

Washington State

Interoperable Communications

Policies, Procedures, and Best Practices



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Special Credits

DRAFT

Letters from Co-Chairs

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EXECUTIVE OVERVIEW

The Washington State Interoperable Communications Policies, Procedures, and Best Practices document will serve as a common reference for all stakeholders to use as a source of information regarding statewide communications interoperability. The process employed to produce this document followed a comprehensive approach and sought the input and advice of the public safety communities.

The purpose of this document is to establish and provide consistent policies, procedures, and best practices for interoperable communications for public safety users throughout Washington State. By instituting these common references and practices, responders, dispatch centers, and emergency management personnel will develop reliable communications processes to improve and aid in their response to emergency situations.

The development of this document considered a number of objectives to be accomplished. One of these intentions is to provide a useful tool to responders in the field regarding several “how to” topics related to interoperable communications. Another goal is to provide a quick reference regarding the use of interoperable channels and frequencies. Having these tools readily available in the field greatly increases the effectiveness of interoperable communications in a “real-time” situation where responses are often critical.

This document may also be used as a planning tool for emergency management personnel. Understanding the location and process of obtaining interoperable communications equipment such as radio caches, mobile command units, or gateway devices are beneficial when developing response plans. It is understood that local departments, agencies, and personnel may have their own specific plans and protocols for certain activities and responses. This document is not intended to override or replace procedures for specific actions, but rather acts as a general guideline to the larger understanding of interoperable communications and to encourage the migration to standardized processes. To help illustrate this concept, the definitions are included here.

- Policy - Set of basic principles and associated guidelines, formulated and enforced by the governing body of an organization, to direct and limit its actions in pursuit of long-term goals.
- Procedure - Fixed, step-by-step sequence of activities or course of action (with definite start and end points) that must be followed in the same order to correctly perform a task. Repetitive procedures are called routines
- Best Practice - Methods and techniques that have consistently shown results superior than those achieved with other means, and which are used as benchmarks to strive for. There is, however, no practice that is best for everyone or in every situation, and no best practice remains best for very long as people keep on finding better ways of doing things.

Although many of the subjects described within this document are very helpful, it may not contain all information required for a particular situation. It is recognized that this document has limitations to the subject base, however researching and describing all possible subject matter was not practical for the purposes of this document. If users require specific information for a particular scenario, independent research should be conducted.

Further, this document is intended to be revised and updated as necessary or when new information becomes available, or as standards change. This document is expected to evolve periodically with user input and peer review, followed by distribution and, finally publication. All updates will be recorded and the information contained herein will be maintained in a repository by the State Interoperability Executive Committee or successor organization.

Finally, it is an objective of this document to raise awareness among first responders, planners, technical personnel, and administrative leaders that interoperable communications requires governance, standardization of procedures, training and exercise, technology, and usage.

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1. INTRODUCTION

This document has been created by representatives from all sectors of public safety to establish an effective pathway for communication during emergency situations involving multiple jurisdictions and disciplines.

Washington State public safety agencies recognize the need for interagency communication, interoperability, and cooperation. Washington's police, fire departments, and Emergency Medical Services (EMS) have well-established interoperability capabilities and mutual aid agreements in place. While these plans and agreements formally extend beyond jurisdictions they tend to remain intra-discipline in practice. Today's public safety realities highlight the need for agencies to work together to establish communications interoperability and mutual aid plans—across traditional jurisdictional boundaries and across disciplines as well.

This document seeks to provide a framework for Washington State interoperability stakeholders of policies, procedures, best practices and other information applicable to interoperable communications across the state so all responders can talk to each other in an efficient, effective manner. Mutually agreed upon, clear, concise, operationally-focused Standard Operating Procedures (SOP) help guide the interaction, and provide greater coordination, during an incident involving multiple jurisdictions and disciplines. SOPs provide organizations with formal documentation to solidify new and existing standards, protocols and procedures for joint operations.

The National Emergency Communications Plan (NECP), the 2009 – 2014 Washington Statewide All-Hazards Emergency Preparedness Strategic Plan and the Interoperability Continuum each point out the need to improve and enhance interoperable communications in the nation and in the State of Washington. The recommended pathways and steps in areas of governance, planning, technology, training and exercises, and usage, demonstrates the need for established policies, procedures and best practices. The policies, procedures and best practices contained in this document are intended to be a guide for Washington's interoperable communications stakeholders, agencies and jurisdictions which can be adopted to enhance interoperability statewide and conform to the recommendations accepted nationwide.

Stakeholders will have the ability to update and revise these recommendations through future periodic revisions and updates, to build upon the SOP foundation this guide provides to the stakeholder community.

National Emergency Communications Plan (NECP)

Every day in cities and towns across the Nation, emergency response personnel respond to incidents of varying scope and magnitude. Their ability to communicate in real time is critical to establishing command and control at the scene of an emergency, to maintaining situational awareness, and to operating overall within a broad range of incidents. However, as numerous after-action reports and national assessments have revealed, there are still communications

deficiencies that affect the ability of responders to manage routine incidents and support responses to natural disasters, acts of terrorism, and other incidents.¹

Recognizing the need for an overarching emergency communications strategy to address these shortfalls, Congress directed the Department of Homeland Security's (DHS) Office of Emergency Communications (OEC) to develop the first National Emergency Communications Plan. Title XVIII of the Homeland Security Act of 2002 (6 United States Code 101 et seq.), as amended, calls for the NECP to be developed in coordination with stakeholders from all levels of government and from the private sector.

In response, DHS worked with stakeholders from Federal, state, local, and tribal agencies to develop the NECP—a strategic plan that establishes a national vision for the future state of emergency communications. The desired future state is that emergency responders can communicate:

- As needed, on demand, and as authorized
- At all levels of government
- Across all disciplines

To measure progress toward this vision, three strategic goals were established:

Goal 1—By 2010, 90 percent of all high-risk urban areas designated within the Urban Areas Security Initiative (UASI)² are able to demonstrate response-level emergency communications³ within one hour for routine events involving multiple jurisdictions and agencies.

Goal 2—By 2011, 75 percent of non-UASI jurisdictions are able to demonstrate response-level emergency communications within one hour for routine events involving multiple jurisdictions and agencies.

Goal 3—By 2013, 75 percent of all jurisdictions are able to demonstrate response-level emergency communications within three hours, in the event of a significant incident as outlined in national planning scenarios.”

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

¹ Examples include *The Federal Response to Hurricane Katrina: Lessons Learned*, February 2006; *The 9-11 Commission Report*, July 2004; and *The Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina*, February 2006.

² As identified in FY08 Homeland Security Grant Program or on the FEMA Grants website: http://www.fema.gov/pdf/government/grant/uasi/fy08_uasi_guidance.pdf.

³ Response-level emergency communication refers to the capacity of individuals with primary operational leadership responsibility to manage resources and make timely decisions during an incident involving multiple agencies, without technical or procedural communications impediments.

2. PLANNING AND IMPLEMENTATION

The National Emergency Communications Plan identifies Objective 3: Common Planning and Operational Protocols.

“Emergency responders employ common planning and operational protocols to effectively use their resources and personnel.”

Agencies often create SOPs to meet their unique emergency communications requirements. In recent years, with support from the Federal Government, emergency responders have developed standards for interoperability channel naming, the use of existing nationwide interoperability frequencies, and the use of plain language. NIMS represents an initial step in establishing national consistency for how agencies and jurisdictions define their operations; however, additional steps are required to continue streamlining response procedures.”⁴

The Department of Homeland Security’s (DHS) Office of Emergency Communications (OEC), in collaboration with local, regional, tribal, state and federal practitioners, developed the National Emergency Communications Plan (NECP) in 2008. The NECP provides OEC with goals, objectives, initiatives and strategic milestones under which interoperable communications can be enhanced. The development of model Standard Operating Procedures (SOPs) is identified in the NECP as Initiative 3.3 under the Objective 3: Common Planning and Operational Protocols. Initiative 3.3’s focus as stated in the NECP is to *“Develop and implement model SOPs for specified events and all-hazard response”*.

Members of the emergency response community have a need for standards, protocols and procedures between agencies, jurisdictions and disciplines each and every day. Mutually agreed upon, clear, concise, operationally focused SOPs help to guide the interaction and provide greater coordination during an incident where interoperable communications is a must. SOPs can be used between local, regional and statewide agencies to govern operations during events. Parties enter into a SOP when they wish to define the standards, protocols and procedures for joint operations. Typically, agreements regarding SOPs in the emergency response community are between states, regions, localities, agencies, and departments. SOPs provide these organizations with formal documentation to solidify new and existing standards, protocols and procedures.

Within the NECP, the following SAFECOM Format for each topic in this section includes:

- Purpose and objectives
- Technical background – Constraint(s)
- Operational Context
- Recommended Protocol Standard
- Recommended Protocol Procedure

⁴ Department of Homeland Security, National Emergency Communications Plan

- Management

National Incident Management System (NIMS)

I. Purpose and Objectives

During significant incidents, whether they are active or anticipated emergencies or planned events, multiple jurisdictions, agencies, disciplines and personnel must work together in a coordinated manner to maximize the effectiveness of assigned resources.

