



Homeland Security

**Tools Supporting
Communications Interoperability
Aligned to National Emergency Communications Plan
(NECP) Initiatives**

October 2009

Purpose of Tools

- SAFECOM tools and methodologies are guidance documents distributed to the emergency response community to assist in their efforts to improve communications interoperability.
- Tools and methodologies provide the emergency response community with best practices for improving interoperability in the areas of governance, standard operating procedures (SOPs), technology, training and exercises, and implementation of the Statewide Communication Interoperability Plans (SCIPs).

Template Suite and Reference Library

Purpose: The Formal Agreement and Standard Operating Procedure (SOP) Template Suite provides guidance and templates to expedite the construction of a Charter, Executive Order, Local to Local Memorandum of Understanding (MOU), State to Local MOU, System-to-System Console Patch SOP, Mobile Gateway Patch SOP, Shared Channel SOP, Shared System SOP, and Radio Cache SOP. The corresponding Reference Library is a collection of over 200 practitioner-submitted formal agreements and SOPs. The Library is available on the National Interoperability Information eXchange (NIIX) website at <http://www.niix.org>.

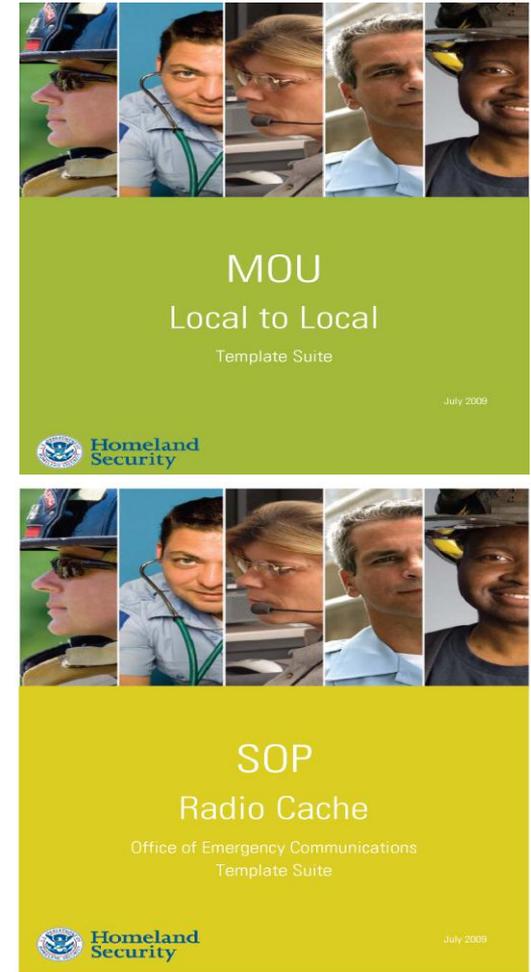
Intended Audience: Interoperable communications practitioners documenting the roles, responsibilities, standards, protocols, and/or procedures that will characterize their partnerships with other practitioners.

How to Use the Tool: The Template Suite and Reference Library are most beneficial when used in conjunction with one another. When customizing the templates contained in the Template Suite, practitioners are encouraged to also review the examples contained in the Reference Library.

SAFECOM Website Link:

<http://www.safecomprogram.gov/SAFECOM/tools/templatesuite>

Supports NECP Initiative: 1.1 and 3.3



Governance and SCIP Implementation

Purpose: This document demonstrates a methodology to implement SCIP strategic initiatives by leveraging a collaborative statewide governance system. The guide presents operations, roles, and responsibilities for various governing bodies charged with improving communications interoperability statewide.

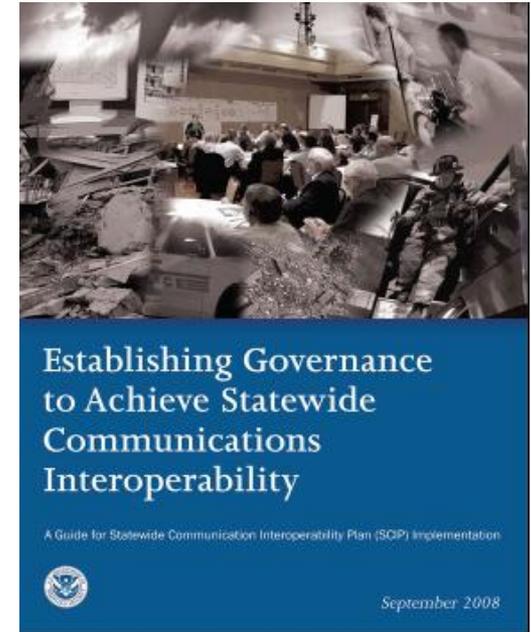
Intended Audience: All State and territory Statewide Interoperability Coordinators and Committees

How to Use the Tool: Without establishing a mandate, this national guide assists States with leveraging stakeholders for SCIP implementation by developing or refining their statewide governance methodologies and systems.

