHSES regional meetings; and a
- 4) Quarterly interoperable communications newsletter.

3.4.3.1 RPC Meetings

The State of New York is comprised of three (3) FCC RPCs. Each of the RPCs holds quarterly planning meetings.

In accordance with FCC regulations, RPC meetings are open to the public, announced via a Public Notice (PN) and appear in the Daily Digest published by the Commission. Furthermore, all meeting information is posted on the Public Safety and Homeland Security Bureau Web site⁸,

⁷ FCC Region 8 also includes counties in Connecticut and New Jersey.

⁸ <http://www.publicsafety.fcc.gov/pshs/public-safety-spectrum/index.htm>



State Communications Interoperability Plan



on the State of New York RPC Website,⁹ and distributed via email, facsimile, and direct mailings to the state, county, local, tribal nation, NGO, federal, and military communities. As a result of having three (3) active RPCs and established information distribution and coordination procedures, the State of New York is effective at leading intrastate and interstate public safety communications activities in terms of policy and technology matters.

In addition to planning and coordinating the use of the 700-MHz General Use Channels, 800-MHz NPSPAC Channels, and 4.9-GHz public safety spectrum, the scope of the meetings and activities include interoperable communications. Representatives from the OIEC attend meetings in each of the three (3) RPCs and provide information to local stakeholders on:

- The status of public safety interoperable communications initiatives underway;
- The outcomes and lessons learned from completed (implemented) projects;
- The results from training and exercise programs;
- Regional activities and findings;
- Information on future programs;
- Interoperable communications funding opportunities;
- Upcoming events; and
- Other pertinent information.

Please refer to Section 10.4.2.1, Meeting Logistics Summary, for additional information.

3.4.3.2 Regional Taskforce Meetings

The three (3) Regional Taskforce Managers, appointed by the SWIC/Director of the Office of Interoperable and Emergency Communications, are charged with a variety of interoperable communications duties in their respective jurisdictions. A key duty of each Regional Manager is to function as a liaison and communications expeditor between stakeholders at the county and local levels and the SWIC. As such, each Regional Manager shall conduct taskforce meetings in each the regions semiannually. These meetings provide a forum to exchange information on interoperable communications initiatives at the State, county, and local levels, while engaging stakeholders who are not able to participate in RPC and SIGB meetings. Additionally, a review of the latest SCIP shall take place to determine the progress of interoperability initiatives set forth in the Plan in relation to programs that have commenced within each RPC region.

3.4.3.3 Focus Group Meetings

To ensure alignment with national and international interoperable public safety communications initiatives, representatives from the Office of Interoperable and Emergency Communications shall regularly participate in application area focus group meetings. The State of New York has a representative serving as chair emeritus of the NPSTC Border Issues Working Group. Representatives from the State serve as lead international and interstate communications advisors for both NPSTC and APCO. Further, the State of New York has a decade of working closely with the RABC and Industry Canada.

⁹ <http://www.dhSES.ny.gov/oiec/committees>



3.4.3.4 Quarterly Communicator

In order to achieve the goals of the SCIP Stakeholder Outreach program, information gathering, documentation, and distribution among the federal, state, county, local, and tribal nation communities is critical. The Office of Interoperable and Emergency Communications will prepare and distribute a quarterly newsletter focusing on communicating the status, progress, and outcomes of activities undertaken by the SWIC, SIGB, RPCs, Regional Taskforces, and focus groups. Please refer to Section 10.4, Stakeholder Communications for additional information.

3.4.4 Expected Outcomes

The stakeholder outreach strategy supports the State's efforts to identify new stakeholders, adapt to the changing needs of existing stakeholders, and to obtain support for interoperable communications initiatives beyond 2013. To ensure multidisciplinary, multi-jurisdictional participation for interoperable communications planning, administration, and improvement activities, the Office of Interoperable and Emergency Communications is working to close the gaps in current stakeholder participation.

3.5 All-Inclusive Approach

The State of New York conducted an all-encompassing outreach program to involve stakeholders from the public safety, public service, NGO, tribal-nation, military, and federal-government communities in the SCIP Program. Additionally, the State of New York, through the SWIC/Director of OIEC continues to implement an ongoing outreach initiative to identify and integrate NGO, federal, military, and additional tribal-nation stakeholders into the grant programs.

To further this all-inclusive approach and to ensure all interests are addressed, a member of the Division of Military and Naval Affairs, National Emergency Number Association, State EMS and 911 Directors, and a representative from New York's Tribal Nations serve on the SIEC.



4. Governance



4. GOVERNANCE

4.1 Authority

New York State County Law, Article 26, Section 717, originating from the 2010 New York legislative session created the Statewide Interoperable and Emergency Communication Governance Board (SIGB). New York County Law, Article 6-A, Section 328, charged this Governance Board with the following powers:

- Make recommendations to the Commissioner of the Division of Homeland Security and Emergency Services on the expenditure of grants and other funding programs related to interoperable and emergency communications;
- Make recommendations related to the development, coordination and implementation of policies, plans, standards, programs and services related to interoperable and emergency communications, including but not limited to ensuring compliance with federal mandates for interoperable communications and compatibility with the national incident management system.
- Establish structures and guidelines to maintain interoperable communications planning and coordination at the statewide level;
- Establish, promulgate and revise standards for the operation of public safety answering points; and
- Establish guidelines regarding the creation of regionally based radio communications systems compatible with the structures and guidelines consistent with federal mandates and best practices.

4.2 Structure

The 25 member Governance Board is comprised of state agency heads, state legislative representatives, representatives of first responder organizations and experts in the field of interoperable and emergency communications. Members are appointed for a term of four years.

Chairperson – Statewide Interoperable and Emergency Communication Coordinator;

Seven (7) gubernatorial appointees;

Five (5) Senate appointees;

Five (5) Assembly appointees; and

Seven (7) ex-officio members.

The 7 ex-officio members are from the following offices:

Department of Health Commissioner,

Department of Transportation Commissioner,

Division of Criminal Justice Services Commissioner,

Division of Homeland Security and Emergency Services Commissioner;



Division of Military and Naval Affairs Adjutant General;
Office for Technology Director, and the
State Police Superintendent.

Governance Board members are required to possess expertise in interoperable and emergency communications issues.

4.3 Governance Board Charter

Until such time as the Statewide Interoperable and Emergency Communication Governing Board approves a new charter, the current Statewide Communications Interoperability Plan Governance Charter will remain in full force and effect. The Charter can be found at Appendix C.

4.4 Permanent Governance Board Implementation

4.4.1 Background

The former SCIP governing body, the SWN Advisory Council, held their final meeting in March 2010. The Statewide Interoperable and Emergency Communication Governance Board was enacted into legislation in June 2010.

4.4.2 Implementation

The Statewide Interoperable and Emergency Communications Governance Board will be named at a later date. Until such time, the State continues to rely on the Office of Interoperable and Emergency Communications for interoperability governance issues.

4.5 Governance Board Meetings

As discussed in 10.4.2, Chain of Command, the Statewide Interoperability Coordinator derives authority to establish management teams, meeting schedules, technical exercises, and training sessions directly related to the improvement and enhancement of State's interoperable communications.

Accordingly, the State of New York, with the Office of Interoperable and Emergency Communications, and in conjunction with the Statewide Interoperable and Emergency Communication Governance Board, will prepare a meeting schedule that coincides with the administration and maintenance of the SCIP, as defined in Section 2.2.6. As part of the review cycle, all changes and/or additions to the SCIP will be approved by the Governance Board and the Commissioner of the Division of Homeland Security and Emergency Services as being compliant with federal policies and the established policies of the State. Any revisions to the SCIP will be announced to all stakeholders via email, facsimile, and/or direct mailings from the Office of Interoperable and Emergency Communications.



5. Technology



5. TECHNOLOGY

Technical interoperability generally ranges from superior to adequate in New York City and other large metropolitan areas and from adequate to poor in many of the least-populated locales. The State's largest metropolitan areas have the most robust radio systems with the greatest interoperability capabilities.

SAFECOM defines interoperability as, "the ability of emergency responders to work seamlessly with **other** systems or products without any special effort. Wireless communications interoperability specifically refers to the ability of emergency response officials to share information via voice and data signals on demand, in real time, when needed, and as authorized. For example, when communications systems are interoperable, police and firefighters responding to a routine incident can talk to each other to coordinate efforts. Communications interoperability also makes it possible for emergency response agencies responding to catastrophic accidents or disasters to work effectively together."

5.1 Statewide Inventory of Critical Communications Assets

An integral component of the State of New York's strategy to improve public safety interoperable communications is the development of a statewide inventory of critical communications assets. This statewide inventory of assets will aid the State in developing an infrastructure baseline from which the short-term objectives identified in Section 2.1.4 of the SCIP can be refined to ensure resources are applied to close the most critical interoperable communications gaps. Further, the infrastructure baseline will be leveraged to:

- Identify critical legacy systems in operation throughout the State;
- Conduct additional gap analysis to develop long-term interoperable communications objectives;
- Formulate a strategy to achieve the objectives;
- Determine the resources required to complete the necessary activities; and
- Ultimately serve as a logistics command and control tool to manage interoperable communications resources across the State, with neighboring States and Territories, and with Canada.

Representatives from the State are authorized administrators of the Communications Assets Survey and Mapping (CASM) tool. The State shall utilize the Communications Assets module to access the statewide inventory of critical communications assets and use the Survey and Mapping module to conduct gap analysis.

5.1.1 Action Plan

The State of New York charged the Office of Interoperable and Emergency Communications with the responsibility of developing and implementing a comprehensive action plan to develop the statewide inventory of critical communications assets. This comprehensive action plan will include the following key initiatives:

- Conducting a data-quality assessment and incorporating the existing UASI equipment inventories into the baseline;



State Communications Interoperability Plan

- Coordinating activities with the county emergency management/communication offices to identify, verify, and assess the accuracy and completeness of existing inventory records;
- Coordinating activities with the county emergency management/communication offices to collect inventory data;
- Developing and implementing a configuration management and change control process; and
- Conducting periodic audits to verify the integrity of the inventory.

5.2 Integration of Legacy Systems

From the interoperable communications vision, the State of New York “will have the right people, procedures, *technology*, and training programs implemented to communicate anytime, anywhere, and with anyone.”

The identification, integration, and support of legacy systems is critical in achieving the State’s interoperable communications vision. A key objective in developing the statewide inventory of critical communications assets is to identify legacy systems in operation throughout the State. As discussed in Section 5.1, the State will conduct gap analysis at the State, county, and local levels to identify whether the short-term interoperable communications objectives need to be refined to ensure resources are applied to close the most critical interoperable communications gaps. In many cases, legacy systems will likely be identified as critical components, and a plan will be identified to integrate them accordingly. Further, as part of the State’s Grant Program Investment Justification (IJ) process, each county and eligible agency/entity in the State is provided with the opportunity to submit proposed projects for review and appraisal. The proposed projects will contain information that aids the Governance Board and OIEC in identifying and prioritizing the projects to be included in the State’s IJ portfolio.

5.2.1 Action Plan

The Office of Interoperable and Emergency Communications (OIEC) is responsible for determining the short- and long-term scope, objectives, and schedule for improving interoperable public safety communications. As such, the knowledge gained from conducting the gap analysis and from reviewing and appraising the projects proposed by the counties and agencies/entities will be used to identify the specific initiatives to be undertaken to integrate legacy systems.

As previously stated, the scope and objectives of this document, the December 31, 2011 update of the SCIP, identifies on-going tasks related to the integration of legacy systems. These tasks are listed in Table 7.



Table 7, Legacy System Integration Tasks

On-Going Tasks
Statewide inventory of critical communications assets
Gap analysis
Identification of critical legacy systems
Short-term strategy to integrate critical legacy systems
Long-term strategy to integrate critical legacy systems
Short-term implementation plan

5.3 Technology Acquisition and Implementation

As detailed in Section 2, the State determined that, in order to achieve meaningful and measurable improvements in public safety interoperable communications, one of the activities that must be undertaken is the acquisition of new technologies.

The acquisition and implementation of new technologies is a significant component in the State’s short- and long-term strategy to improve interoperable communications. The State will acquire, implement, train on, and maintain new technologies solutions that integrate as many of the following capabilities as possible:

- Enable seamless communications across all public safety frequency bands;
- Provide flexibility in tailoring the features and functionalities to satisfy the unique operational needs of fire, EMS, and law enforcement first responders;
- Are designed and hardened adequately to withstand the harsh conditions in which first responders work;
- Interoperate with COTS devices (e.g., PDAs, pagers, cell phone, laptops);
- Are equipped with GPS location-identification hardware, software, and logging devices;
- Support one-to-one and one-to-many (command/broadcast) communications methods; and
- Operate via various communications technology delivery platforms (e.g., LMR, conventional trunking, cellular, and broadband).

5.3.1 Project 25

The State of New York encourages all Public Safety Land Mobile Radio systems to migrate to Project 25 (P25) when appropriate; however the State also recognizes that analog systems can be interoperable. While there are challenges to migrating systems to P25, the State believes the time is right to set this goal and encourage migration. As grants may have specific requirements related to P25, grant applicants are reminded to carefully review all grant terms and conditions.

When procuring equipment for communication systems, a standards-based approach should be used to begin migration to multi-jurisdictional and multi-disciplinary interoperability. Specifically, all new *digital* voice systems must be compliant with the P25 suite of standards. This recommendation is intended for government-owned or-leased digital land mobile public safety



State Communications Interoperability Plan



radio equipment. Its purpose is to make sure that such equipment or systems are capable of interoperating with other *digital* emergency response land mobile equipment or systems. While this goal is encouraged whenever possible, it does not exclude any application if the application demonstrates that the system or equipment being proposed will lead to enhanced interoperability and does not create reduced interoperability or isolate the system from surrounding communication systems.