Agencies and personnel working to manage incidents must work within the framework of a pre-established management system, such as the National Incident Management System (NIMS). NIMS is designed to ensure that organizational structure, communications terminology, resource management, command and control methodologies and other incident management activities are coordinated in as consistent a manner as possible.

This section provides a brief overview of the NIMS framework, related to incident communications that should be utilized by agencies, jurisdictions and individuals working jointly in the management of significant incidents.

Recommended practices for use of common terminology, incident organization development, resource typing, establishment of appropriate facilities, and use of Incident Command System (ICS) tools, including forms specific to communications, are summarized in the following sections.

II. Technical Background – Constraints

A. Requirements for Use of NIMS

Homeland Security Presidential Directive-5. HSPD-5 directed the Secretary of Homeland Security to develop and administer a National Incident Management System (NIMS). NIMS provides a consistent nationwide template to enable all government, private-sector, and nongovernmental organizations to work together during domestic incidents.

- Adoption of NIMS by State, tribal, and local organizations is a condition for Federal preparedness assistance through grants, contracts, and other activities.

B. What Is NIMS?

- A comprehensive, nationwide, systematic approach to incident management, including the Incident Command System, Multiagency Coordination Systems, and Public Information.
- NIMS is **not** an operational incident management or resource allocation plan.
- NIMS represents a core set of doctrines, concepts, principles, terminology, and organizational processes that enables effective, efficient, and collaborative incident management.

- The components of NIMS are adaptable and scalable to any situation, from routine, local incidents, to incidents requiring the activation of interstate mutual aid, to those requiring a coordinated Federal response. NIMS applies to all types of incidents.
- **Effective emergency response depends on communication**—the ability to maintain a common operating picture through the constant flow of information.
- All too often, after-action reports cite communications failures as an impediment to effective incident management.
- Communications breakdowns are not limited to equipment and systems-related failures. The use of different protocols, codes instead of plain language, and non-standardized reporting formats hampers our ability to share critical information and make effective decisions.
- First and foremost, **interoperability is the ability of emergency management/response personnel to interact and work well together.**
- Interoperability also means that technical emergency communications systems should:
 - Be the same or linked to the same system that the jurisdiction uses for nonemergency procedures.
 - Effectively interface with national standards, as they are developed.
 - Allow the sharing of data throughout the incident management process and among all key players.
- Successful communications and information management require that emergency management/response personnel and their affiliated organizations use the following types of standardized communications:
 - [Strategic Communications](#)
High-level directions, including resource priority decisions, roles and responsibilities determinations, and overall incident response courses of action.
 - [Tactical Communications](#)
Communications between command and support elements and, as appropriate, cooperating agencies and organizations.
 - [Support Communications](#)
Coordination in support of strategic and tactical communications (for example, communications among hospitals concerning resource ordering, dispatching, and tracking from logistics centers; traffic and public works communications).
 - [Public Address Communications](#)
Emergency alerts and warnings, press conferences, etc.
- Agreements should be executed among all stakeholders to ensure that the elements within plans and procedures will be in effect at the time of an incident (other sections within the document discuss governance and agreements).

- Periodic training and exercises are essential so that personnel capabilities and limitations of communications plans and systems are addressed before an incident (other sections within the document discuss governance and agreements).
- Communications and data standards are established to allow diverse organizations to work together effectively. Standards may include:
 - A standard set of organizational structures and responsibilities.
 - Common “typing” of communications resources to reflect specific capabilities.
 - Use of agreed-upon communications protocols.
 - Common identifier “titles” for personnel, facilities, and operational locations used to support incident operations.
- The **use of plain language** in emergency management and incident response (other sections within the document discuss governance and agreements).
- Providing effective incident information to the public is an important element of incident management.
 - The **Joint Information System (JIS)** integrates incident information and public affairs into a cohesive organization designed to provide consistent, coordinated, accurate, accessible, and timely information.
 - The **Joint Information Center (JIC)** provides a structure for developing and delivering incident-related coordinated messages by developing, recommending, and executing public information plans and strategies. The JIC is the central point of contact for all news media at the scene of an incident.

III. Operational Context

A. Pre-incident Planning & Training

Collaboration and coordination between jurisdictions, agencies and individuals prior to an incident absolutely facilitates effective, efficient and successful mitigation of potential life, property and / or environmental losses.

- Identification of potential incidents and events that will be well served through pre-incident planning, coordination and training.
- Assessment of potential consequences if no actions are undertaken, if minimal intervention occurs and if coordinated actions are initiated using NIMS.
- Training provided to ensure that all potentially involved response personnel are familiar and competent with basic and / or technical NIMS definitions, requirements and practices. NIMS training should be a component of all recruit level training and institutionalized as a part of ongoing individual and agency training schedules and processes.
- Utilization of NIMS during tabletop and / or field simulated exercises provide opportunities for development of skills, development of relationships and evaluation of strengths and weaknesses for use in continued improvements to mitigation strategies.

B. Establishment of Incident Command

- A critical component of interoperability between the various jurisdictions, agencies and personnel working jointly to effectively and successfully coordinate and manage ongoing events and emergency incidents.
- Creates a framework for joint management of an event or incident when various stakeholders hold responsibilities for decisions and outcomes.
- Provides for a higher level of safety afforded to personnel assigned to the incident.
- Addresses the multitude of needs (food, medical, facilities, communications, transportation, rest and rehabilitation and etc.) required to support personnel.
- Ensures that coordination occurs between responders and local / regional / state / national stakeholders.
- Facilitates transition of command as necessary in incident escalation / demobilization processes.

C. Resource Typing

- Provides for a common system of identifying categories and definitions of equipment, functional teams and individual personnel and their capabilities to avoid confusion in resource ordering, deployment and communications.
- Resource typing is the categorization and description of resources that are commonly exchanged in disasters via mutual aid, by capacity and/or capability.
- Through resource typing, disciplines examine resources and identify the capabilities of a resource's components (i.e., personnel, equipment, and training).
- Common definitions and categorization facilitate that different jurisdictions and agencies speak a common language.
- Examples of resource typing for various disciplines are identified at:
<http://www.fema.gov/emergency/nims/ResourceMngmnt.shtm#item4>
http://www.fema.gov/pdf/emergency/nims/fire_haz_mat.pdf
http://www.fema.gov/pdf/emergency/nims/508-8_search_and_rescue_resources.pdf
http://www.fema.gov/pdf/emergency/nims/508-6_Law_Enfor_Secur_Resources.pdf

D. Communications

- Effective emergency response and event management depends on communication – the ability to maintain a common operating picture through the constant flow of information.
- Communications systems need to be:
 - **Interoperable**—able to communicate within and across agencies and jurisdictions.
 - **Reliable**—able to function in the context of any kind of emergency.
 - **Portable**—built on standardized radio technologies, protocols, and frequencies.
 - **Scalable**—suitable for use on a small or large scale as the needs of the incident dictate.
 - **Resilient**—able to perform despite damaged or lost infrastructure.
 - **Redundant**—able to use alternate communications methods when primary systems go out.

- Unless otherwise delegated the responsibility for communications within the Incident Command System (ICS) resides with the Incident Commander (IC).
- For a major incident / event communications should be a separate component assigned to the Logistics Function of the organizational structure.
- Communication representatives / considerations should be a component of the planning process with detailed operational information provided to all involved personnel operating within the incident / event.
- When specialized technical resources are required to support an incident it is highly recommended to obtain the services of a Communications Leader (COML).

The following table provides an overview of the five incident types as identified in NIMS with a description of the incident variables that differentiate each type and their associated communication requirements.

Incident Type	Description	Communication Requirements
5	<ul style="list-style-type: none"> • The incident can be handled with one or two single resources with up to six personnel. • Command and General Staff positions (other than the Incident Commander) are not activated. • The incident is contained within the first operational period and often within an hour to a few hours after resources arrive on the scene. • Examples include a vehicle fire, an injured person, or a police traffic stop. 	<ul style="list-style-type: none"> • Communications Center typically assigns radio frequency that responding units will utilize throughout duration of incident. • Incidents are of short duration with simple unit to unit or unit to comm. center needs. • Normal agency communication protocols utilized with no specialized communication equipment / training requirements. • A joint agency / jurisdiction / discipline response may necessitate coordination of radio frequencies used – interoperability may need to be coordinated through communications center.
4	<ul style="list-style-type: none"> • Command and General Staff functions are activated only if needed. • Several resources are required to mitigate the incident. • The incident is usually limited to one operational period in the control phase. • The agency administrator may have briefings, and ensure the complexity analysis and delegation of authority are updated. • No written Incident Action Plan (IAP) is required but a documented operational briefing will be completed for all incoming resources. • The role of the agency administrator includes operational plans including objectives and priorities. • Examples include a building fire or large protest/rally. 	<ul style="list-style-type: none"> • Local or regional communications center typically assigns radio frequencies (command, tactical, interoperable) that command staff and responding units will utilize throughout duration of incident. • Normal agency communication protocols utilized with no specialized communication equipment / training requirements. • Depending on complexity of incident communication requirements, use of multiple frequencies may be advantageous. • A joint agency / jurisdiction / discipline response may necessitate coordination of radio frequencies used – interoperability may need to be coordinated through communications center. • If incident complexity escalates, establishment of a mobile command / communications capability utilizing tactical dispatchers may facilitate improved on-site communications.