SAFECOM Website Link:

http://www.safecomprogram.gov/NR/rdonlyres/24F10648-2642-42F3-8305-B29315F833BF/0/GovernanceandSCIPImplementationGuide_FINAL_12_19_08.pdf

Supports NECP Initiative: 1.1



Communications-Specific Tabletop Exercise (TTX) Methodology

Purpose: The guide provides a detailed, step-by-step approach to effectively plan, conduct, and evaluate an interoperable communications-specific TTX. As a result of this methodology, exercises developed and executed will help localities identify interoperability capabilities and gaps within existing processes.

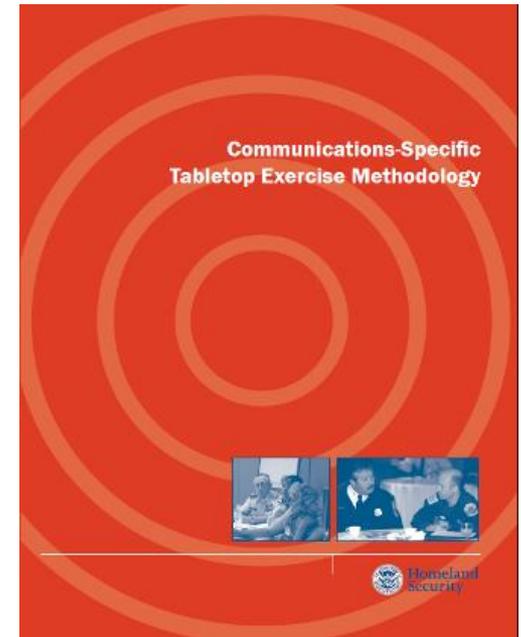
Intended Audience: Local and/or regional committees planning an interoperable communications-specific TTX.

How to Use the Tool: This tool should be used with the general principles for planning and conducting effective exercises put forth by the U.S. Department of Homeland Security (DHS) and should adhere to Homeland Security Exercise and Evaluation Program guidelines.

SAFECOM Website Link:

<http://www.safecomprogram.gov/NR/rdonlyres/C67306E9-3C28-4654-91A5-0CDFD6D3DE55/0/CommunicationsSpecificTabletopExerciseMethodology.pdf>

Supports NECP Initiative: 5.2



Improving Interoperability through Shared Channels – Version 2

Purpose: This document is intended to assist emergency response officials in understanding the level of effort, resources, and key actions needed to implement a shared channels solution.

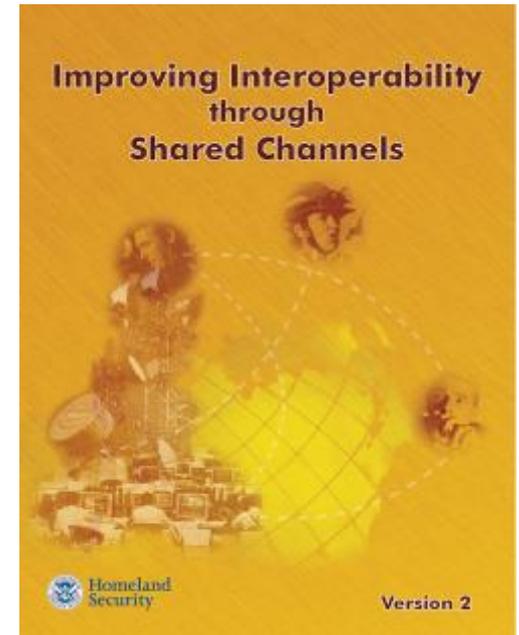
Intended Audience: Emergency response officials charged with improving interoperability within their agency.

How to Use the Tool: This guide should be used as a reference tool for emergency response officials when deciding which technology solution(s) should be used to improve interoperability in their agency.

SAFECOM Website Link:

<http://www.safecomprogram.gov/NR/rdonlyres/D5C8CE37-BF0B-4021-AF5B-892CFBA415A0/0/SharedChannelsVersion2.pdf>

Supports NECP Initiatives: 3.1 and 7.2



Plain Language Guide

Purpose: This brochure helps emergency responders transition from the use of 10-codes to plain language during radio communication. Furthermore, it demonstrates how plain language improves interoperability among agencies; explains the value in using plain language; and documents the effort, resources, and key actions required to implement plain language in a State, region, or agency.