With input from the user community, these standards have been developed to allow for backward compatibility with existing digital and analog systems and to provide for interoperability in future systems. The Federal Communications Commission (FCC) adopted the P25 suite of standards for voice and low-speed data interoperability in the nationwide 700-MHz frequency band for the designated interoperability channels. Most Federal Agencies with a public safety type mission and operating "mission critical" Push-To-Talk (PTT) radio systems have chosen the P25 suite of standards for their digital radio solution, including the U.S. Department of Defense (for non-tactical communications).

This guidance does not preclude Federal funding of non-P25 equipment when there are compelling reasons for using other solutions. However, the first priority of federal funding (subject to the statutory authority of the grantor agency or the objectives of the grant program if the applicant is seeking federal grant funding) for improving public safety communications is to provide basic, operable communications within a department with safety as the overriding consideration. Funding requests by agencies to replace or add radio equipment to an existing non-P25 system (i.e., procurement of new portables on an existing analog system) will be considered if there is an explanation as to how their radio selection will allow for improving interoperability. Absent these compelling reasons, SAFECOM intends that P25 equipment will be preferred for LMR systems to which the standard applies.

P25 systems utilizing encryption must employ the P25 Advanced Encryption Standard (AES) and not proprietary encryption (see Project 25 Block Encryption Protocol, ANSI/TIA-102.AAAD).

P25 systems, both trunked and conventional, must utilize the New York State P25 Numbering Standard to the greatest extent practical. (See Appendix D) This ensures that unit IDs and system IDs are not duplicated across systems, as well as permitting quick identification of units from other areas.

The use of manufacturer specific or proprietary add-ons is discouraged. Any system being procured should specify in the requirements that the system must permit all regular communication functions with any radio, regardless of manufacturer, meeting the P25 Compliance Assessment Program (where applicable, see 5.3.1.1).

5.3.1.1 P 25 CAP

DHS, in partnership with the National Institute of Standards and Technology (NIST), has developed the P25 Compliance Assessment Program (P25 CAP) which allows users to obtain documented evidence from manufacturers that equipment has been tested and passed critical normative P25 performance, conformance, and interoperability tests published by the Telecommunications Industry Association (TIA). This program is being rolled out in phases, beginning with the Common Air Interface (CAI), and additional interfaces are being added to the P25 CAP in subsequent phases. The specific tests covered by the P25 CAP at this time can



State Communications Interoperability Plan



be found in the P25 CAP Compliance Assessment Bulletin (CAB), Baseline Testing Requirements, available on the SAFECOM program Web site at:

<http://www.safecomprogram.gov/currentprojects/project25cap/Default.aspx>

Grantees should clearly state in the grant application that P25 equipment purchased with grant funds shall meet the latest requirements of the P25 CAP. Supplier's Declaration of Compliance (SDoC) must be available, as seen at: <http://www.rkb.us>.

5.3.2 Public Safety Answering Point (PSAP) Technologies

The State recognizes the existence of the emerging Next Generation 911 (NG-911) technologies for Public Safety Answering Points (PSAPs). With the transition of administration of the State PSAP grant program to OIEC, the specific details of PSAP technologies, training and NG-911 are under review. Please contact OIEC for further information.

5.4 Interoperability Channels

5.4.1 National Interoperability Channels

The National Interoperability Channels must be programmed in to all capable and eligible subscriber equipment, in accordance with NECP Objective #3.¹⁰ An ideal time for existing equipment to implement this change is during narrowbanding, rebanding, or other subscriber unit changes. All newly deployed equipment should have these channels implemented during initial programming. A best effort should be made for radios with limited memory capacity.

The ensure interoperability among all responders in New York, as well as outside resources, the VHF, UHF and 800 MHz National Interoperability Channels must be used in analog narrowband mode only. The 700 MHz National Interoperability Channels must be used in P25 mode, in accordance with the FCC Rules. At no time is encryption permitted on any calling channel.

New York State requires the use of plain language on all Interoperability Channels.¹¹

Agencies are reminded that these channels are available for multi-agency and/or multi-jurisdiction incidents, and not to replace or supplement an agency's regular operational channels. However, they should consider the full scope of public safety and public service groups which may be eligible for use of these channels when conducting pre-planning.

The 700 MHz interoperability channels are under the control of the State's Office of Interoperable and Emergency Communications, while the 800 MHz channels are coordinated by the 3 Regional Planning Committee (RPC) plans.

Additional information regarding the use and licensing of the National Interoperability Channels in New York State is available in Appendix E, Guidelines for Licensing National Interoperability Channels.

5.4.2 New York State Interoperability Channels

There is a history of interoperability channel use in New York State that predates the efforts to create a national set of channels. This includes law enforcement interagency (such as 155.370

¹⁰ http://www.dhs.gov/xlibrary/assets/national_emergency_communications_plan.pdf

¹¹ <http://www.safecomprogram.gov/SiteCollectionDocuments/PlainLanguageGuide.pdf>



MHz), EMS (155.715 MHz among others), fire (45.88 MHz, 46.22 MHz) and others. These channels are currently utilized by both base stations and mobile/portable units. It is anticipated that these will continue to remain crucial to users in the State.

The vast majority of users on these channels are currently utilizing them in wideband mode, but a plan to narrowband them (with the exception of the low band channels, which do not require narrowbanding) must be done in a coordinated manner prior to 2013.

Additional information regarding the use and licensing of the New York State Interoperability Channels is available in Appendix E.

5.5 Public Safety Broadband

5.5.1 700 MHz

While the specific direction that 700 MHz public safety broadband will take has not yet been set by the FCC, there is a significant potential available for the mobile and portable use of high speed (megabit speed) data services. A 700 MHz public safety broadband network would enable the use of technologies such as streaming video and database access by first responders in the field.

While it is anticipated that any deployments of 700 MHz public safety broadband will be first used only for data services, eventual technology may also provide for Push-to-Talk (PTT) voice. Significant attention is being given to this technology at the national level, to ensure that all network and services are fully interoperable.

As 700 MHz public safety broadband is in its developmental stages, with much detail still uncertain, this revision of the SCIP does not set forth any specific recommendations but encourages public safety to monitor developments closely and provided input when necessary.

5.5.2 4.9 GHz

Dedicated 4.9 GHz public safety broadband is being utilized by public safety agencies throughout New York State. While the capability for hot-spot type use is available, most deployments in the State encompass point-to-point link capabilities, especially to replace physical (e.g. telephone) links between RF sites and dispatch points.

5.6 Infrastructure Sharing

Public safety (state and local) entities are encouraged to share infrastructure whenever and wherever possible, including across jurisdictions. The use of collocated sites, microwave system interconnection and consolidated dispatch is desirable for both enhanced public safety and fiscal cost savings.

5.7 Equipment Caches

Entities hosting caches of equipment are reminded that cache equipment must be regularly inspected and exercised to insure it is ready for deployment. Training must be included in all equipment cache plans. Inventory information on caches should be included within the CASM tool.



5.8 State Communications Support

To ensure that technology acquired by public safety and public service agencies at the State, county, and local levels supports the SCIP goals, the Office of Interoperable and Emergency Communications can review the proposed technology acquisitions by agencies at the State, county, and local levels. The OIEC will then provide its recommendations to the proposing agency for consideration; however, in many cases, the ultimate purchasing authority lies within the proposing agency.

5.8.1 Planned Acquisitions

Counties have identified and, in some cases achieved activities, milestones, and objectives to support short-term technology acquisition and implementation strategy. All five UASI regions in New York State passed NECP Goal #1. As of December 31, 2011, 86.2% of the counties are in compliance with NECP Goal #2.

Buffalo/Erie/Niagara Area

The Buffalo Erie Niagara (BEN) UASI is currently building an interoperable communication system for police, fire and EMS responders in the region. The system is predominantly UHF but will include cross band repeaters with the VHF systems. To date the Niagara County analog UHF system is completed for fire/EMS and police. VHF is undergoing upgrades. Erie County and the City of Buffalo are building analog UHF systems for fire and EMS, and digital UHF systems for police.

Onondaga County and the Central NY Regional Interoperable Communications Consortium

In February 2010, Onondaga County implemented the Onondaga County Interoperable Communications System (OCICS), a 15 site/15 channel Motorola UHF digital simulcast trunked land mobile radio (TLMR) system. The OCICS serves all public safety agencies (i.e., 19 law enforcement, 58 fire departments, and 18 EMS agencies) serving Onondaga County, including the City of Syracuse. Coverage has exceeded user expectations, providing better than 98% on-street portable coverage throughout the County.

The OCICS was bonded by Onondaga County at a cost of approximately \$34.5 million. Bonding paid for the infrastructure as well as the initial issue of subscriber equipment. Adequate frequency pairs were obtained through letters of concurrence (LOC) with other agencies, as well as coordinated efforts with federal and Canadian authorities. Local agencies that provided LOCs were included as secondary users on the OCICS.

Onondaga County has joined with its neighbors, Cayuga, Cortland, Madison and Oswego Counties, to form the Central New York Regional Interoperable Communications Consortium (CNYRICC). At present, Cayuga, Madison and Oswego counties are building-out Motorola UHF digital simulcast TLMRs that will share Onondaga County's Master Site. This sharing will allow for greater interoperability between the counties and will lower capital and maintenance costs.

Monroe County

Six Counties in Western New York recognize that communication is a crucial tool in coordinating the public safety response and communicating between entities at the scene of incidents. The need to 'talk' to each other gave rise to a regional consortium with representatives from



State Communications Interoperability Plan



Genesee, Livingston, Monroe, Ontario, Orleans and Wayne Counties and NYS agencies to serve as the governance structure for a major regional project to enhance interoperable communications for multiple agencies and multiple disciplines servicing exceeding 1.1 million residents in a 3,424 square mile area. The project will be used in a three-pronged modality: to support day-to-day public safety/public service operations; to support special event operations and to facilitate emergency/disaster operations resulting in a devastating impact to the communications infrastructure.

The technical infrastructure will allow any individual units or base station to communicate by voice to any other individual unit or base station in the six-county region. Appropriate policy decisions and MOUs along with procedures and standard operating guidelines will be established to request, accomplish and terminate the needed interoperable communication.

Each county operates on different frequencies with different technology, but installation of the proposed equipment listing will patch the various systems to allow for communications for events that span the geographical limits, which will create an economical solution by capitalizing on existing infrastructure to achieve interoperability. Each county will install and incorporate appropriate equipment to facilitate voice communications on identified frequencies into their infrastructure and 9-1-1 Centers, along with adding portable radios configured for each county to facilitate patching and interoperable capabilities with other agencies (NYS and federal).

Interoperability requires a complete package of efficient data transport, sophisticated radio interfacing, minimal lifecycle costs and an intuitive, easy-to-learn user interface. Appropriate equipment to facilitate voice communications on various frequencies will be installed into each partner's infrastructure. Additionally, appropriate portable radios in three frequency ranges will be configured for each county to facilitate patching and interoperating with other agencies. The project incorporates end users from each of the counties, along with state and federal partners, from various disciplines, including public safety and non-traditional public safety. Law enforcement, fire service, EMS, public health and public works entities will be able to utilize designated UTAC, VTAC and NPSPAC channels to interoperate. Equipment and process functionality and training effectiveness will be tested and evaluated via exercises, drills and actual events with debriefing assessments following each occurrence to provide lessons learned and a continuous improvement approach.

Albany/Schenectady/Rensselaer/Schoharie Counties

The Albany Urban Area Working Group (UAWG), consisting of the cities of Albany, Schenectady, and Troy and the counties of Albany, Rensselaer, Schenectady, and Schoharie, continues to make interoperable communications a regional priority. The Albany UAWG is leveraging grant funding from multiple sources to create a regional broadband interoperable communications network.

The project includes microwave equipment, fiber optic links, MDT system upgrades, wireless access points, upgrades to radio equipment, and further integration of municipal voice, data and video technologies throughout the region. When complete the project will see the installation of a regional microwave connection which will serve as redundant communications in the event of fiber optic communications disruption. The microwave solution, including wireless broadband, will enable for seamless sharing of data, integration of voice communication systems, and enhanced usage of regional surveillance camera networks.



State Communications Interoperability Plan



The Albany UAWG communications project will enable seamless communications across public safety frequency bands and provide the requisite capability and scalability to be further integrated with existing and emergent interoperability standards and platforms.

Metro 21 (New York City Area)

Metro-21 is a 5 channel, 7 site proprietary Harris EDACS system owned by the New York State Police that provides 97% portable on-hip outdoor coverage throughout the 5 boroughs of New York City. This system serves NY State Police Investigators in the city, as well as a number of other public safety agencies, including the NYS Attorney General's Office, ATF, DEA, District Attorneys and Secret Service.

The New York State Police have begun the process of upgrading this system from proprietary EDACS to a non-proprietary P25 system, using a combination of currently used 800MHz and state-use 700MHz frequencies. It is estimated that this upgrade will cost \$4.5 million, and will be completed in mid-2012.

New York City

The NYC Dept. of Information Technology and Telecommunications is developing a regional IP Gateway to integrate legacy systems and to improve interoperable communications regionally including law enforcement, fire services, emergency management and other public safety entities. As part of this project, a cache of radios has been procured to connect disparate radio systems. The City is also working jointly with the Metropolitan Transit Authority (MTA) and New York City Transit (NYCT) to develop a plan, methodology, and approach for design, implementation, testing and acceptance of the MTA-New York City Transit Interoperable Radio Network.

As part of the PSIC match, DoITT is implementing an IP Core Gateway that will ensure interoperability with 700 MHz narrowband regional voice communications systems. The existing project builds upon and expands the City's existing interoperable capabilities into the 700 MHz band (narrowband portion) and will interconnect mission critical radio networks, in real-time, to respond collectively to an emergency within the region; and to better prepare for incoming aid from regional, state and federal officials.

5.9 PSIC Grant Overview

Public safety agencies in the State of New York plan, coordinate, acquire, deploy, and train on interoperable communications systems that utilize the designated public safety frequency bands. One example is the Strategic Technology Reserve (STR). The State is advancing interoperability with its PSIC Grant Award in all these areas.