<p>3</p>	<ul style="list-style-type: none"> • When capabilities exceed initial emergency response, the appropriate ICS positions should be added • to match the complexity of the incident. • Some or all of the Command and General Staff positions may be activated, as well as • Division/Group supervisor and/or Unit Leader level positions. • A Type 3 Incident Management Team (IMT) or incident command organization manages initial action incidents with a significant number of resources, an extended attack incident until containment/control is achieved, or an expanding incident until transition to a Type 1 or 2 team. • The incident may extend into multiple operational periods. • A written IAP may be required for each operational period. • Examples include a chemical leak with evacuation, tropical storm/hurricane or a hostage stand-off. 	<ul style="list-style-type: none"> • Communications Center typically assigns initial radio frequencies (command, tactical, interoperable) that command staff and responding units will utilize throughout duration of incident. • Incidents may involve multiple operational periods, multiple agencies / jurisdictions / disciplines requiring a formal communication plan, assignment of multiple frequencies, access to on-line data retrieval systems and assignment of tactical dispatchers. • As incident escalates toward anticipated multi-operational period event, development of a communications plan and establishment of a specific ICS communications function must be considered. • A joint agency / jurisdiction / discipline response may necessitate coordination of radio frequencies used – interoperability may need to be coordinated through communications center. • Strongly recommend assignment of a trained COML, either assigned to Operations or Logistics Section under ICS • Specialized communication requirements may be necessary to manage incident. Use of communication gateway systems for interoperable capability, remote repeaters, radio caches, mobile facilities and trained communication technicians / comm. unit leaders.
<p>2</p>	<ul style="list-style-type: none"> • This type of incident extends beyond the capabilities for local control and is expected to go into multiple operational periods. A Type 2 Incident may require the response of resources out of area, including regional and/or national resources, to effectively manage the operations, command and general staffing. • Most or all of the Command and General Staff positions are filled. • A written IAP is required for each operational period. • Many of the functional units are needed and staffed. • Operations personnel normally do not exceed 200 per operational period and total incident personnel do not exceed 500 (guidelines only). • The agency administrator is responsible 	<ul style="list-style-type: none"> • Type II Incident Management Team will assume command of the event with a formal transition of command from the Type III team – if one is in place. If not, the transition will involve the local / regional incident command system in place. • On-site communications support will be required to effectively manage needs; a facility (fixed site / mobile) for dispatch, frequency management, monitoring, gateway operations, potential satellite access, battery support, repairs, data system access and support, plan development, and etc. will be required. • Formal establishment of a Communications Unit under the Logistics Section with a qualified COML and COMT's will be necessary. • Sufficient depth of qualified personnel to

	<p>for the incident complexity analysis, agency administrator briefings, and the written delegation of authority.</p> <ul style="list-style-type: none"> • Examples include a devastating flood or earthquake. 	<p>support multiple operational periods is essential for effective incident communications management and operations.</p> <ul style="list-style-type: none"> • Equipment caches will likely be available from pre-staged supply centers through a national inter-agency coordination center and / or pre-identified locations throughout the State.
1	<ul style="list-style-type: none"> • This type of incident is the most complex, requiring national resources to safely and effectively manage and operate. • All Command and General Staff positions are activated. • Operations personnel often exceed 500 per operational period and total incident personnel will usually exceed 51,000. • Branches need to be established. • The agency administrator will have briefings, and ensure that the complexity analysis and delegation of authority are updated. • Use of resource advisors at the incident base is recommended. • There is a high impact on the local jurisdiction, requiring additional staff for office administrative and support functions. • Examples include a major terroristic attack, multiple complex wild land fires or a Katrina level disaster 	<ul style="list-style-type: none"> • Type I Incident Management Team will assume command of the event with a formal transition of command from either a Type III or II team – if either are in place. If not, the transition will involve the local / regional incident command system in place. • On-site communications support will be required to effectively manage significant and complex needs; a facility (fixed site / mobile) for dispatch, frequency management, monitoring, gateway operations, satellite access, data system access and support, battery support, repairs, plan development, and etc. will be required. • Formal establishment of a Communications Unit under the Logistics Section with a qualified COML and COMT's will be necessary. • Sufficient depth of qualified personnel to support multiple operational periods is essential for effective incident communications management and operations. • Equipment caches will likely be available from pre-staged supply centers through a national inter-agency coordination center.

E. After Action Review of Significant Events

An essential component of any incident or event is to review the incident management process for lessons learned – to reinforce effective practices and performance, identify less than successful behaviors, practices and outcomes and development of strategies for use in future scenarios.

IV. Recommended Protocol Standard

A. Training, Exercise, and Evaluation

- Jurisdictions, agencies, disciplines and personnel who will realistically jointly respond to significant events should train and exercise together, at a minimum, on an annual schedule.
- All personnel involved in emergency response should have, at a minimum, NIMS 100, 200, and 700 training. Supervisors with potential to be assigned division, branch or section responsibilities should have NIMS 300 and 400 training.
- All training exercises should have an after action review component.
- Strong consideration should be given for entities / regions to develop exercise development teams. The FEMA National Emergency Management Institute sponsors courses in exercise development and implementation.

B. Utilization of Incident Command

- Multi-jurisdiction, agency and / or discipline responses or event management should utilize the Incident Management System (ICS).
- All incidents should have an announced Incident Commander (IC) and the incident should be named with an established and announced Command Post (CP).
- In the event multiple jurisdictions or agencies have statutory responsibility, a Unified Command (UC) should be established.
- Safety is paramount and an incident should have a Safety Officer (SO) assigned and identified at a minimum. Consideration should be given to assignment of multiple safety personnel – dependent on the complexity of the incident. Safety messages should be developed and communicated on a regular basis.
- An incident should be managed in a manner that ensures that the supervisory span of control does not exceed 7 individuals – depending on the complexity of the incident. For complex responsibilities / activities, the span of control should be fewer.
- For significant events, consideration for subdividing the incident through creation of sections (Operations, Planning, Logistics and Finance) will significantly improve potential for strategic and operational success.
- Creation of sections, branches, units, divisions, groups, strike teams / task forces or functional teams are effective organizational structural components utilized to effectively manage within the span of control.
- The “Planning P” should be the template utilized to ensure that all managerial incident objectives, strategic planning, operational plans and meeting / communication timeline benchmarks are scheduled. The Planning process should include;
 - Evaluation of the situation.
 - Development of incident objectives.
 - Selection of a strategy.
 - Deciding which resources should be used to achieve the objectives in the safest, most efficient and cost-effective manner.
 - Determination of defined operational periods
- Utilization of appropriate ICS forms should be utilized to ensure continuity of communications, appropriate accountability of resources and incident status, clear identification of objectives and action plan, facilitation of logistical requirements and etc. Be familiar with, and have access to, the following:

- ICS Form 201 – Incident Action Plan
 - ICS Form 205 – Incident Radio Communications Plan
 - ICS Form 209 – Incident Status Summary
 - ICS Form 210 – Status Change Card
 - ICS Form 213 – General Message Form
 - ICS Form 214 – Unit Log
 - ICS Form 218 – Support Vehicle Inventory
 - OF-297 – Emergency Equipment Shift Ticket
 - Radio / Telephone logs
 - Maps
- The Communications Unit with a Communications Unit Leader (COML) should be established for each significant incident:

The Communications Unit develops the Communications Plan (ICS 205), to make the most effective use of the communications equipment and facilities assigned to the incident. Additionally, this Unit installs and tests all communications equipment, supervises and operates the incident communications center, distributes and recovers communications equipment assigned to incident personnel, and maintains and repairs communications equipment on site.

Frequent communication between the COML, Ops Section and Planning Section staff to ensure all communication needs are being addressed. The COML should be present at all communication planning meetings.

C. After Action Review

- Each incident or event should be concluded with an informal after action review (AAR) involving all principle participants within each of the sections.
- Each section chief (IC, Ops, Planning, Logistics and Finance) should ensure that unit leaders have all solicited feedback and suggestions from personnel within their span of control for inclusion in the AAR.
- Notes should be taken highlighting feedback and suggestions obtained in the informal AAR for inclusion in the formal written AAR.
- A formal AAR should be completed and contain, at a minimum the following;
 - A source for documenting response and early recovery activities,
 - Identification of problems and successes during emergency operations.
 - Analysis of the effectiveness of the different components of ICS / NIMS.
 - Description and definition of a plan for initiation of recommended corrective action necessary to implement improvements to existing emergency response efforts.
- The completed draft formal AAR should be distributed to all involved stakeholders for review and comment prior to final report adoption.
- The completed formal AAR should be distributed to all involved stakeholders

V. Management

Each jurisdiction and / or agency with statutory responsibility to respond to and mitigate emergency response incidents shall establish and manage performance requirements and expectations for the utilization of NIMS and ICS during the preparation, response and recovery from the incident. Events requiring coordination of multiple jurisdictions, agencies and personnel to effectively manage the event will be well served by use of NIMS / ICS and remains within the scope of responsibility for the host jurisdiction and / or agency.