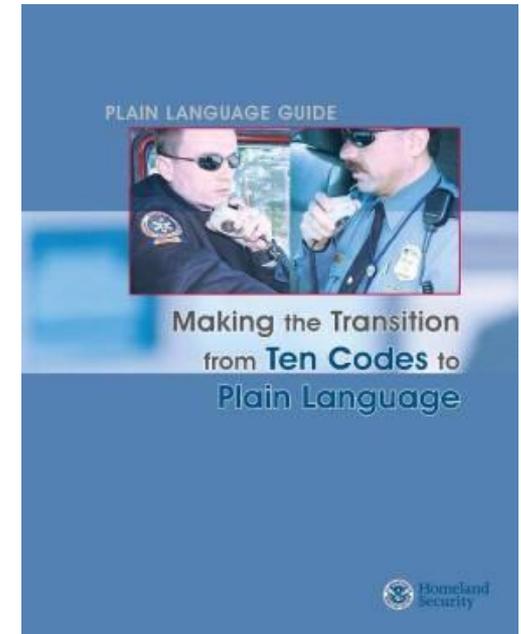
Intended Audience: State and local emergency responders and computer-aided dispatch system operators/dispatchers interested in transitioning from coded language to plain language.

How to Use the Tool: The brochure offers a plan for States, localities, and emergency response agencies to replace coded language radio transmissions with plain language.

SAFECOM Website Link:

<http://www.safecomprogram.gov/NR/rdonlyres/5945AFE3-ADA9-4189-83B0-4D8218D0CA2F/0/PlainLanguageGuide.pdf>

Supports NECP Initiative: 3.1



Updated Interoperability Continuum

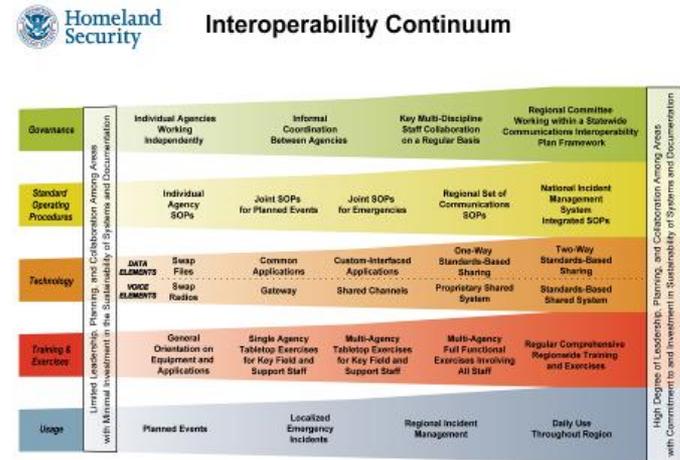
Purpose: The updated Interoperability Continuum is designed to help the emergency response community and Federal, State, local, and tribal policy makers address critical elements for success as they plan and implement interoperability solutions.

Intended Audience: All emergency responders.

How to Use the Tool: The updated Interoperability Continuum should replace all older versions of this tool. This version addresses both data and voice interoperability in the technology element. Emergency response organizations can use this tool to assess their current level of interoperability and determine what elements are lacking or need further development.

SAFECOM Website Link:

http://www.safecomprogram.gov/SAFECOM/library/interoperabilitybasics/1190_interoperabilitycontinuum.htm



Creating a Charter for a Multi-Agency Communications Interoperability Committee

Purpose: This guide focuses on the governance element of the Interoperability Continuum. Specifically, it helps communities that are interested in creating a charter document for their multi-agency interoperability committee or governance group.

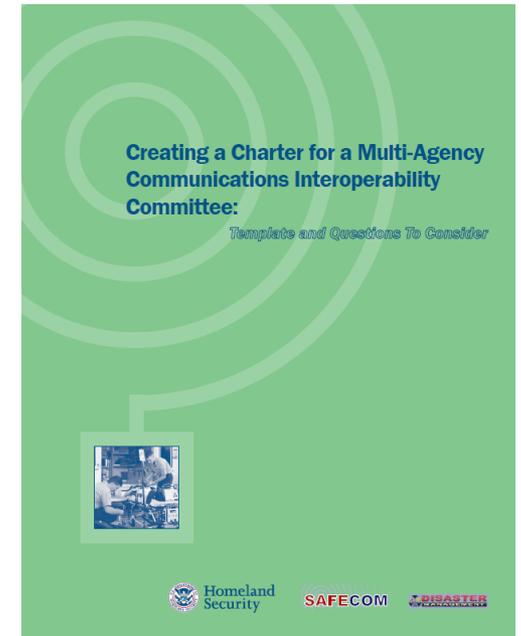
Intended Audience: Newly established statewide, regional, or local governance groups desiring to create a formal charter.