5.10 Statewide Interoperability Across All Public Safety Frequencies

As defined in the SCIP, the State of New York State determined that in order to achieve meaningful and measurable improvements in public safety interoperable communications, the scope of activities to be undertaken shall focus on planning and coordination, acquisition, deployment operations and maintenance and training.

Achieving meaningful and measurable improvements in public safety interoperable communications requires seamless interoperability across all public safety frequencies and systems, both legacy and newly implemented. Thus, the catalyst driving the State's goals and objectives in each of the five (5) focus areas is cross-band interoperability.



State Communications Interoperability Plan



True cross-band interoperable communications involves operational and technical components. Operationally, the SOPs, MOUs, and training and exercise programs will be designed to support cross-band interoperable communications operations. Likewise, technology solutions will be acquired and deployed to provide the means over which operations are executed. For instance, interoperable voice and data communications technologies acquired and deployed should:

- Utilize Software Defined Radio (SDR), allowing for multiple frequencies to be programmed into the infrastructure and subscriber units;
- Support “plug-and-play” configurations and interoperate with Commercial off The Shelf (COTS) devices (e.g., PDAs, pagers, cell phone, laptops, etc);
- Operate on non-proprietary, standards-based platforms;
- Are easily configurable; and
- Are designed and conform to public safety industry standards and best practices.

5.11 Strategic Technology Reserve

In accordance with the terms of the PSIC Grant Program, the State of New York established the STR. New York State allocated \$4,703,820 for the development of a Strategic Technology Reserve, intended to improve response capabilities during all-hazards emergencies.

5.11.1 STR Methodology

As evidenced by the State’s all-hazards risk profile, it is imperative to establish an STR to improve response capabilities during all-hazards emergencies. The potential crippling of existing State and/or local communications systems during natural and manmade disasters is a significant threat that the State’s public safety and first-responder communities continue to address.

To satisfy the requirements of the STR, and in accordance with PSIC objectives, the State of New York: (1) Acquired and is in process of deploying five (5) communications vehicles that will be pre-positioned in the DHSES geographic regions for immediate deployment during all-hazards; (2) Acquired and is in the process of deploying a radio cache to be pre-positioned in each DHSES geographic region; and (3) Will implement NIMS-compliant SOPs and training and exercise programs to support the use of the assets.

The communications vehicles shall be equipped to perform the following functions:

- Provide interoperable communications between numerous public safety and public service agencies at an incident or event through the use of all applicable public safety designated radio frequencies and radio-technology platforms (e.g., conventional, trunked, SDR, IP, IDEN, etc.). The communications vehicles will contain a full complement of Voice over Internet Protocol (VoIP), cellular, satellite, and Plain Old Telephone Service (POTS) telephone capabilities. Additionally, the vehicles will have the capability to tow a fold-down collapsible-tower to gain adequate elevation to sustain Radio Frequency (RF) operations over an extended period of time; and
- The communications vehicles will be equipped with the necessary equipment to sustain communications for an extended period of time (e.g., generators, HVAC, etc.).



5.11.2 Expected Results

The STR will enable the State of New York to pre-position technologically advanced interoperable voice- and data-communications equipment for immediate deployment to an emergency or all-hazards event. Strategically pre-positioning these assets across the State, in both urban and rural areas, enables public safety and public service agencies to respond to natural and manmade disasters within two (2) hours of notification.

The STR will fulfill the operational and technical needs of State, county, local, tribal-nation, and NGO agencies/entities during natural and manmade disasters by reestablishing communications services when existing assets are overwhelmed, damaged, or destroyed. Additionally, the STR will allow connectivity with the State of New York EOC to exchange real-time information on the status of the event/incident to effectively deploy and manage resources. Overall, the STR will aid in restoring the continuity of operations for public safety and public service agencies/entities in support of the protection of life and property.

5.11.3 Technologies

The State of New York determined that the STR must include (at minimum) the following critical components to interoperate with the DHSES vehicles and to restore and sustain communications during a natural or manmade disaster, using the most current technology:

- Eight (8) base-station radios (IP + EM) enabled (UHF, VHF and HF);
- TK 690, 790, 890 (VHF 2*Low, 2*VHF High, Low Band);
- High-Frequency Radio;
- EDACS Radio;
- Trunked Radio;
- One (1) dual-band amateur radio (UHF/VHF);
- An EAS (Emergency Alert System) integrated services IP router;
- Four (4) 2-port LMR integrated service modules;
- Wireless Local Area Network (WLAN) controller;
- Satellite uplink modules and satellite dish;
- IEEE 802.11 a/b/g access points or most current technology;
- VoIP voicemail (up to 12 mailboxes);
- Ten (10) IP phones;
- Ten (10) hard-line IP Phones;
- Wireless Access Points (WAP) with street-light pole kits;
- Two (2) Uninterruptible Power Supplies (UPS);
- 12 Low-band portable radios with hardened cases;
- 12 VHF high-band radios with hardened cases;



State Communications Interoperability Plan

- 12 800-MHz band portable radios with hardened cases;
- Audio Bridge;
- An assortment of LMR interface cables; and
- Two (2) redundant 7500-watt generators.

5.11.4 Administration of the STR

The State of New York's STR will be managed and maintained by DHSES. Subject Matter Experts (SMEs) from the State Disaster Preparedness Commission will be consulted to provide strategic guidance and input in the planning and implementation of the STR.

5.11.4.1 Initiation

Acquisition of the STRs was completed by DHSES/OIEC this calendar year. DHSES will continue responsibility for deploying and providing training and ongoing maintenance services for the STR. The DHSES STR project manager shall be responsible for all monitoring requirements associated with this contract.

5.11.4.2 Performance Measurement

To properly appraise this investment, the STR will be reviewed regularly; both in terms of project performance and product/service performance. This process will be spearheaded by DHSES, in conjunction with the State Disaster Preparedness Committee.



State Communications Interoperability Plan



This page intentionally left blank.



6. Standard Operating Procedures



6. STANDARD OPERATING PROCEDURES

New York State uses existing State, county, and local SOPs and works to integrate disparate SOPs to form regional and statewide procedural platforms for use during daily operations and in responding to natural and manmade disasters.

Caveat

During the data collection process, the State of New York SCIP development team obtained and archived public safety interoperable communications SOPs, MOUs, and other tactical plans from a variety of agencies located throughout the State. **At the request of project stakeholders, certain documents and resources do not appear and/or are not referenced in the SCIP due to the sensitive nature of the information.** A master repository of these documents is being prepared. Requests regarding these sensitive documents and resources should be directed to the NYS Office of Interoperable and Emergency Communications.

6.1 SOP Status Summary

The State of New York has adopted NIMS as the State's command and control protocol for use in coordinating the State's response to natural and manmade disasters. The NIMS MCS establishes a structure for public safety and first responders at all levels of government to coordinate resources during incident-response situations. The New York current and former UASI regions have established TIC plans. In addition to the NIMS MCS and UASI TIC plans, a variety of SOPs exist at the state, county, local, and individual agency level. As detailed in Section 2.2.3, Restoration of Communications, a Comprehensive Emergency Management Plan (CEMP) has been prepared by the DPC.

Overall, there are few integrated multi-jurisdictional and multidisciplinary SOPs. Across the State, only a small percentage of the SOPs are fully NIMS compliant.

6.2 Existing SOPs

Counties are furthering the development of their interoperability SOPs. The former and current New York UASIs have SOPs that are part of their completed TIC Plans.

New York City's TIC Plan also includes comprehensive SOPs. In addition, the City has instituted a Citywide Incident Management System to handle all major incidents and planned events. This system is fully compliant with NIMS and SOEM standards. Interoperability procedures and measures are detailed in the plan. Furthermore, the NYPD has developed a SOP for interoperability with the FBI via the Federal Interoperability Channel. In major metropolitan areas of the State or localities where interoperability needs and capabilities are greatest, SOPs address interoperability and are well documented.

Aside from these major metropolitan areas, many localities across the state have not developed comprehensive SOPs that address interoperability. Depending on the locality, SOPs may address interoperability only as it applies to centralized dispatch, channel allocation, incident response, establishing patches to surrounding jurisdictions, or interoperability between disciplines within the same locality. For instance, Onondaga County SOPs deal with radio-dispatch procedures for EMS, fire service, and law-enforcement. Chautauqua County modified their interoperability SOP's (not yet approved by committee) to include the use of 155.370 MHz. Radios capable of adding channels will have the National Interoperability frequencies added



during service intervals. Chautauqua has also upgraded their dispatch consoles which are capable of patching, but due to the layout of their system and reuse of channels at multiple sites, it is difficult to patch. Aside from that they still relay through dispatch. In late 2010, Genesee County made numerous updates to policy and procedures to take into account interoperability improvements with their neighbor counties. They have also updated their SOPs for the deployment of county communications assets. Local agencies possessing have single channel patching at the tactical level have written local checklists for field personnel to follow.

6.2.1 Mutual-Aid Agreements

A Statewide mutual plan exists for fire services. In addition, mutual-aid agreements have been established between many jurisdictions across the State and with neighboring states. Typically, these plans address major incidents and events. For instance, Erie and Niagara Counties have cross-border agreements with Canada to respond to incidents near the border. Multiple counties in Western New York State have mutual-aid agreements with one another. Although Rockland County is outside the New York City UASI, it has a mutual-aid agreement with New York City for major incidents. In most instances, interoperability is only addressed superficially in mutual-aid agreements; however, localities have agreed on ways to communicate when responding collaboratively to events and incidents.

6.2.1.1 Emergency Management Assistance Compact

The Emergency Management Assistance Compact (EMAC) is a state-to-state mutual-aid compact that offers Governors the opportunity to assist one another in times of disaster or emergency. The Compact is administered by the National Emergency Management Association (NEMA). As a member of the Compact, New York State receives requests for assistance that are issued by other member states. Interstate mutual-aid requests may be for personnel, equipment, special skills, or capabilities. They may be received as a direct request from another member state or through the web-based EMAC broadcast notification system.

Most requests for assistance under the Compact are transmitted through a general broadcast to all member states. The states, in turn, determine whether they are able to respond to a request and make offers of assistance to the requesting state. The offers contain a description of the assets or assistance being offered, the period of time the assets or assistance can be made available, and an estimate of the total cost. Negotiations that ensue may culminate in the acceptance of an offer from the state or states that have offered assistance. In New York, EMAC requests are received and coordinated by the State Office of Emergency Management. The State's participation in EMAC is codified in New York State Executive Law, Article 2b, Section 29(g).

6.3 Development of a SOP Portfolio

From the interoperable communications vision, the State of New York "will have the right people, *procedures*, technology, and training programs implemented to communicate anytime, anywhere, and with anyone."

As defined in Section 2, Strategy, the State has established the following short-term goals to develop a unified portfolio of NIMS-compliant SOPs:



State Communications Interoperability Plan



- Continued improvement of the baseline of existing SOPs and training and exercise programs;
- Review, improve, and refine existing SOPs and emergency readiness exercise programs among jurisdictions to more closely align with and support agile incident response;
- Continued testing and implementation of a common platform of SOPs and emergency readiness exercise programs statewide; and
- Implement a process audit and process improvement program to regularly evaluate the effectiveness of the SOPs and emergency readiness exercises.

6.3.1 Action Plan

The State of New York has charged the SWIC/Director of the Office of the Interoperable and Emergency Communications with the responsibility of executing the activities outlined in Table 8.

Table 8, Standard Operating Procedures

Milestone	Planned Date
Standard Operating Procedures (SOPs) Project Completed	12/31/2012

Activities	Planned Start	Planned Finish	Objectives
Develop a Baseline of Existing SOPs	12/1/2010	12/31/2012	Develop a statewide baseline of existing SOPs. Each State agency, county emergency manager, or agency administrator shall verify that the baseline is at least 85% complete for his/her respective agency or county.
Conduct Analysis of the Baseline SOPs to Identify Integration Opportunities	09/01/2011	06/01/2013	Identify how disparate SOPs may be integrated to form regional and statewide SOPs for incident response. DHS and NIMS criteria shall be employed to define the integrated SOPs.
Develop a Statewide NIMS-Compliant SOP Platform	06/01/2012	12/31/2014	The output of this activity shall be a unified portfolio of NIMS-compliant SOPs segmented into incident-response modules.
Test and Implement the NIMS-Compliant SOP Platform	01/01/2013	09/30/2014	Test and verify the conformance of the unified portfolio of NIMS-compliant SOPs during incident-response exercises. For the SOP platform to be deemed compliant, 100% of the exercises conducted must pass.
Refine the SOPs that Comprise the NIMS-Compliant Platform	10/01/2014	12/31/2014	The output of the activity shall be a refined platform of NIMS-compliant SOPs based on the results of the conformance tests.
Perform Revalidation Testing of the NIMS-Compliant Platform	01/01/2015	04/30/2015	Revalidate the refined NIMS-compliant SOP platform. For the SOP platform to be deemed compliant, 100% of the exercises conducted must pass.



6.3.1.1 Roles and Responsibilities

The Office of Interoperable and Emergency Communications will function as a liaison between State, county, local, tribal nation, federal, and international (Canadian) agencies to develop the SOP portfolio and to regularly exchange information on its usage status.

6.3.2 NIMS-Compliant SOP Platform

As previously cited, with the exception of the UASI TIC Plans, a small percentage of the existing SOPs are fully NIMS compliant.

The State of New York has chartered the Office of Interoperable and Emergency Communications with developing:

- A unified portfolio of NIMS-compliant SOPs segmented into incident-response modules; and
- A unified portfolio of NIMS-compliant training and exercise programs.

6.3.2.1 Implementation Strategy

The State of New York — via the member agencies of the State Preparedness Steering Committee (Division of Homeland Security and Emergency Services, Division of Criminal Justice Services, Department of Health, and Division of State Police) — has promulgated a NIMS implementation strategy for State agencies, counties, tribal nations, and local jurisdictions. The goals of the strategy include ensuring that there is an ability to, “establish communication processes, procedures, and protocols that will ensure effective interoperable communications among emergency responders, 911 centers, and multi-agency coordination systems such as Emergency Operations Centers (EOC).”