Additional Resources:

FEMA – NIMS Resource Center: <http://www.fema.gov/emergency/nims/index.shtm>

FEMA – NIMS Resource Typing:

<http://www.fema.gov/emergency/nims/ResourceMngmnt.shtm#item4>

FEMA – NIMS 700 (National Incident Management System – An Introduction):

<http://training.fema.gov/emiweb/is/is700a.asp>

FEMA – Incident Management, The “Planning P”;

<http://training.fema.gov/EMIWeb/IS/ICSResource/assets/PlanningP.pdf>

FEMA – Incident Command Forms;

http://training.fema.gov/EMIWeb/IS/ICSResource/ICSResCntr_Forms.htm

Agency and Personnel Roles

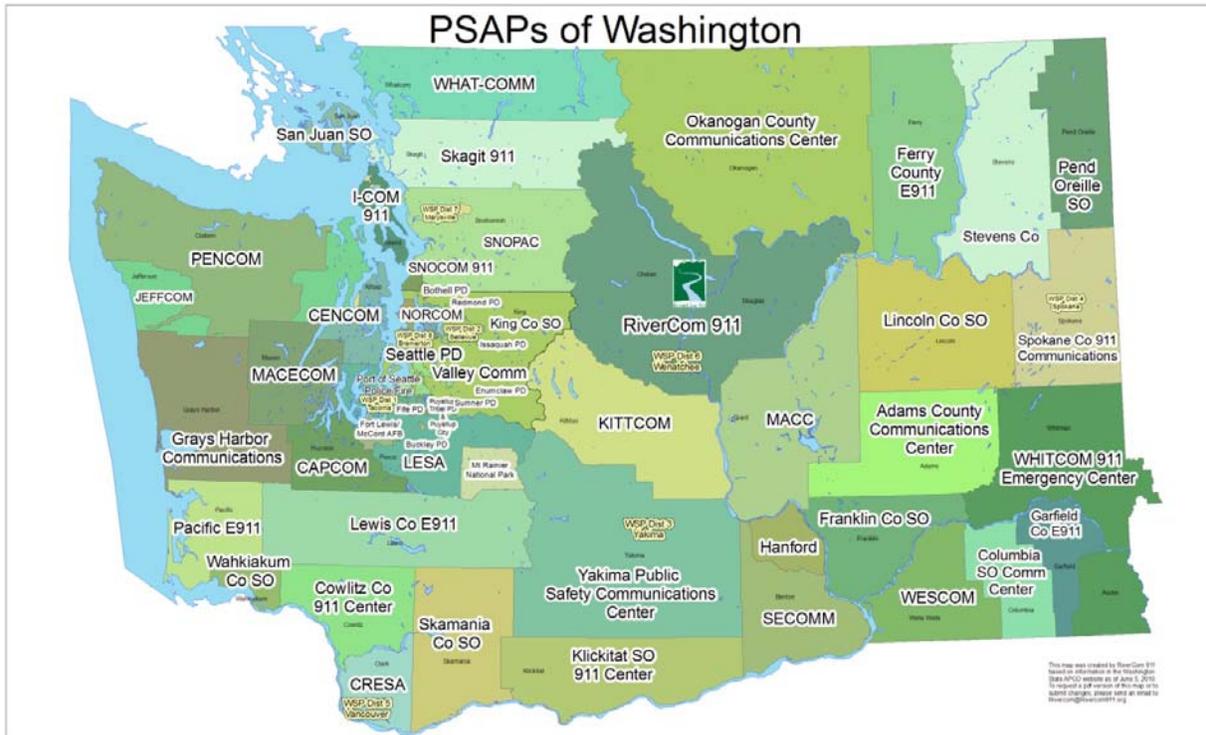
There are a number of agencies and personnel that perform critical functions and roles related to interoperable communications.

Communications Centers and Public Safety Answering Points (PSAP)

Across Washington State, 9-1-1 Public Safety Answering points (PSAP), consolidated 9-1-1 communication centers and individual police and fire emergency dispatch communication centers, provide the first point of contact for citizens needing emergency response service and other support from public safety and other service providers. The highly trained tele-communicators, dispatchers and supervisory personnel who staff these operations provide the link between those requiring assistance and the emergency providers in the field who must deliver services to the public. Should the process not be handled properly from the time that the call is received at the dispatch center; the remainder of the public safety response process is put into jeopardy. Communication centers and PSAPs utilize a variety of telephone, voice radio, data communication and related systems in carrying out their daily activities.

Typical functions provided by communication centers often include, but are not limited to the following:

- Answering and processing emergency calls for service
- Quickly and efficiently interrogating callers to ascertain the location and nature of the call.
- When appropriate and authorized, providing pre-arrival emergency medical instructions to callers
- Dispatching emergency response services.
- Provide on-going support to responding field personnel.



See State E911 Coordinator Contacts in Appendix F

Emergency Operations Centers (EOC)

Emergency Operations Centers serve as the focal point for responses to emergencies and disasters. These emergencies or disasters are the result of natural, technological or human-caused hazards.

The EOC notifies and alerts state agencies, local governments, and the public of impending emergencies and disasters. In the EOC, staff coordinates with state, federal, and local government agencies, non-government organizations, private businesses and industry to effectively respond and recover from to a natural or technological emergency.

Primary and back-up communications systems allow EOCs to warn local and state agencies, and the public, of an emergency and to communicate among all emergency response agencies during that event. During an emergency, representatives from other agencies with emergency roles come to the EOC to help coordinate the response. Federal government agencies, along with state and local volunteer organizations, also may provide representatives.

During an emergency or disaster, the EOC is designated as the central location for information gathering, disaster analysis, and response and recovery coordination. Information gathered is used by executives to make decisions concerning emergency actions and to identify and prioritize the use of resources needed to respond to the emergency. The EOC may issue

emergency warnings or disseminate critical information and instructions to government personnel and the public who may need to take emergency protective actions.

Emergency Management

Emergency Management typically consists of various levels or hierarchies and normally includes the Federal Emergency Management Agency (FEMA) at the federal level, Washington Military Department Emergency Management Division at the state level, and the Emergency Management Departments at the county and local levels.

They have day-to-day responsibilities for emergency management programs and activities. Emergency Management coordinates resources from all sectors before, during, and after an emergency and manages activities in all four phases of emergency management which are described as:

- Mitigation
- Preparedness
- Response
- Recovery

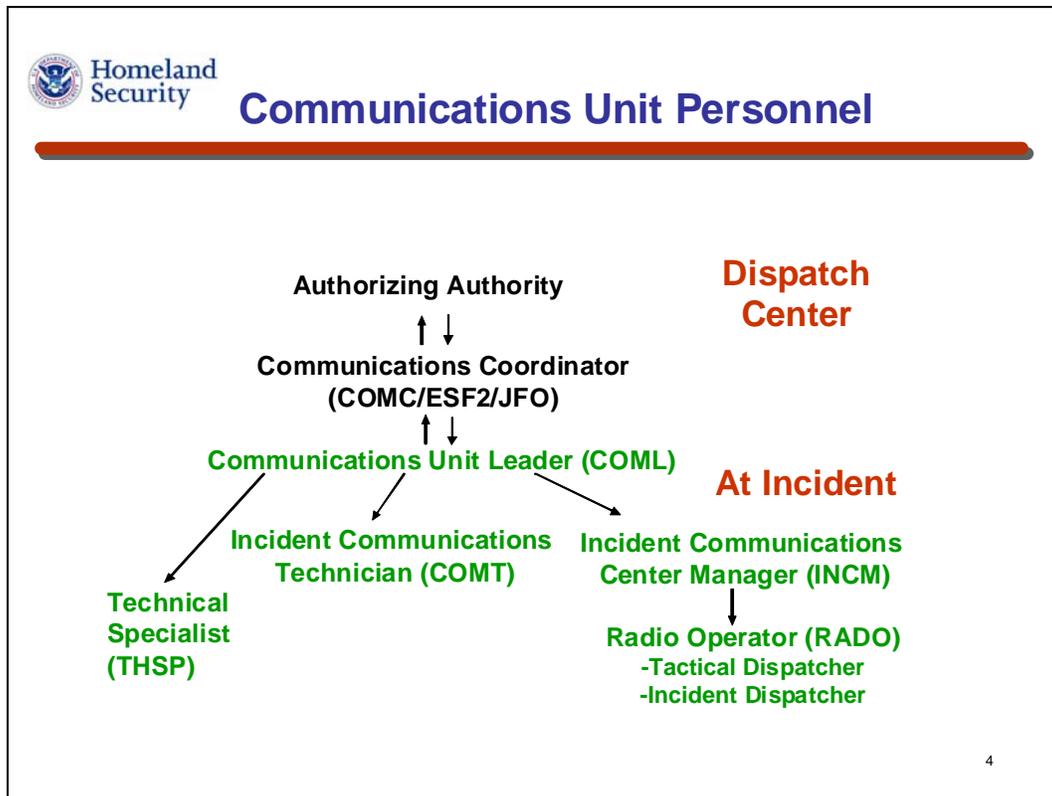
Additional roles and functions of Emergency Management may include:

- Awareness of potential threats to the community
- Participation in mitigation and prevention activities
- Planning for emergencies
- Operating effectively in emergency situations
- Coordinating effective recovery operations after a disaster
- Coordinating all components of the emergency management system, including:
 - Fire and law enforcement
 - Emergency medical programs services
 - Public works
 - Volunteer and voluntary organizations
 - Other groups involved in emergency activities

Communications Unit Leaders (COML)

The COML is responsible for developing and implementing plans to ensure effective incident communications. They serve as radio communications unit leaders during all-hazards emergency operations. This training will significantly improve communications across the multiple disciplines and jurisdictions responding to an incident. The COML will qualify emergency responders as lead radio communications coordinators if they possess the necessary prerequisites, including knowledge of local communications; communications systems; and local, regional, and state communications plans. COML responsibilities include developing plans for the effective use of incident communications equipment and facilities, managing the distribution of communications equipment to incident personnel, and coordinating the installation and testing of communications equipment.