How to Use the Tool: This guide outlines a recommended charter structure with suggested headings for each section. Additionally, the tool outlines potential issues and questions that should be addressed when setting up a communications interoperability committee.

SAFECOM Website Link:

http://www.safecomprogram.gov/NR/rdonlyres/49A7EC9B-7227-45D5-930A-83D9145EE1F1/0/Governance_t1.pdf

Supports NECP Initiatives: 1.1, 1.3, and 2.4



Interoperable Communications for Planned Events

Purpose: This guide is intended to assist emergency response officials who are responsible for designing and executing interoperable communications plans for planned events. This tool provides a comprehensive and explicit process to ensure successful communications during planned events.

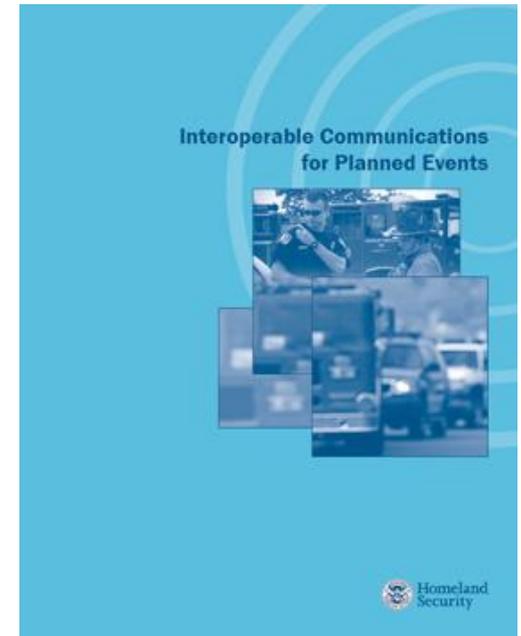
Intended Audience: Communications and operations officials involved in planning a special event.

How to Use the Tool: The guide is a checklist for communications officials to use as they work with operations to establish the communications for specific events in their community. The guide provides key insights and actions to improve efficiency as officials plan event communications.

SAFECOM Website Link:

<http://www.safecomprogram.gov/NR/rdonlyres/EF68FF90-3107-47A4-B3A5-94A72592FBE3/0/InteroperableCommunicationsforPlannedEvents.pdf>

Supports NECP Initiative: 3.3



Interoperability Business Case: An Introduction to Ongoing Local Funding

Purpose: This document assists emergency response officials in establishing the need for ongoing local interoperability funding within their community. The document provides information about why interoperability is important as well as key considerations and steps for emergency response officials as they develop their project plan.

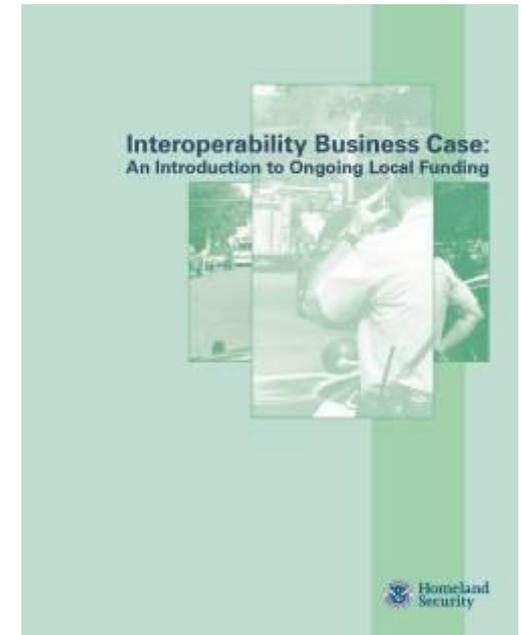
Intended Audience: Elected officials and emergency response officials.

How to Use the Tool: This tool provides four success stories from communities across the United States that were able to achieve “buy-in” from elected officials as well as the community. This document highlights how each of these communities used different mechanisms to establish dedicated funds for interoperability projects.

SAFECOM Website Link:

<http://www.safecomprogram.gov/NR/rdonlyres/696C6E03-7BC5-4760-9F26-A16857E3985F/0/InteroperabilityBusinessCase.pdf>

Supports NECP Initiative: 6.1



Writing Guide for a Memorandum of Understanding (MOU)

Purpose: This document provides guidance for developing an MOU. It includes recommendations for structuring the MOU, questions to consider when generating content for each section, and sample language to illustrate how a community could write each MOU.