The NIMS implementation strategy offers a broad array of ICS training that is available online and through classroom training sessions coordinated by the Division of Homeland Security and Emergency Services. The State of New York made a significant commitment to ensure that higher levels of required ICS training are available statewide. This commitment resulted in ICS-300 courses being offered in every county and in ICS-400 courses being delivered regionally. The training is open to a wide audience of response officials, including those that may be designated in local incident command structures to serve in the Communications Unit Leader position.



State Communications Interoperability Plan



This page intentionally left blank.



7. Training and Exercises



7. TRAINING AND EXERCISES

The State of New York, through the Division of Homeland Security and Emergency Services, conducts regularly scheduled exercises with both State and local government entities engaged in EMS, fire service, and law-enforcement. Although these exercises vary in scope, they are designed not only to test communications processes, but also to ensure that entities understand the process by which assistance can be sought for an emergency, both from the State of New York and from federal government sources.

7.1 Multi-Jurisdictional/Multi-Disciplinary Training

Through a series of conferences and training events, DHSES coordinates various State, federal, and local governments/agencies, as well as volunteer organizations for effective emergency response. Some of the areas covered involve training in the NIMS, as well as assistance in local emergency planning. The DHSES Website, <http://www.dhSES.ny.gov/>, has ready information and samples of various planning documents available for use.

In addition to the DHSES exercise activities, several local governments and some State agencies regularly conduct their own training events. These events are developed around a likely emergency scenario and look to test various processes in the emergency-management area. In these exercises, various emergency-response specialists are familiarized with other disciplines in an effort to provide a level of cross training and networking with other emergency responders. Of particular importance in these exercises is communications interoperability between and among participants. These training events are often evaluated for the performance of the emergency-response systems and to capture lessons learned for future needs.

DHSES conducts multi-jurisdictional and multi-agency training programs to provide public safety and first responders with the knowledge, skills, tools, and techniques required to prevent, prepare for, mitigate, and respond to terrorist acts and natural disasters regardless of cause, size, or complexity. The target audience includes traditional first responders (EMS, fire service, and law-enforcement personnel) as well as non-traditional first responders (i.e., employees of Public Works, Emergency Management, etc.), and groups with specialized functions such as National Guard troops, police investigators, and security guards. DHSES strives to accomplish this mission by providing high-quality classroom training and by supporting a variety of exercises that allow personnel to apply classroom knowledge in real-world situations. DHSES also seeks to accomplish the mission by facilitating the statewide implementation of the NIMS, so that responders from different jurisdictions and disciplines can work together effectively.

In order to ensure that the training mission is accomplished as efficiently and seamlessly as possible, DHSES formed a Disaster Preparedness Steering Committee, as discussed in Section 6, which meets monthly to plan and discuss common concerns. DHSES is the training POC for the Training Education Division. This designation allows DHSES to schedule the delivery of federal training programs statewide in a rational, coordinated manner.

Interagency exercise collaboration is a top priority. The Training and Exercise Division established a multi-agency exercise committee to support the design, development, coordination, and evaluation of exercises at the State, regional and local levels. This



committee, a subcommittee of the Disaster Preparedness Steering Committee, developed the State's comprehensive multi-year training and exercise plan.

The DHSES currently maintains a training schedule at the following Website:

<http://www.dhses.ny.gov/training/>

The DHS cross-posts or links to courses of interdisciplinary interest with other training partners in the State. Training information is distributed statewide by email and hard copy and publicized at regional and local meetings. NIMS implementation is a training priority. DHSES, through the State Office of Emergency Management and Office of Fire Prevention and Control has trained over 700 local trainers in ICS 700/100/200 in 2006 – 2009 and delivered 157 ICS 300 or 400 courses statewide in 2009. Additionally, 18 regional workshops on NIMS implementation were held in 2009. Interoperable communications is a key component of NIMS implementations.

Working with the State's Disaster Preparedness Steering Committee and through focus groups and regional meetings, DHSES develops a multi-year exercise and training schedule that is updated on an ongoing basis and revised annually. OIEC offers Communication Asset and Survey Mapping (CASM) training to state agencies, local governments and agencies within counties. The CASM tool's standardized collection method for emergency response agencies assists them and the State as they store and visually display data about their public safety communications assets and how those assets are used.

7.1.1 Integration of Interoperable Communications Practices

NIMS interoperable communications implementation is a key component and major priority of DHSES, with training provided throughout the State on an ongoing basis. The Incident Management Systems Division of the National Integration Center FEMA/DHS Communications Leader (COML) is already implemented in New York. Further, many of the courses delivered in the State by DHS and other contractors include interoperable communications as a component. DHSES continues to identify training that incorporates interoperable communications and delivers it as it becomes available. Because New York is a home-rule state, local jurisdictions have control over many of their training activities and conduct local training including vendor-provided training on interoperable communications equipment.

DHSES staff directly supports a number of exercises in multiple jurisdictions throughout New York and will continue to support multi-agency, multi-jurisdictional exercises throughout the State. Additionally, local jurisdictions and other State agencies including the State Police, and federal agencies regularly conduct exercises. The scope and nature of these exercises include interoperable communications as a component; and local and regional exercises incorporate the local, tribal, State and federal agencies that interact with the exercise host. Exercises are used to test plans and training and include seminars, workshops, tabletops, games, drills, functional exercises, and full-scale exercises.

The State's Disaster Preparedness Exercise Subcommittee conducts Homeland Security Exercise and Evaluation Program (HSEEP) training throughout the State. All exercises that benefit from homeland security funding incorporate the HSEEP, as do many exercises that receive no such funding. This program incorporates Exercise Evaluation Guides (EEG), which are used to



evaluate exercise objectives to include interoperable communications. Results recorded in the EEGs are used to develop After Action Reports (AAR/IP) and Corrective Action (CA) Plans to identify training needs and test local plans.

7.2 Statewide Communications Training

The comprehensive ICS training initiative outlined previously extends to include ICS function-specific training (e.g., Communications Unit Leader) and interoperable communications practices critical to the development of local, regional, and State ICS capabilities.

7.3 Exercises

New York State adheres to the HSEEP and established an interagency Exercise Coordination Committee as part of the Preparedness Steering Committee. The State encourages and supports a comprehensive State exercise program that provides mutual-agency support for the design, conduct and evaluation of all-hazards exercises including tabletop, functional and full-scale environments. State and local exercises are monitored by the State of New York and a calendar of upcoming State and local exercises is maintained on the DHSES Website (<http://www.dhSES.ny.gov>)

7.4 Training and Exercise Goals and Objectives

Training and exercise goals and objectives are outlined in the State's Emergency Management Program Strategic Plan provided in the subsections that follow.

7.4.1 Training Goal

Enhance and maintain training programs so that emergency-response and management professionals can execute their duties safely and efficiently.

7.4.1.1 Training Objectives

- Establish a progressive emergency-management training program to address the knowledge, skills, and abilities needed by State and local agency personnel to accomplish their emergency-management job duties and responsibilities over the longer term. This must include any specialized threats faced by the jurisdiction.
- Ensure that emergency-management training is consistent with the training needs assessment and the State's strategy, and is related to corrective actions or deficiencies identified from emergency-management exercises or actual incidents/events.
- Ensure that training is provided on the NIMS to prepare State and local emergency management and other agencies and their personnel to function under NIMS protocols.
- Establish and implement a NIMS-compliant STR training program.
- Identify and develop a cadre of adjunct instructors to conduct quality emergency-management training programs based on identified training needs.
- Where appropriate and practical, utilize alternative training methodologies such as distance-learning and independent-study programs to increase access and availability of training for State and local emergency-management personnel.



7.4.2 Exercise Goal

Increase the number of State- and local-level individuals trained in exercise design, development, facilitation, and evaluation to provide a greater level of support for State- and local-agency exercise programs.

7.4.2.1 Exercise Objectives

- Deliver the HSEEP and Exercise Evaluation and Training Program to local governments, DHSES Regional Staff, and to DPC agency staff.
- Provide additional training or review training, as needed, to ensure that new staff, at both the local and the State level, is trained in HSEEP methodology.
- Provide ongoing regional HSEEP workshops to deliver new or revised HSEEP information on a timely basis, as this information becomes available.

7.4.3 Exercise Goal

Conduct exercises that test the ability of the State, counties, and local governments to respond to and recover from catastrophic events (including the use of the STR) and that recommend follow-up activities to address any shortfalls.

7.4.3.1 Exercise Objectives

- Identify and authorize a multi-agency exercise-coordination group of exercise officials from appropriate New York State agencies to come together and coordinate exercise scheduling, assistance, facilitation, and evaluation.
- Provide technical assistance, through trained SOEM staff members and trained staff members from other DPC agencies. This technical assistance would be coordinated by the exercise-coordination group, and would be available to assist with developing, delivering, and evaluating county-level exercises.
- Provide after-action reports to exercise participants in order to document any problems and to recommend activities to improve performance.

7.4.4 Exercise Goal

Enhance the scope and frequency of State-level exercises.

7.4.4.1 Exercise Objectives

- Develop and coordinate, through the multi-agency exercise-coordination group, a comprehensive, multi-year all-hazard exercise plan, in which exercises build on each other, enabling them to grow in complexity.
- Coordinate scope and frequency of exercises between agencies and disciplines, such that agencies or local governments are not overburdened with multiple conflicting exercises, and so that the exercise needs of agencies and local governments are met.
- Encourage specific sectors, such as business, education, etc., to participate in the scheduled exercises.



State Communications Interoperability Plan



7.5 SCIP Implementation Action Plan

The State of New York will leverage the established DHSES training and exercise program to accomplish the objectives defined in Table 9.

Table 9, Interoperable Communications Systems Training

Milestone	Planned Date
Ongoing Interoperable Communications Systems Training	12/31/2012

Activities	Planned Start	Planned Finish	Objectives
Conduct and Manage COML and COMT Training Courses for Public Safety First Responders	10/01/2010	10/31/2012	Provide opportunities for COML and COMT training for Public Safety First Responders.
Conduct Multi-Jurisdictional Training and Exercises	01/01/2011	12/31/2012	Conduct multi-jurisdictional training and exercises utilizing the interoperable communication system(s) and NIMS-compliant SOPs under NECP Goal #2.
Develop Training and Exercise Documentation	06/01/2011	12/31/2012	Prepare, distribute, and archive training and exercise plans, schedules, outcomes, and records. The documentation shall be prepared in accordance with DHS and NIMS standards.



8. Usage



8. USAGE

Interoperable communications technologies and practices are used by public safety and first responders. The State of New York's plan ensures consistent usage of interoperable communications systems, the application of SOPs during day-to-day operations, and initiatives to improve usage statewide.

8.1 Background

The experiences in New York City on September 11, 2001, highlighted the necessity for interoperability improvements across the State. Given the emotional impact of that day, all public safety and first-responders in New York State are keenly aware of the importance of employing technical and operational interoperable-communications practices on a daily basis throughout the State.

On local levels, interoperability is addressed during joint exercises, radio committee meetings, and training sessions. In addition, real-world events, such as major sporting events, fairs, and incidents such as the 2006 Bucky Philips manhunt in Western New York State, as well as floods and major snowstorms, remind leaders of the importance of interoperability and force agencies to explore continual improvements.

Interoperability is a daily necessity between agencies in each locality. In some heavily populated areas, such as the five-county Capital District, cross-jurisdictional personnel routinely respond to traffic accidents, fires, and other incidents on a daily basis. In Erie and Niagara Counties, interoperability is most important during major events such as Buffalo Bills football games and county fairs. Erie and Niagara Counties also require interoperability with Canada, given the heavy cross-border traffic at the Peace Bridge near Buffalo and the four points of entry near Niagara Falls. Genesee County achieves interoperability by instituting NIMS unified command structure to control traffic and respond to incidents when concerts occur at Darien Lake. In smaller communities, the need for interoperability is primarily event-driven. In larger communities, flood-prone communities, and communities that experience heavy lake-effect snow and ice, interoperability is driven by major incidents, as well as by predictable events. In New York State, major planned events most frequently occur in summer and fall. Unplanned incidents can occur at any time, but storm response is most typical in winter, while flash flooding usually occurs in spring and early summer.

At local levels, the incident commander is typically responsible for issuing requests for escalation and outside support. In localities where interoperability is limited, the usual practice is to contact 911 or the dispatch center during relatively minor instances. Most incident commanders request on-scene patching equipment, if needed. In response to larger incidents requiring a wider-area response or State participation, the incident commander contacts an emergency-services official, who in turn notifies the State and other jurisdictions.

8.1.1 Regional Incident Management

The frequency with which interoperability is used for regional incidents varies greatly across the State and from year to year. Arguably the most frequent need for interoperability occurs during major weather events. Yearly regional incidents seem to take place every year in upstate New York. In Western New York State, the Bucky Philips 2006 manhunt and the October 2006 snowstorm both required massive regional responses. In both instances, new interoperability



State Communications Interoperability Plan



procedures proved very effective. Ice and snow storms, some resulting in widespread power outages, have occurred in upstate New York several times in recent years, always necessitating a regional response. The Oswego County snowstorm of January 2004, when 86 inches of snow accumulated over four days, resulted in a presidential emergency declaration and FEMA participation. The June 2006 flooding of the Susquehanna River in the Southern Tier also necessitated a cross-jurisdictional response of New York and New Jersey, the New Jersey State Police, and adjacent counties. Most recently, interoperability around the state was tested as a result of the massive flooding caused by Tropical Storms Irene and Lee in 2011.

8.2 Action Plan

In order to improve the usage of public safety interoperable communications statewide, the State of New York, via the Statewide Interoperability Coordinator (SWIC), will leverage the established governance structures and initiatives of the DHSES-Office of Interoperable and Emergency Communications (OIEC) and Statewide Interoperability Governing Board (SIGB) to implement regional usage action plans. The three (3) Regional Planning Committee’s Task Forces shall also be utilized to develop, implement, test, and maintain strategic and tactical plans to ensure that interoperable public safety equipment and procedures are in use on a daily basis throughout and between the regions.