The COML in the current version of ICS reports to the services section of the logistics branch and is responsible for managing the positions shown in green below.



Communications Unit Personnel Authority⁵

The responsibilities of the Communications Unit Leader may include:

- Determine Unit personnel needs.
- Prepare and implement the Incident Radio Communications Plan (ICS Form 205).
- Ensure the Incident Communications Center and the Message Center is established.
- Establish appropriate communications distribution/maintenance locations within the Base/Camp(s).
- Ensure communications systems are installed and tested.
- Ensure an equipment accountability system is established.
- Ensure personal portable radio equipment from cache is distributed per Incident Radio Communications Plan.
- Provide technical information as required on:
 - Adequacy of communications systems currently in operation.
 - Geographic limitation on communications systems.

⁵ OEC All Hazards Communications Leader Training Course, Unit One

- Equipment capabilities/limitations.
- Amount and types of equipment available.
- Anticipated problems in the use of communications equipment.
- Supervise Communications Unit activities.
- Maintain records on all communications equipment as appropriate.
- Ensure equipment is tested and repaired.
- Recover equipment from Units being demobilized.
- Maintain Unit/Activity Log (ICS Form 214).

The COML's responsibility is to ensure effective incident communications through planning, coordination, implementation, or delegation.

Governance

Governance refers to establishing a shared vision and collaborative decision-making process that support interoperability efforts to improve communication, coordination, and cooperation across disciplines and jurisdictions. This vision is set and maintained by a group of individuals representing the broadest possible group of relevant organizations.

“Establishing a common governing structure for solving interoperability issues will improve the policies, processes, and procedures of any major project by enhancing communication, coordination, and cooperation; establishing guidelines and principles; and reducing any internal jurisdictional conflicts. Governance structures provide the framework in which stakeholders can collaborate and make decisions that represent a common objective. It has become increasingly clear to the emergency response community that communications interoperability cannot be solved by any one entity; achieving interoperability requires a partnership among emergency response organizations across all levels of government. As such, a governing body should consist of local, tribal, state, and Federal entities as well as representatives from all pertinent emergency response disciplines within an identified region.”⁶

The National Emergency Communications Plan July 2008 identifies Objective 1: Formal Governance Structures and Clear Leadership Roles.

“Formal decision-making structures and clearly defined leadership roles coordinate emergency communications capabilities.”

The approach for the State of Washington is Regional Committees Working within a Statewide Communications Interoperability Plan Framework to include Multi-disciplinary jurisdictions working together across a region pursuant to formal written agreements as defined within the larger scope of a state plan—promoting optimal interoperability.

Interoperability Continuum

Standard operating procedures—formal written guidelines or instructions for incident response—typically have both operational and technical components. Established SOPs enable emergency responders to successfully coordinate an incident response across disciplines and jurisdictions.

⁶ Department of Homeland Security, SAFECOM: www.safecomprogram.gov/.../Interoperability_Continuum_Brochure_2.pdf

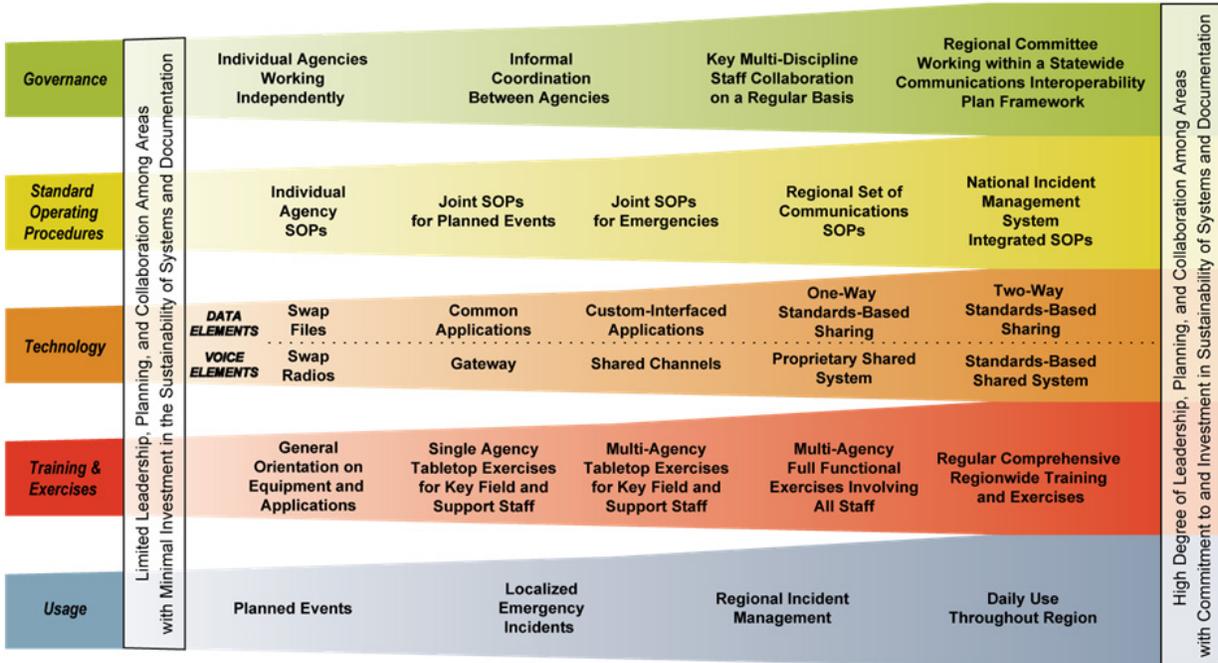
Clear and effective SOPs are essential in the development and deployment of any interoperable communications solution.

- Individual Agency SOPs—SOPs exist only within individual agencies and are not shared, resulting in uncoordinated procedures and/or incompatible data systems among agencies that can hinder effective multi-agency/multi-discipline response.
- Joint SOPs for Planned Events—The development of SOPs for planned events—this typically represents the first phase as agencies begin to work together to develop interoperability.
- Joint SOPs for Emergencies—SOPs for emergency level response that are developed as agencies continue to promote interoperability.
- Regional Set of Communications SOPs—Region-wide communications SOPs for multi-agency/multi-discipline/multi-hazard responses serve as an integral step towards optimal interoperability.
- National Incident Management System Integrated SOPs—Regional SOPs are molded to conform to the elements of the National Incident Management System.⁷

⁷ http://www.safecomprogram.gov/NR/rdonlyres/54F0C2DE-FA70-48DD-A56E-3A72A8F35066/0/Interoperability_Continuum_Brochure_2.pdf



Interoperability Continuum



Communications Asset and Mapping Tool (CASM)

For the purpose of this document, the Communications and Asset Mapping is defined as a system that allows interoperability stakeholders, such as Incident Management Teams (IMT) and police, fire, and emergency medical services (EMS) and other first and second responder agencies, to have the ability to track communication inventories, identify interoperability requirements and, identify interoperability gaps in response area across Washington State. CASM is a web-based tool that assists public safety agencies to collect and visualize data, and assess inter-agency interoperability based on the communication assets and interoperability methods (i.e. land mobile radios, gateways, radio caches, interoperability channels, etc.) that exist in their urban area or state. CASM should be used as a best practice.

I. Purpose/Objectives

Identify the best practice uses of the CASM interoperability tool to support interoperable communications planning in Washington State and with jurisdictions in neighboring states. The CASM tool aids emergency management personnel by developing accurate situational awareness of their own interoperability capabilities while also helping to plan interoperable communications with neighboring jurisdictions, state-level agencies, and Federal agencies.

II. Technical Background

The CASM (Communication Asset and System Mapping) tool is comprised of two web-based components; The Computer Communication Assets Survey component and the Communication Assets Mapping component. CASM tool was released 18 July 2005 for general use by Urban Areas that received grants from the Department of Homeland Security, Office of Grants and Training and who had requested Interoperable Communications Technical Assistance Program (ICTAP) Services.

CASM provides a single database to collect information about land mobile radio systems, other interoperability methods and how they are used by public safety agencies within an urban area or other part of the state. It includes a method to display the data along with tools to analyze the data and visualize interoperability gaps in accordance with the SAFECOM Interoperability Continuum framework.