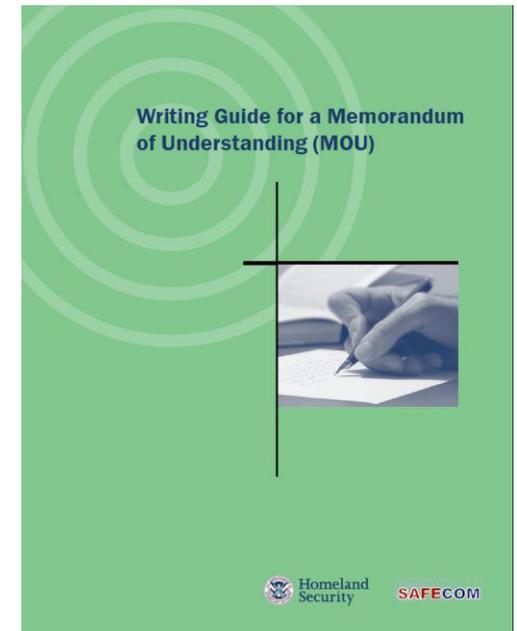
Intended Audience: Statewide, regional, or local governance groups desiring to create formal MOUs to enhance collaboration with other communities.

How to Use the Tool: This tool is intended to be a guide for writing an MOU. It outlines a recommended MOU structure with suggested headings for each section. Samples are also included for reference.

SAFECOM Website Link:

<http://www.safecomprogram.gov/NR/rdonlyres/70169F1E-F2E9-4835-BCC4-31F9B4685C8C/0/MOU.pdf>

Supports NECP Initiatives: 1.3 and 2.4



Writing Guide for Standard Operating Procedures (SOPs)

Purpose: The purpose of this guide is to assist communities that want to establish SOPs. SOPs are formal written guidelines or instructions for incident response. SOPs typically have both operational and technical components and enable emergency responders to act in a coordinated fashion across disciplines in the event of an emergency.

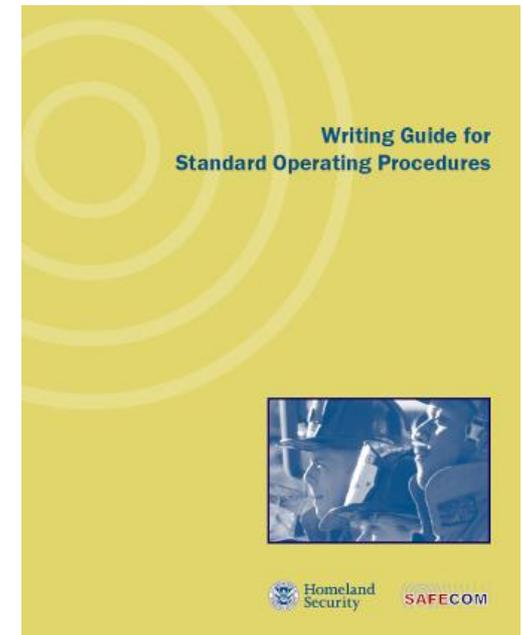
Intended Audience: All emergency responders and planners developing SOPs for communications interoperability.

How to Use the Tool: This guide is intended to help communities write SOPs. The sections of this guide are consistent with recommended sections for each part of an SOP.

SAFECOM Website Link:

<http://www.safecomprogram.gov/NR/rdonlyres/2D396F0E-CE19-4DCB-A30A-35982721F5AA/0/SOP.pdf>

Supports NECP Initiatives: 1.3, 3.3, and 7.1



The System of Systems Approach for Interoperable Communications

Purpose: This brochure is designed to help the emergency response community as well as Federal, State, local, and tribal policy makers understand the system of systems concept, the benefits of applying this concept, and how it can aid agencies in achieving interoperability.

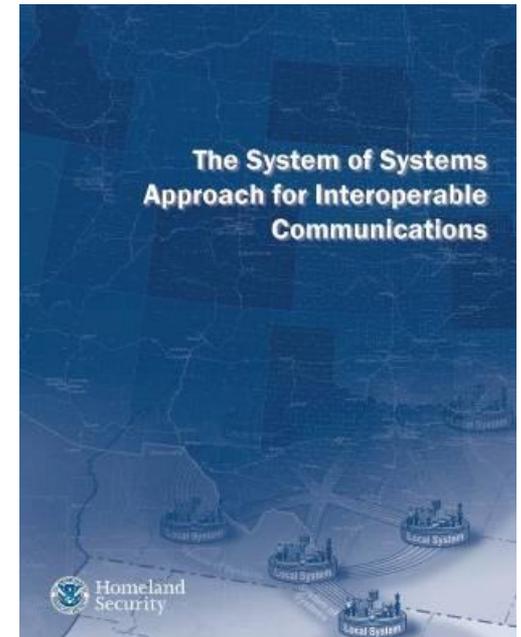
Intended Audience: Emergency responders and Federal, State, local, and tribal policy makers.