8.2.1 Roles and Responsibilities

Each Regional Planning Committee’s (RPC) Chairman, who serves also as the Regional Manager, along with the Office of Interoperability and Emergency Communications (OIEC), shall be responsible for planning, coordinating, implementing, testing, maintaining, and auditing the conformance of interoperable communications usage compliant with NIMS SOP, training, exercise, and usage plans as set forth by DHSES-OIEC, the SWIC, the SIGB and federal agencies. The State identified annual deadlines to plan and implement the Regional Usage Action Plans, as listed in Table 10.

Table 10, Usage Milestones

Milestone	Planned Date
The Office of the Statewide Interoperability Coordinator names the three (3) Regional Managers	Completed
Continue to analyze usage gap analysis in each of the three (3) regions	09/15/2012
The Office of Interoperable and Emergency Communications reviews and appraises the gap analysis in relation to federal, State, county, and local operational needs and requirements	12/31/2012
The three (3) Regional Usage Action Plans are completed	06/30/2013
The Regional Managers present and review the Usage Action Plans to the EMS, fire service, law-enforcement, tribal nation, NGO, federal, and military stakeholders in each of the Regions.	07/31/2013
Refinements to the Usage Action Plans are completed	09/30/2013
The three (3) Regional Usage Action Plans are implemented	11/01/2013



State Communications Interoperability Plan



This page intentionally left blank.



9. Funding



9. FUNDING

This section defines the process the State of New York shall employ to administer public safety interoperable communications grant funds and the financial responsibilities of the State and awardees for ongoing operations and maintenance of products and services procured using grant funds.

9.1 Monetary Awards

The State of New York charged the Office of Interoperable and Emergency Communications with administering the State's public safety interoperable communications comprehensive funding program. At the State level, the DHSES is responsible for identifying the resources necessary to manage and implement future initiatives. The Governance Board will review grant-proposal requests from State, county, local, tribal-nation and NGO agencies/entities and make monetary awards based on the State of New York Public-Safety Interoperable Communications Weighting Criteria. The Governance Board will rely on information provided by the OIEC, the SIEC, and individual local agencies to make future grant awards.

OIEC now manages the established 9-1-1 Public Safety Answering Point (PSAP) grants. The 9-1-1 PSAP grant is available to counties for the development, consolidation or operation of Public Safety communications systems or networks designed to support statewide interoperable communications. This grant was formerly managed by the Office of Fire Prevention and Control (OFPC).

In addition to the enabling legislation creating OIEC, the office was charged with developing standards and guidelines and to direct the NYS Public Safety Interoperability Grants. The grants will be used to develop, consolidate or operate public safety communications systems or networks designed to support statewide interoperable communications for first responders.

The first awards under the Statewide Interoperable Communications Grant (SICG) were announced on December 20, 2011. The competitive reimbursement program awarded sixteen counties a share of the \$20 million allocated for FY 2010-2011. Counties receiving awards will use the funding to obtain portable and mobile radios, as well as base stations (fixed-station equipment handling radio traffic from many users) that are capable of using national interoperability channels and other local mutual-aid channels.

Also included are projects to construct and install new equipment at towers and antenna sites, projects to deploy microwave equipment to provide more reliable transmission between sites and facilities, and projects to implement gateway technologies for linking county systems. Equipment purchased using these grants will allow different agencies to use common channels during incidents where multiple jurisdictions are involved.

The following counties are receiving awards:

- Cortland: \$4,000,000
- Delaware: \$1,078,000
- Essex: \$2,000,000
- Genesee: \$228,309
- Greene: \$893,000



State Communications Interoperability Plan



- Madison: \$1,997,812
- Nassau: \$877,729
- Niagara: \$2,000,000
- Onondaga: \$331,446
- Otsego: \$1,128,000
- Schoharie: \$858,000
- Steuben: \$1,523,264
- Sullivan: \$1,198,000
- Ulster: \$978,000
- Warren: \$736,938
- Washington: \$171,500.

OIEC supports the DHSES Federal Grant Program Administration with maintenance of the Public Safety Interoperable Communications (PSIC) and Interoperable Emergency Communications Grant Program (IECGP) grants, as well as a host of other grants related to public safety interoperability.

The Public Safety Interoperability Communications (PSIC) Grant Program is a one-time formula-based, matching grant program intended to enhance interoperable communications with respect to voice, data, and/or video signals. PSIC provides public safety agencies with the opportunity to achieve meaningful and measurable improvements to the state of public safety communications interoperability through the full and efficient use of all telecommunications resources.

The PSIC Grant Program assisted public safety agencies in the planning and coordination associated with, acquisition of, deployment of, or training for the use of interoperable communications equipment, software and systems that:

- Utilize reallocated public safety spectrum for radio communication
- Enable interoperability with communications systems that can utilize reallocated public safety spectrum for communication; or
- Otherwise improve or advance the interoperability of public safety communications systems that utilize other public safety spectrum bands.

Eligible applicants for this grant program were the 56 States and Territories of the United States. Application for the PSIC grant funds were required to submit the following three items:

1. Application;
2. Statewide Communications Interoperability Plan (SCIP); and
3. Investment Justifications for projects selected by the States and Territories for PSIC funding.

Competitive grant funds totaling \$12,416,975.00 was allocated for award to eleven (11) eligible local recipients in New York State that were located outside of the NYC Urban Area Security Initiative (UASI). For public safety purposes, interoperability is the capacity of this wide range of agencies and services to communicate with one another wherever and whenever needed to most effectively protect the public and accomplish agency-specific and collective missions.



9.2 Monetary Administration

Subsequent to grant distribution, maintenance and operational costs will be borne by the appropriate unit of local government, tribal nation, or NGO. Local governments shall be responsible for securing appropriations through their legislatures for future operational and maintenance costs tied to equipment secured through grants, unless the grants specifically allow for sustainability of assets. These governments are subject to audit by the federal government and the New York State Office of the State Comptroller (OSC) to ensure that assets obtained through grants are maintained according to the appropriate systems of internal controls.

The OIEC will work with State, county, local, tribal-nation, and NGO agencies/entities to identify any potential funding sources to assist in defraying maintenance and operational costs. As the clearinghouse for the State of New York for many homeland security grants, the DHSES will assist in providing information to all stakeholders and ensure that they are aware of future grants, including any related requirements and timeframes.

9.3 PSIC Project Implementation

During 2008, New York State was allocated \$64 million in Public Safety Interoperable Communications grants, or six percent (6%) from the nationwide pool. Funds were distributed to local governments during 2008. New York City Metropolitan Area received \$34,812,602, and the rest of the State received \$25,922,181. In July 2008, New York State awarded Public Safety Interoperable Communications grants to 11 local governments totaling \$12,416,975.

Federal DHS extended the date for fund disbursement associated with grant projects to September 30, 2012. Projects associated with the award are in various stages of completion.

Monroe County

The County completed their operational plan, but equipment is not yet installed for testing. Proximity to Canada and the county's need for Canadian frequency approval has resulted in obstacles to completion. The County is working with DHSES/OIEC to secure federal and Canadian frequency approval. Once frequencies are approved, antennas will be purchased and equipment installed and tested for use.

9.4 Interoperable Emergency Communications Grant Program (IECGP)

The FY 2008 IECGP National Grant award was \$48.5 million to improve interoperable emergency communications for response to natural disasters, acts of terrorism and other man-made disasters. IECGP funding was meant to assist states and territories in implementing their components of Statewide Communications Interoperability Plans (SCIP) and aligning priorities with the goals outlined in the National Emergency Communications Plan (NECP). New York State's total award was \$7.8 million of which \$6.26 million was the local share going to thirteen (13) local Jurisdictions. The FY2008 IECGP Grant had two priorities; (1) Priority Group #1 objective was to establish a Statewide interoperability Executive Committee (SIEC) and a full-time Statewide Interoperability Coordinator (SWIC); (2) Priority Group #2 was to achieve common planning and operational protocols and emergency responder skills and capabilities.

The FY2009 IECGP National Grant award was \$48 million that had priorities that required spending for improving interoperable communications capabilities for states, territories & tribes, & to support implementation of the SCIP and alignment to the NECP. Two priorities existed; (1)



State Communications Interoperability Plan

Priority 1 was to improve the Governance structuring and Standard Operating Protocols; (2) Priority 2 required Improving capabilities, training and exercises. Also, if priorities 1 and 2 are met and tested through TICP AAR then equipment purchase was allowable with a match requirement. New York State received \$6.99 million of which \$5.99 million went to thirteen (13) local government agencies. FY2009 applications were sent to DHS/FEMA in January, 2009.

The FY2010 IECGP National Grant award was \$48 million of which New York State received \$6.30 million. Funding will be spent on improving interoperable communications capabilities for states, territories and tribes, and to support implementation of the Statewide Communications Interoperability Plan (SCIP) and alignment to the National Emergency Communications Plan (NECP). There were two priorities; (1) Priority 1 – Governance Structuring and Standard Operating Protocols; (2) Priority 2 – Improving capabilities through training and exercises. Only after both priorities are met and tested is equipment allowable and 25% local match applies. There were twenty applicants of which two (2) were disqualified, requesting \$30 million. Seven (7) applicants were fully funded and one (1) was only partially funded. A total of \$5.04 million was awarded.



10. Implementation



10. IMPLEMENTATION

As discussed in Section 2, the State of New York determined that in order to achieve short-term meaningful and measurable improvements in public safety interoperable communications, the scope of the activities to be undertaken and the resources allocated to achieve the improvements will be applied to close the most critical interoperable communications gaps.

10.1 Short-Term Goals

Within the identified focus areas, the State has identified the prioritized¹² short-term goals in subsections that follow to improve public safety interoperable communications capabilities across the SAFECOM Continuum. The State of New York, via the SWIC and the Office of Interoperable and Emergency Communications, is in the process of defining the long-term scope, objectives, and schedule for improving interoperable public safety communications beyond 2013.

Governance

Table 11, Governance Implementation

Priority	Critical Success Factor	Goal
High	✓	Leverage the existing governance bodies at the State, county, and local levels to continue the establishment of Regional Task Forces to plan, administer, and coordinate interoperable communications initiatives.
High	✓	Implement clear roles, responsibilities, and reporting relationships between the SIGB, SIEC, Regional Task Forces, and other governance bodies.

SOPs

Table 12, SOP Implementation

Priority	Critical Success Factor	Goal
High	✓	Develop a baseline of existing SOPs and training and exercise programs.
High	✓	Develop, test, and implement an integrated platform of NIMS-compliant SOPs and emergency-readiness exercise programs statewide.
Medium		Implement a process audit and process-improvement program to regularly evaluate and improve the SOPs and emergency-readiness exercises.

¹² High priority goals are deemed absolutely critical (i.e., CSFs) to advance short-term public-safety interoperable communications planning and implementation. Execution of the medium- and low-priority goals is dependent on the successful completion of the high-priority tasks.



State Communications Interoperability Plan



Technology

Table 13, Technology Implementation

Priority	Critical Success Factor	Goal
High	✓	Develop a statewide inventory of critical communications assets.
High	✓	Clearly define interoperable communications constraints (problem definitions/gaps) and develop a SOW that includes needs assessment, product-scope description, and statement of strategic importance.
Med		Conduct an analysis of existing critical interoperable communications assets and their impact on proposed new technology projects.
Med		Develop the system designs for the selected projects.

Training and Exercises

Table 14, Training and Exercise Implementation

Priority	Critical Success Factor	Goal
High	✓	Integrate efforts with DHSES to collectively plan, implement, and administer multi-jurisdictional and multidisciplinary training and exercise programs.
High	✓	Leverage the existing training and exercise components of the NIMS MCS and UASI TIC plans to develop fully NIMS-compliant training and exercise programs.
Medium		Implement international (with Canada), interstate, and intrastate training and exercise programs.

Usage

Table 15, Usage Implementation

Priority	Critical Success Factor	Goal
High	✓	The Office of Interoperable and Emergency Communications named the three (3) Regional Managers responsible for implementing strategic and tactical plans to ensure that interoperable public safety equipment and procedures are in use on a daily basis throughout and between the regions.
High	✓	Usage gap analysis is completed in the Regions.
Med		Regional Usage Action Plans are completed.
Low		The Regional Managers present and review the Usage



State Communications Interoperability Plan



Priority	Critical Success Factor	Goal
		Action Plans to the EMS, fire-service, law-enforcement, tribal-nation, NGO, federal, and military stakeholders in each of the Regions.
Low		Regional Usage Action Plans are implemented.

10.2 Project Management Methodology

The SWIC, along with DHSES OIEC, works with the DHSES Federal Grant Program Administration (FGPA) to manage the portfolio of public safety interoperable communications projects executed under current and future grant programs. The Office of Interoperable and Emergency Communications is the principal state agency for all interoperable and emergency communications issues and oversees and directs the development, coordination and implementation of policies, plans, standards, programs and services related to interoperable and emergency communications, including those related to land mobile radio communications. Additionally, the SWIC/Director of OIEC functions as the primary liaison between the OIEC, FGPA, SIEC, and the SIGB.

10.3 Performance Measurement System

The SWIC/Director of OIEC, in conjunction with the FGPA, and overseen by the SIGB, shall be responsible for implementing a performance-measurement system and defining project-specific metrics¹³ to measure and report on the status and progress of each initiative.

The system will measure project and product/service performance. *Project performance measurement* will monitor and control cost, scope, schedule, resources, quality, and risk, while *product/service measurement* will evaluate the extent to which public-safety interoperable communications capabilities improve across the SAFECOM Interoperability Continuum, the extent to which the improvements adhere to application area standards (e.g., NIMS, etc.), and the extent to which the improvements meet the needs, requirements, and expectations of the stakeholders.