The CASM tool consists of two components: the Communication Assets Survey (CAS) and the Communication Assets Mapping (CAM) tool.

- The CAS component provides a means to input, edit and delete information about an agency's communications assets and usage. Information is entered for assets such as radio systems, dispatch centers, mutual aid channels/systems, gateways and radio caches.
- The CAM component provides a means to display this information in a map-based interface and analyzes the data to display agency-to-agency interoperability in various ways.

CASM has three primary components of security for the collected data:

- Data is stored on a server at a Department of Defense (DoD) facility, subject to standard DoD security measures, including periodic internal probes.

- Utilizes HTTPS (hyper text transfer protocol with secure sockets layer) which encrypts the data as it travels over the internet.
- Controlled Data Access; all users have individual user accounts
 - Each account has access only to the urban area or state they are associated with.
 - Strong passwords are enforced.
 - 3 Strikes Rule: after three unsuccessful attempts to login with an incorrect password, the account is locked until the user requests an administrator to unlock it.
 - User account creation is controlled by the urban area or state.

III. Operational Context

CASM is a web-based single repository to support interoperable communications analysis to;

- Facilitate information sharing
- Hold communication assets inventory assessment (agency, region, statewide)
- Foster inter-agency interoperability analysis Enable development of Tactical Interoperable Communication Plans (TICPs)
- Evaluate an agency's "Need vs. Ability" to communicate

CASM enables:

- Creation of Inventory (agency, region)
- Understanding of the level of interoperability between agencies/regions
- Identification of interoperability gaps
- Provides information with which to create Investment justifications / funding requests
- Development of plans to close gaps and improve interoperability

By using CASM, your jurisdiction and region of the State will benefit by:

- **Sharing Data.** CASM makes communication assets and interoperability data available to authorized users within an urban area or state. Assists participating public safety agencies in understanding the interoperability methods used by neighboring agencies.
- **Access to Up-to-Date Data.** Repetitive data collection efforts need not be conducted once data has been entered into CASM. Maintenance of existing data is easy and may be done at any time.
- **Identifying Gaps.** CASM provides a number of different ways to visualize potential interoperability between agencies in an urban area or state. This information may be used to design solutions to interoperability gaps.
- **Reporting Options.** CASM provides eight different pre-formatted reports that may be converted to standard word processing or spreadsheet documents for further customization by individual users.

CASM enhances interoperability planning:

- Urban area or state Interoperability is displayed in a clear, color-coded format.
- Inter-agency Interoperability is illustrated using the *Interoperability Matrix or Compatibility Tool* and is calculated based on data entered by agency representatives.
- Information from the FCC license database can be imported into the tool

- Information from CASM can be exported to provide critical information required for the development of a Tactical Interoperable Communications Plan (TIC-P) for your agency or region.
- **Sharing Data** - CASM makes communication assets and interoperability data available to authorized users within an urban area or state. The tool assists participating public safety agencies in understanding the interoperability methods used by neighboring agencies, across disciplines and jurisdictions.
- **Access to Up-to-Date** - Repetitive data collection efforts need not be conducted once data has been entered in CASM. Maintenance of existing data is easy and may be done at any time.
- **Identifying Gaps** - CASM provides a number of different ways to visualize potential interoperability between agencies in an urban area or state. This information may be used to design solutions to interoperability gaps.
- **Reporting Options** - CASM provides eight different pre-formatted reports that may be easily converted to standard word processing or spreadsheet documents for further customization by individual users.

CASM provides an on-line training tutorial which will assist users in learning how to enter and extract data from the system and how to utilize the information for interoperability planning purposes. Additional training and assistance can be obtained by contacting the state's CASM administrator.

IV. Recommended Best Practice

All jurisdictions of the State are encouraged to adopt CASM as a primary interoperability planning tool. Access to the tool is administered in Washington State by the Washington State Patrol's State Interoperability Executive Committee Project Manager. You may request a CASM account by sending an e-mail to CASM@wsp.wa.gov.

To begin using the CASM Tool each county or city must:

- Appoint a CASM contact and request a user name and password.
- Contact the State administrator for CASM (SIEC Project Manager) and request a user name and password.
- Consider how they want to further delegate user privileges for agency level management and data entry.
- Plan data collection for communications systems.
- Utilize the collected information to identify interoperability opportunities with neighboring jurisdictions and regions.
- Through use of the tool, identify and document your agency's interoperability gaps and future interoperability requirements and, plan for addressing interoperability deficiencies and needs.

CASM use provides a cost effective means to inventory and analyze the public safety communications assets used in the state of Washington. Although not mandatory, use of CASM benefits user agencies and the state as a whole through development of a repository of information that can be used to document and communicate our interoperability readiness

and our needs. CASM will aid us when communicating status and needs to elected officials and with the federal government as well.

DRAFT

3. INTEROPERABLE COMMUNICATIONS EXERCISE AND TRAINING

The National Emergency Communications Plan identifies Objective 5: Emergency Responder Skills and Capabilities

“Emergency responders have shared approaches to training and exercises, improved technical expertise, and enhanced response capabilities.”

“Training and exercises play a vital role in preparedness, readiness, and proficiency in accessing and using communications capabilities during emergency events. Preparedness is essential to ensuring that interoperable emergency communications equipment is well maintained, operational, and ready for deployment. Achieving appropriate levels of readiness and proficiency ensures that personnel can deploy, set up, and use equipment effectively, both on their own and in conjunction with other emergency responders. Conducting training and exercises helps emergency responders understand their roles and be properly prepared to respond to a wide range of emergency events.”⁸

The Department of Homeland Security, SAFECOM provides additional guidance tools regarding training and exercises. The Interoperability Continuum identifies the following levels of interoperability. A low degree of interoperability is associated with a General Orientation on Equipment and Applications, with a progressive continuation toward Regular Comprehensive Region wide Training and Exercises at the optimal level of the continuum.

“Implementing effective training and exercise programs to practice communications interoperability is essential for ensuring that the technology works and responders are able to effectively communicate during emergencies.

General Orientation on Equipment and Applications—Agencies provide initial orientation to their users with regard to their particular equipment and applications. Multi-agency/multi-jurisdictional operations are often an afterthought to this training, if provided at all.

Single Agency Tabletop Exercises for Key Field and Support Staff— Structured tabletop exercises promote planning and identify response gaps. However, single agency activities do not promote interoperability across disciplines and jurisdictions. Additionally, management and supervisory training is critical to promoting routine use of interoperability mechanisms.

Multi-Agency Tabletop Exercises for Key Field and Support Staff— As agencies and disciplines begin working together to develop exercises and provide field training, workable interoperability solutions emerge. Tabletops should address data and/or voice communications interoperability and focus on effective information flow.

⁸ Department of Homeland Security, [National Emergency Communications Plan](#)

Multi-Agency Full Functional Exercises Involving All Staff—Once multi-agency/multi-discipline plans are developed and practiced at the management and supervisory level, it is critical that all staff who would be involved in actual implementation receive training and participate in exercises.

Regular Comprehensive Region wide Training and Exercises— Optimal interoperability involves equipment familiarization and an introduction to regional/state interoperability at time of hire (or in an academy setting). Success will be assured by regular, comprehensive, and realistic exercises that address potential problems in the region and involve the participation of all personnel.

Despite the best planning and technology preparations, there is always the risk of the unexpected—those critical and unprecedented incidents that require an expert at the helm who can immediately adapt to the situation. Within the Incident Command System, these specialists are called Communications Unit Leaders. The role of the Communications Unit Leader is a critical function that requires adequate training and cannot be delegated to an individual simply because that person “knows about communications systems.” Rather, the proper training of these individuals is of significant importance to a region’s ability to respond to unexpected events, and it should prepare them to manage the communications component of larger interoperability incidents by applying the available technical solutions to the specific operational environment of the event.⁹

HSEEP: “The Homeland Security Exercise and Evaluation Program (HSEEP) is a capabilities and performance-based exercise program that provides a standardized methodology and terminology for exercise design, development, conduct, evaluation, and improvement planning. The HSEEP constitute a national standard for all exercises. Through exercises, the National Exercise Program supports organizations to achieve objective assessments of their capabilities so that strengths and areas for improvement are identified, corrected, and shared as appropriate prior to a real incident. The HSEEP is maintained by the Federal Emergency Management Agency’s National Preparedness Directorate, Department of Homeland Security.

Exercise program management consists of the functions required for an entity (e.g., State, region, county, city, department, agency, private company, or other organization) to sustain a variety of exercises, targeted toward preparedness priorities, on an ongoing basis. It includes project management, multi-year planning, budgeting; grant management, staff hiring, funding allocation, and expenditure tracking.

The basis of effective exercise program management is a Multi-Year Training and Exercise Plan. A Training and Exercise Plan Workshop is usually conducted in order to create a Multi-Year Training and Exercise Plan. During the workshop, participants review priority preparedness capabilities and coordinate exercise and training activities that can improve and validate those capabilities. As a result of the workshop, the Multi-Year Training and Exercise Plan outlines a multi-year schedule and milestones for execution of specific training and exercise activities.