How to Use the Tool: This brochure describes effective technology planning to implement a system of systems approach, as well as real-life examples of how a systems of systems methodology has improved interoperability.

SAFECOM Website Link:

http://www.safecomprogram.gov/NR/rdonlyres/FD22B528-18B7-4CB1-AF49-F9626C608290/0/SOSApproachforInteroperableCommunications_02.pdf

Supports NECP Initiatives: 4.3 and 6.4



Law Enforcement Tech Guide for Communications Interoperability

Purpose: The purpose of this guide is to provide background information on the subject of communications interoperability and the tools to carry out the technology initiatives that make interoperability possible.

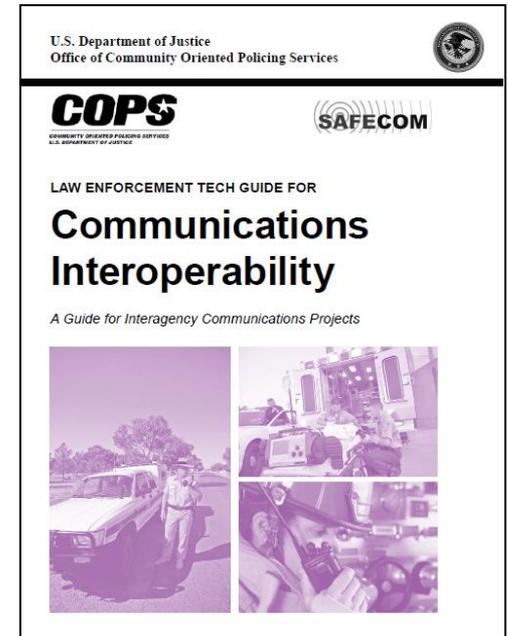
Intended Audience: All communications officials, agency executives, or project managers seeking background information on communications interoperability.

How to Use the Tool: This guide is intended to provide background information, strategies, best practices, and recommendations for public safety radio communications. It serves as a companion guide to the *Law Enforcement Tech Guide: How to plan, purchase and manage technology: A guide for executives, managers, and technologists*.

SAFECOM Website Link:

www.safecomprogram.gov/NR/rdonlyres/8E4846BE-4118-4F43-ACB9-4CEA4FC00E9C/0/Interop_Revise.pdf

Supports NECP Initiative: 6.1



Data Messaging Standards Guide for Requests for Proposals (RFPs)

Purpose: This document assists emergency responders and procurement officers in developing appropriate RFP language that requires data messaging standards when purchasing emergency response-related systems.

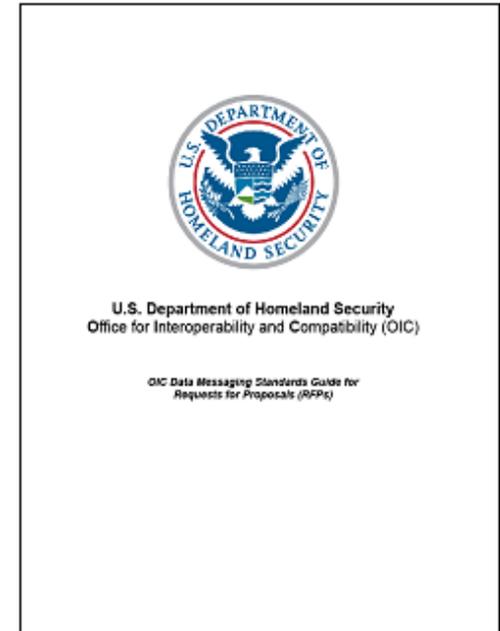
Intended Audience: Procurement officers and anyone making procurement decisions for emergency response-related systems.

How to Use the Tool: This guide should be used as a reference document for procurement officers during the development of RFPs. The guide contains specific RFP language for systems that require the use of data messaging standards.

SAFECOM Website Link:

<http://www.safecomprogram.gov/NR/rdonlyres/09738C06-78D7-4205-8958-1B9E64D8DF67/0/DataMessagingStandardsGuideforRFPs.pdf>

Supports NECP Initiative: 4.3



Guide to Standards and Technology

Purpose: The purpose of this guide is to communicate how SAFECOM works with the emergency response community to define communications requirements and to accelerate standards to help meet those requirements.