10.3.1 Implementation Plan

The State identified milestones related to the implementation of the performance-measurement system. The steps of the plan include:

- Development of a project-performance measurement system;
- Development of a product/service performance measurement system;
- Review and refinement of an integrated performance measurement system by OIEC and FGPA;
- Approval of the integrated performance system by the SIGB; and

¹³ Metrics will be established for each of the projects undertaken within the five (5) focus areas of planning and coordination, acquisition, deployment, operations and maintenance, and training.



- Implementation of the integrated performance measurement system.

10.4 Stakeholder Communications

10.4.1 Leadership Team Communications

The Office of Interoperable and Emergency Communications, DHSES, and the SIEC are the leadership team with a communications management plan and meeting schedule to support the planning and administration of the State's public safety interoperable communications initiatives. Additionally, the Director of the OIEC is responsible for establishing and maintaining communications with stakeholders at the international (i.e., Canada) and national levels (e.g., FCC, NTIA, DHS, NPSTC, APCO, etc.).

10.4.2 Chain of Command

As an employee of the State, and under the direction of the Commissioner of DHSES, as outlined in NYS Executive Law Section 26, the Director of OIEC derives the authority to establish management teams, meeting schedules, technical exercises, and training sessions directly related to the improvement and enhancement of statewide interoperable communications.

As discussed in Section 3.4.1, the SWIC/Director of OIEC oversees three (3) Regional Taskforces. The Task Forces work concurrently with the OIEC to provide the necessary input for scheduling of meetings, training, and technical exercises.

The SWIC/Director of OIEC serves as Chairperson of the SIEC during their semiannual scheduled meetings. The SWIC reserves the right to schedule additional meetings throughout the calendar year as deemed necessary. These meetings will be coordinated and scheduled by the OIEC. Representatives from the SIEC will be requested to participate in the Regional Task Force meetings as well as international meetings with Canada. Further, representatives from the SIEC are encouraged to attend all national interest group meetings.

10.4.2.1 Meeting Logistics Summary

As discussed in Section 3.4.3, the SWIC/Director of the OIEC shall coordinate and schedule semiannual meetings of the Regional Task Forces in each of the three (3) regions. The meetings will be conducted separately within each region to minimize travel time and costs for all participants. In its oversight role, the SIEC shall meet as a full body semiannually to coordinate any outstanding activities among the three (3) Taskforce Regions.

At these meetings, there will be a review of the SCIP to determine the progress of interoperability initiatives set forth in the Plan as well as any special programs started within each of the Regional Areas. Each Regional Taskforce Manager will assist the OIEC by working with the counties and other local government entities who conduct interoperability exercises and/or training in their area. Documentation will be generated, disseminated, and archived on the status, progress, and outcomes of all activities undertaken.

As discussed in Section 3.4.3.3, Focus Group Meetings ensure alignment with national and international interoperable public safety communications initiatives, representatives from the OIEC, SIGB, SIEC, and Regional Task Forces shall regularly participate in application area focus



group meetings. The Director of OIEC is charged with coordinating the activities among these bodies and scheduling meetings as necessary.

National interest group meetings (e.g., NPSTC, APCO, etc.) occur in accordance with established schedules and therefore do not require scheduling by the Director of OIEC. Preplanned meetings with the State of New York or neighboring RPCs may be coordinated around the scheduled national interest group meetings and/or conferences.

10.4.3 Stakeholder Communications

As discussed in Section 3.1, the Office of Interoperable and Emergency Communications is responsible for conducting interoperable public safety communications outreach activities with the State, county, local, tribal-nation, NGO, federal, and military communities. In efforts to continually identify new stakeholders, adapt to the changing needs of existing stakeholders, and to obtain support for interoperable communications initiatives beyond 2012, the OIEC will prepare and distribute a quarterly newsletter. The newsletter will provide information on:

- The status of public safety interoperable communications initiatives underway;
- The outcomes and lessons learned from completed (implemented) projects;
- The results from training and exercise programs;
- Regional Task Force activities and findings;
- Information on future programs;
- Interoperable communications funding opportunities;
- Upcoming events; and
- Other pertinent information.

The newsletter will be published in hard-copy and electronic format, downloadable from the State of New York SCIP Website¹⁴ and from the DHSes Website¹⁵. Additionally, input from the public safety and public service communities will be electronically solicited via the Websites.

10.5 Continuous Improvement Plan

In order to ensure that the products and services implemented under the State's public safety interoperable communications program remain properly aligned with the changing needs, operational and technical requirements, and expectations of the public safety and public service communities, the OIEC, SIEC, and Regional Task Forces will engage in continuous "environment scanning."

Industry best practices, advances in technology, economic considerations, and regulatory developments impact on public safety interoperable communications across the Interoperability Continuum. By continuously scanning the environment, the State of New York Interoperability Leadership Team will remain well informed and able to communicate information to stakeholders at the State, county, local, tribal-nation, and NGO communities in a timely manner.

¹⁴ <http://www.dhSES.ny.gov/oiec/interoperability-plans>

¹⁵ <http://www.dhSES.ny.gov/>



State Communications Interoperability Plan

Input will be solicited from the public safety and public service communities via Regional Task Force meetings and FCC RPC meetings held regularly throughout the State. The OIEC and SIEC will be responsible for documenting, evaluating, and recommending changes to projects underway and for proposing new initiatives to the Statewide Interoperability Governance Board.



State Communications Interoperability Plan



This page intentionally left blank.



Appendices



Appendix A, Links Cited in SCIP

Links Cited in the SCIP & Additional References
New York State SCIP on-line: http://www.dhSES.ny.gov/oiec/interoperability-plans/
List of Emergency Medical Service agencies in New York State: http://www.health.ny.gov/nysdoh/ems/counties/map.htm
List of County Fire Coordinators in New York State: http://www.dhSES.ny.gov/ofpc/#1
Public Safety Clearinghouse: http://publicsafety.fcc.gov/pshs/clearinghouse/index.htm
NYS Standard Multi-Hazard Mitigation Plan: http://www.dhSES.ny.gov/oem
Cross Border Contingency Plan: http://www2.cdc.gov/phlp/docs/Erie_NiagaraCBP.pdf
Civil Emergency Cooperation Agreement between the United States and Canada: http://www.pnwbha.org/wp-content/uploads/2010/04/CA-US-Agreement-a-on-Cooperation-in-Comprehensive-Civil-Emergency-Planning-and-Management.pdf
New York State Division of Homeland Security and Emergency Services: http://www.dhSES.ny.gov
List of Cities and Towns in New York State: http://www.nysl.nysed.gov/genealogy/townlist.htm
New York State Law Enforcement Agencies: http://criminaljustice.ny.gov
Detailed List of Critical Infrastructure and Key Resources: http://www.dhSES.ny.gov/ocs
National Infrastructure Protection Plan: http://www.dhs.gov/xlibrary/assets/NIPP_Plan.pdf
Presidential Disasters and Declarations: http://www.fema.gov/news/disasters.fema
New York State FCC Regional Planning Committees (RPCs): http://www.dhSES.ny.gov/oiec/committees
New York State Comprehensive Emergency Management Plan: http://www.dhSES.ny.gov/oem/planning/documents/Planning-Guide.pdf
Public Safety and Homeland Security Bureau: http://publicsafety.fcc.gov/pshs/public-safety-spectrum/index.htm
SAFECOM P25 Program website: http://www.safecomprogram.gov/currentprojects/project25cap/Default.aspx
Supplier's Declaration of Compliance: http://www.rkb.us
National Emergency Communications Plan: http://www.dhs.gov/xlibrary/assets/national_emergency_communications_plan.pdf
APCO Standard Channel Nomenclature for the Public Safety Interoperability Channels: http://www.apco911.org/new/commcenter911/documents/APCO-NPSTC-ANS1-104-1web.pdf



State Communications Interoperability Plan



Links Cited in the SCIP & Additional References

SAFECOM Plain Language Guide:

<http://www.safecomprogram.gov/SiteCollectionDocuments/PlainLanguageGuide.pdf>



State Communications Interoperability Plan



Appendix B, NYS Executive Order 26

Executive Order-No. 26.1: Incorporating the National Incident Management System as the Management System for Emergency Response

WHEREAS, on occasion disasters occur that threaten the public health, safety and lives of the citizens of the State;

WHEREAS, it is necessary and desirable to ensure that all State and local emergency agencies and personnel coordinate their efforts to efficiently provide emergency relief and disaster recovery aid;

WHEREAS, to facilitate efficient and effective assistance to those impacted, it is important that all State and local emergency response agencies and personnel utilize common terminology, integrated communications, consolidated action plans, unified command, modular organization, manageable span of control, comprehensive resource management and designated incident facilities during emergencies or disasters;

WHEREAS, Homeland Security Presidential Directive-5 directs the development and implementation of the National Incident Management System ("NIMS"), which sets forth standardized procedures for managing personnel, communications, facilities and resources and is designed to provide a consistent nationwide approach for federal, state, territorial, tribal and local governments to work effectively and efficiently together to prepare for, prevent, respond to, and recover from domestic incidents regardless of cause, size or complexity;

WHEREAS, Homeland Security Presidential Directive-5 directs that federal departments and agencies make the adoption of NIMS a requirement, to the extent permitted by law, for providing federal preparedness assistance through grants, contracts or other activities;

WHEREAS, the Occupational Safety and Health Administration requires the establishment of a site-specific Incident Management System to handle emergency responses;

WHEREAS, the State Emergency Response Commission endorses a standardized Incident Management System;

NOW, THEREFORE, I, GEORGE E. PATAKI, Governor of the State of New York, by virtue of the authority vested in me by the Constitution and the Laws of the State of New York, do hereby establish the National Incident Management System as the State standard command and control system during emergency operations.

Executive Order Number 26, dated March 5, 1995, is superseded by this Executive Order.

Signed: George E. Pataki
Dated: September 28, 2006



State Communications Interoperability Plan

Executive Order -No. 26: Establishing a Management System for Emergency Response.

WHEREAS, on occasion disasters occur that threaten the public health, safety and lives of the citizens of the State;

WHEREAS, it is necessary and desirable to ensure that all State and local emergency agencies and personnel coordinate their efforts to efficiently provide emergency relief and disaster recovery aid;

WHEREAS, to facilitate efficient and effective assistance to those impacted it is important that all State and local emergency response agencies and personnel utilize common terminology, integrated communications, consolidated action plans, unified command, modular organization, manageable span of control, comprehensive resource management and designated incident facilities during emergencies or disasters;

WHEREAS, the Incident Command System, as developed by the National Interagency Incident Management System, sets forth standardized procedures for managing personnel, communications, facilities and resources;

WHEREAS, the Incident Command System procedures are used by the Federal Emergency Management Agency, National Fire Academy, National Fire Protection Association, National Wildfire Coordinating Group, and other states;

WHEREAS, the Incident Command System is an integral part of various emergency management training programs currently taught throughout the State;

WHEREAS, the Occupational Safety and Health Administration requires the establishment of a site-specific Incident Command System to handle emergency responses; and

WHEREAS, the Disaster Preparedness Commission Task Force on Command and Control and the State Emergency Response Commission endorse the establishment of a standardized Incident Command System;

NOW, THEREFORE, I, GEORGE E. PATAKI, Governor of the State of New York, by virtue of the authority vested in me by the Constitution and Laws of the State of New York, do hereby establish the National Interagency Incident Management System -- Incident Command System as the State standard command and control system during emergency operations.

Signed: George E. Pataki

Dated: March 5, 1996



State Communications Interoperability Plan



Appendix C, Governance Charter



Statewide Communications Interoperability Plan



Governance Charter

OVERVIEW & BACKGROUND

With its Federal partners, SAFECOM and Disaster Management (DM) provides research, development, testing and evaluation, guidance, tools, and templates on communications-related issues to local, tribal, state, and Federal emergency response agencies. As communication programs of the Department of Homeland Security's Office for Interoperability and Compatibility (OIC), SAFECOM and DM are managed by the Science and Technology Directorate.

SAFECOM developed the Interoperability Continuum in accordance with its locally driven philosophy and its practical experience in working with communities across the Nation. The Continuum visually depicts the core facets of interoperability according to the stated needs and challenges of the public safety community and aids the efforts of public safety practitioners and policy makers to improve interoperability.

One of the Office for Interoperability & Compatibility's goals is to provide the public safety community with tools to improve all aspects of the Continuum. This tool focuses on the Governance element of the Continuum, specifically to help communities that are interested in creating a charter document for their multi-agency Interoperability Board.



The SAFECOM Interoperability Continuum

A charter document describes the reason the group exists and establishes the ground rules of operation. It provides clarity and aligns a diverse group with a common purpose. When creating a charter, the group must agree upon key issues that determine how the group best achieves its desired outcomes.



State Communications Interoperability Plan

Charter Issues include:

- Purpose
- Authority
- Outcomes or Deliverables
- Scope of Project
- Operating Principles
- Membership
- Decision Making

INTRODUCTION

One of the most critical aspects to a successful multi-agency effort is a charter set of guidelines and principles for stakeholders to follow as they come together and work to tackle challenges outside the realm of their agency, discipline, or jurisdiction. Certain norms and principles must be in place to transform a new Board into a highly effective team with common goals. There must be clarity of purpose, leadership, established roles and responsibilities, and a strong foundation for making decisions.

The State's Communications Interoperability Board's Governance Body, hereafter the Board, is committed to cooperatively addressing the challenge of communications interoperability. This document describes the purpose, authority, outcomes, scope, operating principles, membership, and management by which the Board will achieve success.

PURPOSE

The Board exists to establish partnerships and to address the challenges facing interdisciplinary communications across multiple jurisdictions. The Board's purpose is to create a centralized interoperable communications planning and implementation capacity for the State of New York. Their goals are:

- Creating Statewide seamless Interoperability among agencies
- Provide guidance to municipalities throughout the State
- Make available the most effective use and allotment of resources to First Responders

It is necessary for public safety organizations to communicate or share critical voice or data information with other jurisdictions in day-to-day operations, natural disasters, emergency response scenarios, and terrorist incidents. Failure to accomplish the mission in each situation can result in the loss of lives and property. The Board exists to establish a partnership among state, local, federal & tribal first responders in order to enhance communications interoperability capabilities. The Board provides a forum for each agency to discuss related public safety communications initiatives that may or may not impact the work of this Board. The Board will help ensure individual projects have an opportunity to align with the regional plan.