⁹ Interoperability Continuum Brochure-2, http://www.dhs.gov/files/publications/gc_1285865538920.shtm

Program management functions cyclically. First, a Multi-Year Training and Exercise Plan is developed in consideration of an entity's preparedness priorities. Next, specific exercise activities are planned and conducted according to the multi-year plan's schedule. Finally, exercise planners consider post-exercise After Action Reports / Improvement Plans (AARs/IPs) when developing priorities for the next multi-year plan, as well as updating plans and procedures, acquiring new equipment, and conducting additional training.

HSEEP Exercise Project Management

Exercise project management is a component of exercise program management used to carry out the activities needed to execute an individual exercise. Exercise project management involves five phases, which are collectively known as the *exercise cycle*. Exercises conducted in accordance with the phases of the exercise cycle lead to tangible preparedness improvements. The five phases of the exercise cycle are as follows:

1. **Foundation:** The following activities must be accomplished to provide the foundation for an effective exercise: create a base of support (i.e., establish buy-in from the appropriate entities and senior officials); develop a project management timeline and establish milestones; identify an exercise planning team; and schedule planning conferences.
2. **Design and Development:** Building on the exercise foundation, the design and development process focuses on identifying objectives, designing the scenario, creating documentation, coordinating logistics, planning exercise conduct, and selecting an evaluation and improvement methodology.
3. **Conduct:** After the design and development steps are complete, the exercise takes place. Exercise conduct steps include setup, briefings, facilitation/control/evaluation, and wrap-up activities.
4. **Evaluation:** The evaluation phase for all exercises includes a formal exercise evaluation, an integrated analysis, and an After Action Report/Improvement Plan that identifies strengths and areas for improvement in an entity's preparedness, as observed during the exercise. Recommendations related to areas for improvement are identified to help develop corrective actions to be tracked throughout the improvement planning phase.
5. **Improvement Planning:** During improvement planning, the corrective actions identified in the evaluation phase are assigned, with due dates, to responsible parties; tracked to implementation; and then validated during subsequent exercise.

Washington State Department of Emergency Management: The Washington State Department of Emergency Management advises that the requirements for the Interoperable Emergency Communications Grant Program (IECGP) are that all exercises be in accordance with the HSEEP guidelines for funding.¹⁰

¹⁰ https://hseep.dhs.gov/pages/1001_HSEEP7.aspx

Interoperable Communications Exercise, Training and Best Practices Policy

I. Purpose and Objective

“Communications” refers to both the technology as well as the knowledge of the responders utilizing that technology to effectively and efficiently communicate inside and outside of their jurisdictions. Communications is often one of the top issues identified in any exercise after action report and improvement plan. Implementation of effective training and exercise programs to practice communications interoperability ensures that the technology works and responders are able to effectively communicate during emergencies. Following a recommended time table outlining types and frequency of training exercises ensures that Public safety and service professionals become proficient and more accurate with their communications equipment when it is needed during emergencies.

II. Scope

This Policy has been approved by the Washington State Interoperability Executive Committee and applies to all Public Safety First Responder Agencies within Washington State.

III. Recommended Best Practices

Washington conducts regular comprehensive regional training and exercises that are inclusive of interstate and international participation. These exercises prepare the state to respond to a wide variety of emergency situations varying in scale from local response to that requiring assistance from or providing assistance to outside jurisdictions, other states, the federal government, and Canada. Following the SAFECOM-Homeland Security Interoperability Continuum it is recommended that communications interoperability and technology be emphasized at all levels of training and exercises.

All personnel should complete training following FEMA guidelines for NIMS Compliance. It is also recommended that all training exercises are in accordance with Homeland Security Exercise and Evaluation Program (HSEEP). This is a performance-based exercise program that provides a standardized methodology and terminology for exercise design, development, conduct, evaluation, and improvement planning. It is a requirement for the Interoperable Emergency Communications Grant (IECGP) that all exercises be in accordance with HSEEP guidelines for funding.

IV. References

Homeland Security- Interoperability Continuum Tool (SAFECOM)
Washington Statewide Communications Interoperability Plan
Washington Statewide Homeland Security Strategic Plan 2006-2011

<http://www.emd.wa.gov/plans/documents/WAHLSSstrategic2006-2011.pdf>
<http://www.fema.gov/emergency/nims/NIMSTrainingCourses.shtm#item5>
https://hseep.dhs.gov/pages/1001_HSEEP7.aspx

4. OPERATIONS

During significant multi-operational period events, local and regional agencies may find themselves utilizing resources (equipment and personnel) from neighboring agencies or agencies from across the State. To ensure the safe coordinated response of all agencies communications must not fail. This component of the Washington State Interoperability Policies, Procedures and Best Practices document will provide guidance on the technical background and the underlying constraints of the technology, it will give operational context, recommended protocol standards and procedures and the management of these resources.

Plain Language Policy

I. Introduction

This Policy has been approved by the Washington State Executive Interoperability Committee and applies as a Best Practice to all Public Safety First Responder Agencies within Washington State. First responders providing mutual aid must be able to communicate clearly, succinctly and during periods of stress and ensure multi-discipline first responders clearly understand their message. A key component of interoperable communications is the ability to communicate using a common language. The NIMS Integration Center recommends the use of plain English language to be used for multi-agency, multi-jurisdiction and multi-discipline events.

II. Purpose

Public Safety First Responder Agencies are encouraged to implement plain language in their day-to-day operations to avoid confusion and misinterpretation among different disciplines and agencies. Plain language communication will ensure consistent, uniform training and operation for public safety first responders. During emergencies first responders will react as they are trained or routinely operate.

III. Definitions

- Plain Language or Plain English – communication that can be understood by the intended audience and meets the purpose of the communicator.
- Common Terminology – normally used words and phrases—avoiding the use of different words/phrases for similar concepts—to ensure consistency and to allow diverse incident management and support organizations to work together across a wide variety of incident management functions and hazard scenarios.

IV. References

- Plain Language Frequently Asked Questions (FAQS), Homeland Security, June 2010.
- Plain Language Guide “Making the Transition from Ten Codes to Plain Language”, Homeland Security.
- Washington Statewide Communications Interoperability Plan.
- Department of Homeland Security. National Incident Management System.

V. Suggested Standardized Terms

Intended Message	Suggested Term	Alternate Term
Need emergency assistance – then explain the need	Emergency	Help
Need priority assistance – short of an emergency – then explain the need	Priority	Priority Backup or Priority Assistance
Need assistance routine	Routine	
Confidential information to relay – Could be medical or wanted person information which is a safety issue	Message Pending	
Information that is not for the general public, or is administrative routine	Message Pending Routine	
Identifying the side of a building. Generally the Front entrance or door is Side A and then work in a clockwise rotation to label the remaining 3 sides. Exception could be a more prominent entrance on the street side of the building could be Side A	Side A Side B Side C Side D	
Identifying vertical floors in a building. Ground level is considered floor 1. Sublevels would be numbered -1, -2 etc.	Floor minus 1 Floor 1 Floor 2	
Clear the channel of routine traffic for a critical incident	Priority Traffic Only	
Acknowledgment of message or responding yes	Affirmative	
Advising that a message was incorrect, or a response requires no	Negative	

VI. Initiating a radio call – Communication Order Model

There are two widely accepted methods for initiating a radio call, each having their own benefits and limitations. The first method is for the calling party to identify themselves on the radio first, followed by identifying the party they wish to communicate with. An example of such a call is “Officer 212, dispatch”. This shows that Officer 212 wants to talk to the dispatch center. The second method is for the calling party to first identify the party in which

they wish to contact, followed by their own identification. This example may be something such as “Dispatch, Officer 212”. Some examples of each method’s strengths and weaknesses are listed below.

Method	Strengths	Weaknesses
Identify self first	Tends to queue listeners on who is talking on the radio. If transmission is cut-off, the identification of the calling party is still known.	With certain radio systems, users must pause for the system to open a talk path first. If the user does not wait, the first syllables may be missed and identification may be lost.
Identify called party first	Tends to queue specific listener for their attention.	If transmission is cut-off, listeners may not know who originated the message.

Phonetic Alphabet

It is recommended that the International Telecommunication Union (ITU) version of the phonetic alphabet be utilized in all future public safety training to allow the transition to a standardized radio communication phraseology system. It is understood that APCO has an alternate phonetic code that is commonly used by law enforcement – while the message may still be understood – standardization to the more broadly accepted and NIMS compliant ITU Phonetic Alphabet is recommended.

I. Background

Public safety agencies throughout the United States have traditionally have used a phonetic alphabet to clarify the spelling and meaning of certain words that are spoken over the radio. There are two generally accepted phonetic alphabets that are commonly used, the Public Safety Phonetic Alphabet and the ITU or Military Phonetic Alphabet. The Washington State SIEC recommends that every agency adopt the use of one of these standards so that clarity can be added to transmissions requiring the spelling of certain names, and words over the radio. The use of any phonetic alphabet when heard by the listener will convey to the listener the importance of the correct spelling of the word being transmitted. What is more important is that that there is consistence in the use of a particular phonetic alphabet by an agency so as to add less confusion to the listener if a repeat of the message is required.

II. Policy

The Washington State SIEC adopts the use of a phonetic alphabet to help clarify the transmission of names and certain important words that may otherwise be difficult to understand in radio transmissions.