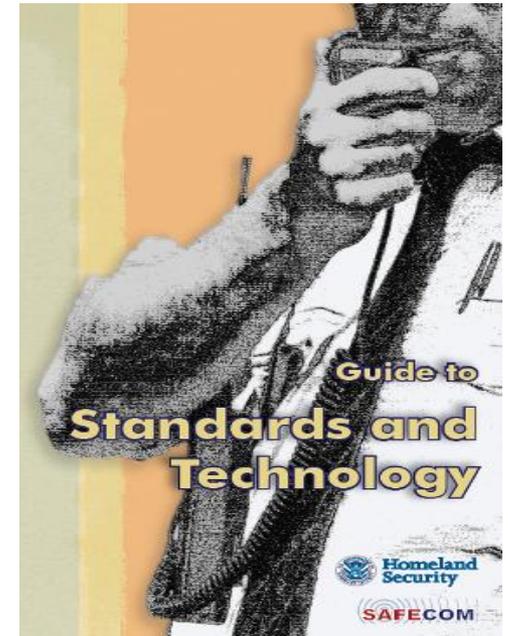
Intended Audience: Emergency response communications practitioners and officials desiring to better understand the DHS standards and technology process.

How to use the Tool: The SAFECOM Standards Development Model is a practitioner-driven approach to standards development. The model considers four key areas of activity: Planning for new technology, tracking and assessment, developing new standards, and testing and evaluation.

SAFECOM Website Link:

<http://www.safecomprogram.gov/NR/rdonlyres/F81FB608-7926-4D6C-8A0C-1F3FB5CDBA63/0/TechTool.pdf>

Supports NECP Initiative: 4.1



National Public Safety Telecommunications Council's Channel Naming Report

Purpose: This document outlines the National Coordination Committee/National Public Safety Telecommunications Council's (NPSTC's) Standard Channel Nomenclature for Public Safety Interoperability.

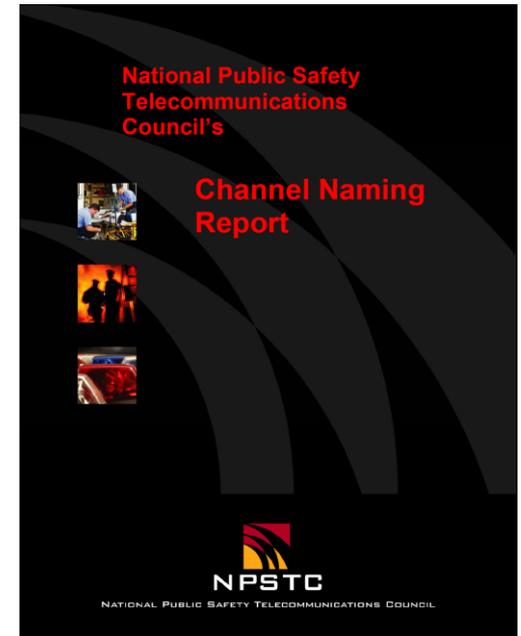
Intended Audience: All public safety officials and radio technicians requiring common names for channels designated for interoperability use by the FCC.

How to Use the Tool: This tool provides operational and technical parameters for use of the 700 megahertz public safety band.

SAFECOM Website Link:

www.safecomprogram.gov/SAFECOM/library/technology/1319_channel.htm

Supports NECP Initiative: 3.1



National Interoperability Field Operations Guide (NIFOG)

Purpose: This document is a collection of technical reference material for radio technicians who are responsible for radios that will be used in disaster response applications.

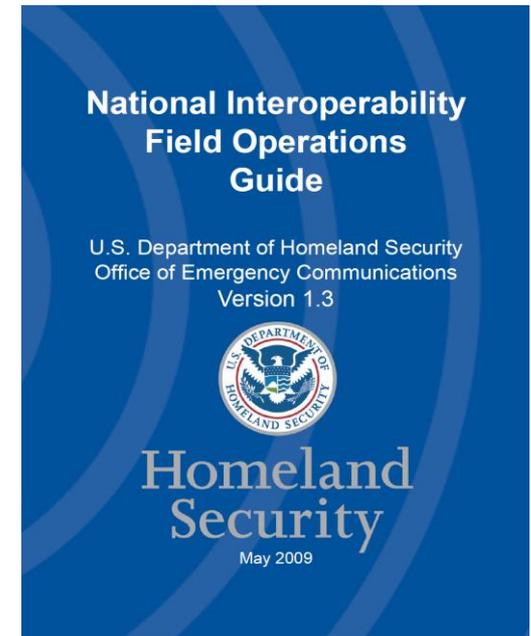
Intended Audience: Radio technicians who are responsible for radios that will be used in disaster response applications.

How to Use the Tool: The NIFOG includes information from the National Interoperability Frequency Guide (NIFG), the instructions for use of the NIFG, and other reference materials. It is formatted as a pocket-sized guide for radio technicians to carry with them.