State Communications Interoperability Plan



AUTHORITY

New York State has designated the existing Statewide Wireless Network (SWN) Advisory Council as the permanent SCIP Governance Board. State Technology Law Sections 401 and 402, originating from the 2004 Legislative session, created the Statewide Wireless Network Advisory Council consisting of 27 members and 14 ex-officio members. Presently this Council is in the process of adding two additional new representatives; one ex-officio Director of Military and Naval Affairs and one additional appointee of the Governor, increasing the total Council membership to be 29 members.

To administer the planning and development of the SCIP, the State of New York appointed an Interim Governance Board. The Interim Governance Board is composed of members from the emergency service, EMS, fire service, law enforcement, and Tribal Nation communities. This Board was established to make recommendations to help direct the use of PSIC Grant funds earmarked for capital improvements and operational upgrades to improve statewide public safety communications and interoperability.

The SWN Advisory Council will be assuming the responsibilities of the Interim Governance Board and assign the existing members of the Interim Governance Board to function as a working group under the Council. They will be entitled the State Interoperability Executive Committee (SIEC) and will review all funding proposals, determine compliance with the SCIP, and score the compliant proposals and forward those to the Advisory Council Chairperson. The activities now carried out by the Interim Governance Board will be transitioned to the expanded SWN Advisory Council/SCIP Governance Board. These activities include developing and implementing the SCIP and reviewing and appraising all IJs for the PSIC Grant Program. Additionally, the Board will be responsible for reviewing and appraising proposals for future public safety interoperable communications grant subsidies.

Outcomes

The desired outcomes that the Board may accomplish are listed below:

1. Conduct an assessment to better understand the current baseline of communications interoperability in the State.
2. Task a working group to identify and recommend future technologies that will enhance the communications interoperability capability in the State.
3. With the assistance of the State's Interoperability Coordinator (IC) create a state-wide Communications Interoperability Strategy and Spending Plan.
4. With the assistance of the State's IC manage the implementation of the Communications Interoperability Plan.



State Communications Interoperability Plan

5. Create statewide best practices, policies, procedures, and protocols for communications interoperability and incorporate them into existing regional interoperability agreements.
6. Ensure the training of key communications personnel—especially dispatchers and dispatch center supervisors as well as technical communications support staff in accordance with federal mandates. [i.e.: Communications Unit Leader (COML) requirements]
7. Ensure training opportunities around communications interoperability are available to all necessary and authorized public safety practitioners.
8. Promote education of Interoperable communications to elected officials.

Scope

1. Government <ul style="list-style-type: none"> • Federal • State • Multi-Region • Region • Jurisdiction 	2. Discipline <ul style="list-style-type: none"> • Fire Service • Law Enforcement • Emerg. Medical Services (EM S) • Emergency Management • Public Health • Health Care • 911 PSAP Centers 	3. Level <ul style="list-style-type: none"> • Executive • Emerg. Operations Center • Dispatch/Comm Centers • Command Post • Tactical (Field)
4. Function <ul style="list-style-type: none"> • Equipment & Technology • Utilization & Operations 	5. Type <ul style="list-style-type: none"> • Data • Voice • Images/Imaging 	6. Usage <ul style="list-style-type: none"> • Day-to-Day (routine within a jurisdiction) • Day-to-Day (routine inter- jurisdiction mutual-aid) • Critical Incident • Planned Event

1. Government

The Board will:

- Work toward identifying initiatives that improve statewide public safety communications interoperability while understanding that there is the possibility that a statewide and/or regional initiative could improve the statewide response.



State Communications Interoperability Plan

- Work with Federal, State, Tribal and Local agencies to prevent duplication of effort. This includes coordination of procurement decisions.
- Address regional organizations that are not directly funded by Department of Homeland Security grants, and identify ways to coordinate activities through sharing of resources or technologies.
- Use its relationship with the State's Interoperability Coordinator to educate public officials to increase awareness and ensure the success of communications interoperability initiatives.

2. Inclusion

The Board will focus on 1st Responders and incorporate additional disciplines in future phases.

3. Level

The Board will initially focus on Tactical and Command Post communications and incorporate additional levels in future phases.

4. Function

The Board will address the technology components of communications interoperability relative to equipment procurement and maintenance.

5. Communications Type

The Board will address voice and data interoperable communications with consideration for open architecture for data that supports a standard.

6. Usage

The Board will address four distinct levels of interoperability:

- Day-to-Day – Routine within a jurisdiction (interdisciplinary)
- Day-to-Day – Routine inter-jurisdictional (mutual aid)
- Unplanned Critical Incident (interdisciplinary/inter-jurisdictional)
- Planned Major Event (interdisciplinary/inter-jurisdictional)

Operating Principles

- Consider each region's unique needs—recognize and respect them, and try to deal with them if they negatively impact statewide communications interoperability capabilities.
- Think interdisciplinary.
- Use a phased approach. Do not attempt to solve all the problems at once.



State Communications Interoperability Plan

- Ensure all strategic initiatives fit within the desired future goals and strategy.
- Identify matters within the Board's control, and apply resources toward those matters rather than areas that are not within the Board's control.
- Coordinate a State strategy with the other State interoperability strategies.
- Identify a balance between infrastructure and subscriber unit needs.
- Distribute the responsibility of managing communications interoperability so that it does not rest on any one individual, agency, or technology.
- Stay aligned with other State systems where possible.
- Avoid acronyms and codes to eliminate confusion or misunderstanding.
- Speak with one voice when reporting externally.
- Keep the issue of Interoperable communications before elected officials
- Though both voice and data interoperability is within the scope of the Board, work toward achieving voice interoperability solutions across disparate systems in the short term (2-3 years out).
- Consider security concerns during the planning of future communications solutions.
- Further the education of Interoperable Communications for Stakeholders and elected officials.

Membership

The following disciplines will be represented on this Board:

- Law Enforcement
 - Fire Service
 - Emergency Medical Services
 - Emergency Management
 - 9-1-1 PSAP
-
- Regional Planning Committee Jurisdictions (Regions 8, 30, 55) as designated by the Federal Communications Commission (FCC) will be represented on this Board
 - Voting members are to be responsible for representing their region. If a voting member is unable to attend a Board meeting, an alternate voting member from that region may be appointed for that meeting. The voting member must notify the Board chair prior to the meeting that an alternate has been designated to represent him/her at the meeting. Without such prior notification, the alternate will not count when determining if a quorum has been established or be allowed to participate in votes during the meeting.
 - Advisory members are part of the Board by virtue of their position and ensure that all disciplines are represented in the Board. These members are required to attend all Board meetings and provide feedback to the voting members for decision-making purposes. However, they will not vote. Additionally, a number of regional and state agencies provide advisory members to



State Communications Interoperability Plan

represent the views of their organization and provide coordination for implementing aspects of the statewide communications interoperability plan.

- The Board may add ad hoc members as necessary. These members may come from local (including surrounding jurisdictions), regional, state, tribal, or Federal public safety agencies or planning organizations. They may sit on the Board on a temporary basis as needed.

Decision Making

Board Decision Making Process

- Each appointed Board member will have one vote. If the official voting member is not available to vote, that member's alternate may then cast a vote in his/her absence.
- Simple majority rules. All recommendations approved by a simple majority will be considered a decision or recommendation of the Board when presented to the State Office of Homeland Security for consideration. As much as possible, the majority opinion will be reflected. Board members are free to express to their own agency how they voted/stood on the position.
- A simple majority vote is required for charter amendments.
- Quorum will be met when twenty-one (21) of the voting members (or their designated alternates) are present. If a sufficient quorum is not achieved, votes will be tabled.
- The Communications Interoperability Plan will be developed independent of this charter.

[Rev. V; Nov. 27, 2007]



State Communications Interoperability Plan

Appendix D, New York State Project 25 (P25) Numbering Standard

Created: November 24, 2010

Revised:

Purpose

Each terminal device is required to have a unique user ID number so that the radio may be authenticated to a P25 trunked system, or identified in a conventional system.

Each P25 system utilized in New York State shall utilize a standard plan for the network numbering parameters, such as the WACN.

New York State, through the Office of Interoperable and Emergency Communications, has determined that a standardized numbering plan for Project 25 users and systems will provide improved interoperability and reduce the possibility of duplicate identifiers within the State.

Scope

This guideline applies to all P25 systems and users in New York State. For non-P25 systems, it should be followed as closely as possible.

Guideline

The center three digits categorize similar types of response or service. These codes will be assigned in accordance with this policy to specific entities. The last four digits of the code, the end user identifier, will be assigned by the user agency at their discretion. Any entity that is not listed, or is unsure which category should be utilized, shall contact the New York State Office of Interoperable and Emergency Communications for assistance.



State Communications Interoperability Plan



PROJECT 25 USER IDENTIFIER

Entity Code (First 3 digits of code):

The Entity code categorizes the type of system user. The code consists of 3 digits per below series of charts:

[Code 001 to 062](#) shall identify terminals operating under specific County governance.

[Code 101 to 162](#) is reserved for future county growth.

[Code 200 and 300](#) series shall identify Law Enforcement.

[Code 400 and 500](#) series shall identify Fire and Hazardous Materials.

[Code 600](#) series shall identify EMS providers.

[Code 700](#) series shall identify Transportation and Public Works providers.

[Code 800](#) series shall identify specific NYS Agencies and Authorities.

[Code 900](#) series shall be held in reserve as spares.

Entity Code Categories – 000 to 099

000 Series shall identify (**Counties**):

ID	County Name	ID	County Name
001	Albany	032	Niagara
002	Allegany	033	Oneida
003	Bronx	034	Onondaga
004	Broome	035	Ontario
005	Cattaraugus	036	Orange
006	Cayuga	037	Orleans
007	Chautauqua	038	Oswego
008	Chemung	039	Otsego
009	Chenango	040	Putnam
010	Clinton	041	Queens
011	Columbia	042	Rensselaer
012	Cortland	043	Richmond
013	Delaware	044	Rockland
014	Dutchess	045	St. Lawrence
015	Erie	046	Saratoga
016	Essex	047	Schenectady
017	Franklin	048	Schoharie
018	Fulton	049	Schuyler
019	Genesee	050	Seneca
020	Greene	051	Steuben
021	Hamilton	052	Suffolk
022	Herkimer	053	Sullivan
023	Jefferson	054	Tioga
024	Kings	055	Tompkins
025	Lewis	056	Ulster
026	Livingston	057	Warren
027	Madison	058	Washington
028	Monroe	059	Wayne
029	Montgomery	060	Westchester



State Communications Interoperability Plan

030 Nassau 061 Wyoming
031 New York 062 Yates

Entity Code Categories – 100 to 199

100 Series shall be reserved for (**County Expansion**):

ID	County Name	ID	County Name
101	Albany	132	Niagara
102	Allegany	133	Oneida
103	Bronx	134	Onondaga
104	Broome	135	Ontario
105	Cattaraugus	136	Orange
106	Cayuga	137	Orleans
107	Chautauqua	138	Oswego
108	Chemung	139	Otsego
109	Chenango	140	Putnam
110	Clinton	141	Queens
111	Columbia	142	Rensselaer
112	Cortland	143	Richmond
113	Delaware	144	Rockland
114	Dutchess	145	St. Lawrence
115	Erie	146	Saratoga
116	Essex	147	Schenectady
117	Franklin	148	Schoharie
118	Fulton	149	Schuyler
119	Genesee	150	Seneca
120	Greene	151	Steuben
121	Hamilton	152	Suffolk
122	Herkimer	153	Sullivan
123	Jefferson	154	Tioga
124	Kings	155	Tompkins
125	Lewis	156	Ulster
126	Livingston	157	Warren
127	Madison	158	Washington
128	Monroe	159	Wayne
129	Montgomery	160	Westchester
130	Nassau	161	Wyoming
131	New York	162	Yates



State Communications Interoperability Plan

Entity Code Categories – 200 to 999

200 series shall identify types of **Law Enforcement**

- 200 to 209 Federal (e.g. Customs and Border, ATF, Marshals)
- 210 to 219 Federal (210 – Tribal; SPARE)
- 220 to 229 Statewide
- 230 to 239 Statewide Coordination (e.g. State Communication Vehicles)
- 240 to 249 Statewide (NYSP)
- 250 to 259 Statewide (SPARE)
- 260 to 269 Statewide (260, 261-Park Police; 265, 266 - DEC ECO; 267, 268 - DEC Rangers)
- 270 to 279 Statewide (270-272 - State University Police)
- 280 to 289 Statewide (280-282 - MTA Police; 285 – NYSDOH BNE)
- 290 to 299 Statewide (SPARE)

300 series shall identify types of **Law Enforcement**

- 300 to 309 Regional (Ports, Tunnels & Bridge Police)
- 310 to 319 Regional (SPARE)
- 320 to 329 State (NYS DOCS)
- 330 to 339 Regional (SPARE)
- 340 to 349 County, not otherwise part of 000-199 (Sheriff, Jail, Tribal)
- 350 to 359 County, not otherwise part of 000-199 (SPARE)
- 360 to 369 City, not otherwise part of 000-199 (City Police)
- 370 to 379 City, not otherwise part of 000-199 (SPARE)
- 380 to 389 Town, Village and Local, not otherwise part of 000-199 (Local Police)
- 390 to 399 Town, Village and Local, not otherwise part of 000-199 (Local Police)

400 series shall identify types of **Fire Service / Haz-Mat**

- 400 to 409 Federal Fire/Haz Mat Agencies (ATF, FEMA, W'vliet Arsenal, Bases)
- 410 to 419 Federal Fire/Haz Mat Agency (410 – Tribal; SPARE)
- 420 to 429 Statewide (Office of Fire Prevention and Control)
- 430 to 439 Statewide (Spare)
- 440 to 449 Regional
- 450 to 459 Regional (SPARE)
- 460 to 469 County, not otherwise part of 000-199
- 470 to 479 County, not otherwise part of 000-199 (SPARE)
- 480 to 489 City, not otherwise part of 000-199
- 490 to 499 City, not otherwise part of 000-199 (SPARE)



State Communications Interoperability Plan



500 series shall identify types of **Fire Service / Haz-Mat**

- 500 to 509 Town, Village and Local, not otherwise part of 000-199
- 510 to 519 Town, Village and Local, not otherwise part of 000-199 (SPARE)
- 520 to 529 Town, Village and Local, not otherwise part of 000-199
- 530 to 539 Town, Village and Local, not otherwise part of 000-199 (SPARE)
- 540 to 549 (SPARE)
- 550 to 559 (SPARE)
- 560 to 569 (SPARE)
- 570 to 579 (SPARE)
- 580 to 589 (SPARE)
- 590 to 599 (SPARE)

600 series shall identify types of **Emergency Medical Services**

- 600 to 609 Federal (e.g. CDC)
- 610 to 619 Federal (610 – Tribal; SPARE)
- 620 to 629 State (NYS-DOH)
- 630 to 639 State (SPARE)
- 640 to 649 Regional (Hospitals, Medevac)
- 650 to 659 Regional (SPARE)
- 660 to 669 County, not otherwise part of 000-199 (County DOH)
- 670 to 679 County, not otherwise part of 000-199 (SPARE, Red Cross)
- 680 to 689 City, not otherwise part of 000-199 (City DOH)
- 690 to 699 City, not otherwise part of 000-199 (SPARE)

700 series shall identify types of Public **Transportation and Public Works**

- 700 to 709 Federal (FEMA, NTSB)
- 710 to 719 State (NYS DOT)
- 720 to 729 State (NYS Thruway Authority)
- 730 to 739 Regional Public Transportation (MTA, Amtrak, CSX Conrail)
- 740 to 749 Regional Public Transportation (SPARE)
- 750 to 759 (SPARE)
- 760 to 769 Local Public Transportation, not otherwise part of 000-199
- 770 to 779 Public Utilities (e.g. NYSEG, National Grid, ConEd)
- 780 to 789 (SPARE)
- 7900 to 799 (SPARE)



State Communications Interoperability Plan

800 series shall identify types of **State Agencies and Authorities**

Note: Specific Units/Divisions within an agency/authority may fit in an above response service category (e.g. law enforcement). The agency is encouraged to place those users in the appropriate category to facilitate service identification.

800	Reserved
801	Spare
802	Spare
803	Adirondack Park Agency
804	Aging, Office for the
805	Agriculture and Markets, Department of
806	Alcoholism & Substance Abuse Services, Office of
807	Assembly, New York State
808	Attorney General, Office of the
809	Banking, Department of
810	Board of Elections
811	Board of Regents
812	Bridge Authority, State
813	Budget, Division of the
814	Buffalo and Fort Erie Public Bridge Authority
815	Canal System, State
816	Children and Family Services, Office of
817	City University of New York
818	Civil Service, Department of
819	Commission on Public Integrity, New York State
820	Comptroller, Office of State
821	Consumer Protection Board
822	Correctional Services, Department of
823	Counter Terrorism, Office of (DHSES)
824	Court Administration, Office of
825	Criminal Justice Services, Division of
826	Spare
827	Spare
828	Dormitory Authority
829	Education, Department of
830	Emergency Management, Office of (DHSES)
831	Empire State Development
832	Employee Assistance Program
833	Energy Research and Development Authority
834	Environmental Conservation, (non-Law Enforcement, non-Ranger) Department of
835	Environmental Facilities Corporation



State Communications Interoperability Plan

- 836** Fire Prevention and Control, Office of (DHSES) (Other than 400 series)
- 837** General Services, Office of
- 838** Governor, Office of the
- 839** Governor's Office of Employee Relations
- 840** Governor's Traffic Safety Committee
- 841** Higher Education Services Corporation
- 842** Homeland Security and Emergency Services, Division of
- 843** Housing and Community Renewal, Division of
- 844** Human Rights, Division of
- 845** Spare
- 846** Spare
- 847** Inspector General, Office of the
- 848** Insurance Fund, New York State
- 849** Insurance, Department of
- 850** Interoperable and Emergency Communications, Office of (DHSES)
- 851** Labor, Department of
- 852** Lieutenant Governor, Office of the
- 853** Liquor Authority
- 854** Lottery, New York State
- 855** Mental Health, Office of
- 856** Metropolitan Transportation Authority (non-Law, non-Transportation Operations)
- 857** Military and Naval Affairs, Division of
- 858** Motor Vehicles, Department of
- 859** Ogdensburg Bridge and Port Authority
- 860** Spare
- 861** Spare
- 862** Parks, Recreation and Historic Preservation (Operations), Office of
- 863** Parole, Division of
- 864** People with Developmental Disabilities, Office for
- 865** Port Authority of New York and New Jersey
- 866** Port of Oswego Authority
- 867** Power Authority
- 868** Prevention of Domestic Violence, Office for
- 869** Probation and Correctional Alternatives, Division of
- 870** Public Employment Relations Board
- 871** Public Service Commission
- 872** Racing and Wagering Board
- 873** Real Property Services, Office of
- 874** Roosevelt Island Operating Corporation of the State of New York
- 875** Senate, New York State
- 876** Science, Technology & Academic Research, Office of
- 877** State Police, Division of (other than 200 series Law Enforcement)



State Communications Interoperability Plan

- 878** State University of New York (Central Administration)
- 879** State, Department of
- 880** Tax Appeals, Division of
- 881** Taxation and Finance, Department of
- 882** Technology, Office for
- 883** Temporary and Disability Assistance, Office of
- 884** Thruway Authority
- 885** Transportation, Department of
- 886** Tri borough Bridge and Tunnel Authority
- 887** Waterfront Commission
- 888** Veterans' Affairs, Division of
- 889** Workers' Compensation Board
- 890** Spare
- 891** Spare
- 892** Spare
- 893** Spare
- 894** Spare
- 895** Spare
- 896** Spare
- 897** Spare
- 898** Spare
- 899** Spare

900 Series shall be **(SPARES)**:

- 900 Reserved
- 902 Reserved
- 999 Reserved



State Communications Interoperability Plan

The End User Identifier Code (last 4 digits of identifier):

The last 4 digits are the end user identifier code, which identifies the specific end user device. Individual agencies/counties may assign these at their discretion. A suggested plan is below.

0000 Reserved

0001 to 1999 series shall identify types of **Misc. Users** not identified below

2000 to 2999 series shall identify types of **Law Enforcement**

3000 to 3999 series shall identify types of **Law Enforcement**

4000 to 4999 series shall identify types of **Fire Service / Haz-Mat**

5000 to 5999 series shall identify types of **Fire Service / Haz-Mat**

6000 to 6999 series shall identify types of **Emergency Medical Services**

7000 to 7999 series shall identify types of **Public Works**

8000 to 8999 series shall identify types of **Public Transportation**

9000 to 9999 series **Reserved**

PROJECT 25 NETWORK IDENTIFIERS

The State of New York is evaluating standardized numbering for system network identifying parameters. Input is requested.



State Communications Interoperability Plan

Appendix E, Guidelines for Licensing and Use of Interoperability and State Plan Channels

Created: November 24, 2010

Revised:

Purpose

Designated interoperability channels are available for use by agencies throughout New York State. Some channels are nationally designated for interoperable communications at an incident, others are state plan channels designated for various purposes.

Scope

This guideline applies to eligible public safety and public service entities in New York State, including those who operate in New York State during an incident.

Guideline

National Interoperability Channels¹⁶

Definition

The National Interoperability Channels are those channels so designated by the Federal Communications Commission (FCC) for interoperable communications. This includes channels known as channels VCALL10-VTAC14, UCALL40-UCALL43 (see FCC Order 00-348, released 10/10/2000), 8CALL90-8TAC94, as well as all 700 MHz interoperability channels designated in 47CFR90.531(b)(1).

Eligibility¹⁷

Eligibility for use of these channels is under the authority of the FCC. Entities eligible for licensing under 47CFR 90.20 (Public Safety Pool) are also eligible to utilize the VHF, UHF and 800 MHz channels. For more details, refer to the FCC Rules and FCC Order 00-348, released 10/10/2000. The 700 MHz channels are addressed by 47CFR 90.525; entities holding a Part 90 license and eligible for licensing under 47CFR 90.523 are eligible to use the 700 MHz interoperability channels. Federal users should contact the National Telecommunications and Information Administration for more information.

¹⁶ National Interoperability Channels refer to those channels designated by the FCC for this purpose. Other sources, such as the NIFOG book, may utilize more general language that identifies additional channels, including some identified here as State Plan Channels.

¹⁷ All eligibility and licensing information provided in this document is only a summary. For specific rules and regulations, refer to the FCC Rules, 47CFR Part 90. No part of the document replaces or supersedes any FCC requirement. Federal users should contact the NTIA for more information on use of frequencies not allocated to Federal use.



State Communications Interoperability Plan

Licensing

Eligible entities may utilize the National Interoperability Channels VCALL10-VTAC14, UCALL40-UCALL43, 8CALL90-8TAC94 in mobile and portable radios without additional licensing (see FCC 00-348, released 10/10/2000). For the 700 MHz National Interoperability Channels, entities holding a Part 90 license and eligible for licensing under 47CFR 90.523 are eligible to use the 700 MHz interoperability channels. However, in all cases, be advised that certain international treaty restrictions may still apply.

Base station (infrastructure) use of the National Interoperability Channels requires an FCC license. For base station license applications in VHF and UHF, the State requests that all potential applicants first coordinate their use with OIEC prior to applying to the FCC for a license. In 800 MHz, applicants should contact their Regional Planning Committee (RPC) for more information. In 700 MHz, the FCC requires the State to administer those channels and approve applications. No application for 700 MHz National Interoperability Channels may be sent to coordination or the FCC without approval of OIEC (see 47CFR 90.525(b)).

Programming

Mobiles/Portables: Narrowband FM (12.5 kHz) for analog channels or C4FM (P25) for digital channels. Time out timer shall be set to 3 minutes MAXIMUM. Radios must use a 156.7 Hz transmit CTCSS on all analog channels; P25 channels use NAC \$293. Receive programming should be carrier squelch unless CTCSS (156.7 Hz) is required due to local conditions.

Base Stations: Narrowband FM (12.5 kHz) for analog channels or C4FM (P25) for digital channels. Tone: Use 156.7 Hz transmit CTCSS on all analog channels; NAC \$293 for digital channels. Receivers must decode and pass audio for 156.7 Hz or NAC \$293. Additional CTCSS tones or NACs for specialty functions will be considered by OIEC with appropriate justification. Repeater enable/disable control MUST be available at a control point 24 hours a day, 7 days a week. Unmonitored and/or uncontrolled repeaters are strictly **prohibited** in New York State. The repeater "normal state" (repeat on or repeat off) will be determined in accordance with local need.

Channel names should adhere, whenever possible, to the ANSI/APCO Channel Naming Standard: APCO/NPSTC ANS 1.104.1-2010, "Standard Channel Nomenclature for Public Safety Interoperability Channels".¹⁸

Use

The National Interoperability Channels must be programmed in to all capable and eligible subscriber equipment, in accordance with NECP Objective #3.¹⁹ An ideal time for existing equipment to implement this change is during narrowbanding, rebanding, or other subscriber unit changes. All newly deployed equipment should have these channels implemented during initial programming. A best effort should be made for radios with limited memory capacity.

To ensure interoperability among all responders in New York, as well as outside resources, the VHF, UHF and 800 MHz National Interoperability Channels must be used in analog narrowband mode only. The 700 MHz National Interoperability Channels must be used in P25 mode, in accordance with the FCC Rules. At no time is encryption permitted on any calling channel.

¹⁸ <http://www.npstc.org/documents/APCO-NPSTC-ANS1-104-1web.pdf>

¹⁹ http://www.dhs.gov/xlibrary/assets/national_emergency_communications_plan.pdf



State Communications Interoperability Plan

New York State requires the use of plain language on all Interoperability Channels.²⁰

Agencies are reminded that these channels are available for multi-agency and/or multi-jurisdiction incidents, and **not** to replace or supplement an agency's regular operational channels. However, they should consider the full scope of public safety and public service groups which may be eligible for use of these channels when conducting pre-planning.

Dispatch centers and other control point are requested to maintain a watch on as many of the calling channels as possible.

Testing

Use of the interoperability channels in multiagency exercises is encouraged. This will permit users the opportunity to become familiar with their use. Testing of base stations and repeaters should be done on a frequent enough basis to ensure their operation, but without causing disruption to other users or stations that may maintain a watch.

New York State Plan Channels

Definition

New York State Plan Channels are those channels that are defined or commonly used, for operable and/or interoperable communications over large areas of New York State. These may also be utilized in other states for similar purposes, or they may be utilized for unrelated purposes. Not all channels may be utilized in all areas of New York State.

At this time OIEC is collecting and reviewing information on the various frequencies used in New York. Further information will be provided in a future update of this document.

Eligibility

As certain channels are set aside for specific reasons, each channel may have its own eligibility requirements. However, generally, the minimum eligibility is that the applicant/licensee is eligible under 47CFR90.20.

Licensing

All users of State Plan Channels are required to hold an FCC license for that channel. There is no "blanket licensing" available.

Programming

(Pending future release)

²⁰ http://www.safecomprogram.gov/SAFECOM/library/interoperabilitybasics/1617_plainlanguage.htm



State Communications Interoperability Plan

Use

(Pending future release)

Narrowbanding

As of the date of the release of this document, the majority of the users on these State Plan channels are operating in wideband mode. All users of the State Plan channels from 150 MHz – 512 MHz will need to narrowband their operations on those channels prior to January 1st, 2013²¹.

²¹ http://www.fcc.gov/pshs/docs/public-safety-spectrum/General_Information_on_VHF-UHF_Narrowbanding.pdf