SAFECOM Website Link:

http://www.npstc.org/documents/NIFOG_1_3.pdf

Supports NECP Initiative: 3.1



How to Guide for Funding State and Local Public Safety Wireless Networks

Purpose: This guide provides emergency response professionals and government managers with an introduction to the key steps in developing and implementing a comprehensive strategy for funding wireless networks.

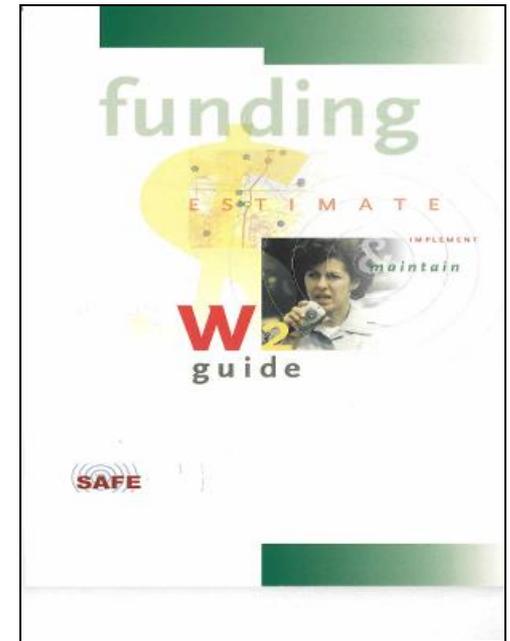
Intended Audience: Emergency response communications practitioners and officials seeking funding for governance sustainability, SOP development, training and exercises, and technology procurements.

How to Use the Tool: Within this tool, core components and activities are identified for estimating network life-cycle funding requirements, developing a comprehensive funding strategy, implementing a funding strategy, and maintaining full funding for the network life-cycle.

SAFECOM Website Link:

[http://www.safecomprogram.gov/NR/rdonlyres/D9BDFBD4-9BCF-445D-A3B4-D975C964CC91/0/How to guide for funding state and local PSW N.pdf](http://www.safecomprogram.gov/NR/rdonlyres/D9BDFBD4-9BCF-445D-A3B4-D975C964CC91/0/How%20to%20guide%20for%20funding%20state%20and%20local%20PSW%20N.pdf)

Supports NECP Initiative: 2.3



How to Guide for Managing the Radio System Life-Cycle

Purpose: This guide is designed to assist emergency response agencies in navigating the radio system life-cycle.

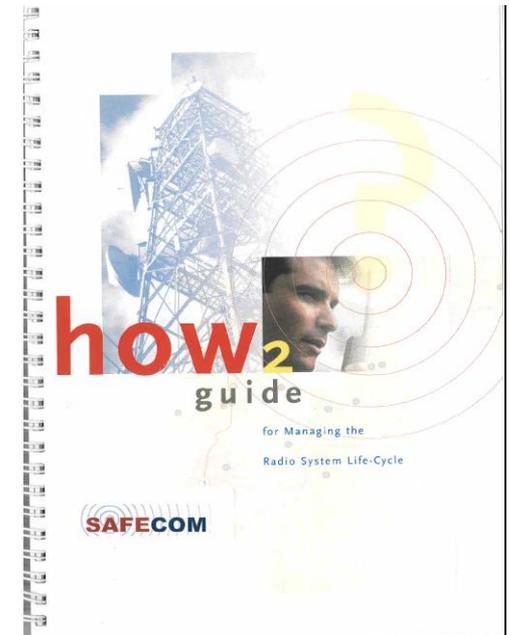
Intended Audience: Emergency response officials charged with managing a communications radio system.

How to Use the Tool: This tool covers issues essential to successful planning, design, procurement, implementation, operations, and maintenance of a statewide or regional radio communications system.

SAFECOM Website Link:

http://www.safecomprogram.gov/NR/rdonlyres/9826FC3F-BE4D-4C02-9AE9-166AF13C7B9B/0/how_to_guide_radio_system_life_cycle_guide.pdf

Supports NECP Initiative: 6.1



The Role of the Federal Government in Public Safety Wireless Interoperability

Purpose: This guide is directed at Federal government leaders, but is intended to assist all levels of government in understanding the role that the Federal government can play in improving emergency response interoperability.

Intended Audience: All communications officials, agency executives, elected officials, or project managers seeking to understand the Federal government's role in communications interoperability planning and policy development.

How to Use the Tool: This tool describes the Federal government as an enabler of interoperability. The guide provides examples of several activities the Federal government is currently undertaking to improve emergency response communications.

SAFECOM Website Link:

http://www.safecomprogram.gov/NR/rdonlyres/B56E2C10-226F-4C2B-A724-857CB45AFFDA/0/fed_role.pdf

Supports NECP Initiative: 1.4