III. Procedure

- Common phonetic alphabet descriptors for letters (such as “Alpha” or “Adam” for the letter “A”) should be used when trying to convey over the radio important words, names

or descriptions which may be critical to the message being sent. All public agencies within the State of Washington should adopt this policy by reference in their respective standard operating procedure manuals and general/standing orders.

- It is recommended that each agency adopt a standard phonetic alphabet for their use. Both the Public Safety (APCO) and the ITU/Military phonetic alphabets are recommended for use.
- Whether agencies chose to use one of the above phonetic alphabets or some other recognized format, agencies should insure that personnel are trained in, and consistently use the chosen format, so as to add consistency to transmissions and to minimize the likelihood of mistakes in the transmission of critical transmissions.
- Both the Public Safety and the ITU/Military Phonetic Alphabets are attached hereto.

ITU Phonetic Alphabet and Figure Code

When it is necessary to spell out call signs, service abbreviations and words, the following letter spelling table shall be used:

Letter to be transmitted	Code word to be used	Spoken as *
A	Alfa	<u>AL</u> FAH
B	Bravo	<u>BRAH</u> VOH
C	Charlie	<u>CHAR</u> LEE or <u>SHAR</u> LEE
D	Delta	<u>DELL</u> TAH
E	Echo	<u>ECK</u> OH
F	Foxtrot	<u>FOKS</u> TROT
G	Golf	GOLF
H	Hotel	HOH <u>TELL</u>
I	India	<u>IN</u> DEE AH
J	Juliette	<u>JEW</u> LEE <u>ETT</u>
K	Kilo	<u>KEY</u> LOH
L	Lima	<u>LEE</u> MAH
M	Mike	MIKE
N	November	NO <u>VEM</u> BER
O	Oscar	<u>OSS</u> CAH
P	Papa	PAH <u>PAH</u>
Q	Quebec	KEH <u>BECK</u>
R	Romeo	<u>ROW</u> ME OH
S	Sierra	SEE <u>AIR</u> RAH

T	Tango	<u>T</u> ANG GO
U	Uniform	<u>Y</u> OU NEE FORM
V	Victor	<u>V</u> IK TAH
W	Whiskey	<u>W</u> ISS KEY
X	X-ray	<u>E</u> CKS <u>R</u> AY
Y	Yankee	<u>Y</u> ANG KEY
Z	Zulu	<u>Z</u> OO LOO

* The syllables to be emphasized are underlined.

When it is necessary to spell out figures or marks, the following table shall be used:

Letter to be transmitted	Code word to be used	Spoken as **
0	Zero	ZEE-RO
1	One	WUN
2	Two	TOO
3	Three	TH-UH-REE
4	Four	FOW-ER
5	Five	FI-IV
6	Six	SIX
7	Seven	SEV-EN
8	Eight	ATE
9	Nine	NIN-ER
Decimal point	Decimal	DAY-SEE-MAL
Full stop	Stop	STOP

Each syllable should be equally emphasized.

Public Safety Phonetic Alphabet

Letter	Phonetic	Letter	Phonetic
A	Adam	N	Nora
B	Boy	O	Ocean
C	Charles	P	Paul
D	David	Q	Queen
E	Edward	R	Robert
F	Frank	S	Sam
G	George	T	Tom
H	Henry	U	Union
I	Ida	V	Victor
J	John	W	William
K	King	X	X-ray
L	Lincoln	Y	Young
M	Mary	Z	Zebra

VHF Interoperability and Mutual Aid Channels

Washington State has identified several VHF, mutual aid channels that are in service by many of the state agencies. These channels are also available to local governments for mutual aid and interoperability purposes, provided the local agency coordinates the Washington State Emergency Management and properly licenses with the FCC.

Name	Receive	Code	Transmit	Code	Wide / Narrow	Description
LERN	155.370	CSQ ¹¹	155.370	CSQ	Wide	Law Enforcement Radio Network
NLEC	155.475	CSQ	155.475	CSQ	Wide	National Law Enforcement Channel
SAR	156.150	CSQ	156.150	CSQ	Wide	Search and Rescue
Red Net	153.830	CSQ	153.830	CSQ	Wide	Fire Service Mutual Aid Network
OSCCR	156.135	CSQ	056.135	CSQ	Wide	On Scene Command and Control Radio Network
DNR Common	151.415	CSQ	151.415	CSQ	Narrow	Department of Natural Resources (DNR) Common
HEAR	155.340	Varies	155.340	Varies	Wide	Hospital Emergency Administrative Radio

¹¹ CSQ – Carrier Squelch

Channel Naming

The National Public Safety Telecommunications Council (NPSTC) has adopted new Channel Naming Conventions to standardize the names of channels and frequencies for interoperable use. In addition the Association of Public-Safety Communications Officials (APCO) has adopted these channel naming standards. The Standard Channel Nomenclature for the Public Safety Interoperability Channels can be found at <http://www.npstc.org/documents/APCO-NPSTC-ANSI-104-1web.pdf>. Pertinent channel names and frequencies are included in the following pages. Where the capabilities of the radios allow, all national interoperability channels with these naming conventions should be programmed into the radios.

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NPSTC Channel Naming Plan- Short Name Supplemental Addendum

FCC-Designated Interoperability Channels With Short Names Included

May 6, 2008 - Subscriber Programming Shown

Yellow = Narrow only with original FCC Docket name shown

Channeling: N = 11.25 kHz modulation bandwidth (narrowband)
W = 16 or 20 kHz modulation bandwidth, depending upon band (wideband)

Before Rebanding/Narrowbanding (Legacy Names)					
Current Name	Rx FREQ	Rx CTCSS	Tx FREQ	Tx CTCSS	Channeling
VHF LOW BAND					
Locally determined	39.4600	156.7	45.8600	156.7	W
Locally determined	39.4600	156.7	Simplex	156.7	W
Pending FCC	39.4800 is used today by numerous local agencies				
Locally determined	45.8600	156.7	Simplex	156.7	W
Locally determined	45.8800	156.7	Simplex	156.7	W
VHF HIGH BAND					
VCALL	155.7525	none	Simplex	none	N
VTAC1	151.1375	none	Simplex	none	N
VTAC2	154.4525	none	Simplex	none	N
VTAC3	158.7375	none	Simplex	none	N
VTAC4	159.4725	none	Simplex	none	N
Locally determined	154.2800	none	Simplex	none	W
Locally determined	154.2650	none	Simplex	none	W
Locally determined	154.2950	none	Simplex	none	W
NLEMARS	155.4750	none	Simplex	none	W

Post-Rebanding/Narrowbanding						
NPSTC Name	Short Name (6 char)	Rx FREQ	Rx CTCSS	Tx FREQ	Tx CTCSS	Channeling
VHF LOW BAND						
LLAW1	LLAW1	39.4600	156.7	45.8600	156.7	W
LLAW1D	LLAW1D	39.4600	156.7	Simplex	156.7	W
LFIRE2 (pend)	LFIRE2	39.4800	156.7	Simplex	156.7	W
LLAW3D	LLAW3D	45.8600	156.7	Simplex	156.7	W
LFIRE4	LFIRE4	45.8800	156.7	Simplex	156.7	W
VHF HIGH BAND						
VCALL10	VCAL10	155.7525	none*	Simplex	156.7	N
VTAC11	VTAC11	151.1375	none*	Simplex	156.7	N
VTAC12	VTAC12	154.4525	none*	Simplex	156.7	N
VTAC13	VTAC13	158.7375	none*	Simplex	156.7	N
VTAC14	VTAC14	159.4725	none*	Simplex	156.7	N
VFIRE21	VFIR21	154.2800	156.7	Simplex	156.7	N
VFIRE22	VFIR22	154.2650	156.7	Simplex	156.7	N
VFIRE23	VFIR23	154.2950	156.7	Simplex	156.7	N
VFIRE24	VFIR24	154.2725	156.7	Simplex	156.7	N
VFIRE25	VFIR25	154.2875	156.7	Simplex	156.7	N
VFIRE26	VFIR26	154.3025	156.7	Simplex	156.7	N
VMED28	VMED28	155.3400	156.7	Simplex	156.7	N
VMED29	VMED29	155.3475	156.7	Simplex	156.7	N
VLAW31	VLAW31	155.4750	156.7	Simplex	156.7	N
VLAW32	VLAW32	155.4825	156.7	Simplex	156.7	N

Current Name	Rx FREQ	Rx CTCSS	Tx FREQ	Tx CTCSS	Channeling
UHF					
UCALL	453.2125	none	458.2125	none	N
UCALLD	453.2125	none	Simplex	none	N
UTAC1	453.4625	none	458.4625	none	N
UTAC1D	453.4625	none	Simplex	none	N
UTAC2	453.7125	none	458.7125	none	N
UTAC2D	453.7125	none	Simplex	none	N
UTAC3	453.8625	none	458.8625	none	N
UTAC3D	453.8625	none	Simplex	none	N
800 MHz					
ICALL	866.0125	156.7	821.0125	156.7	W
ICALLD	866.0125	156.7	Simplex	156.7	W
ITAC 1	866.5125	156.7	821.5125	156.7	W
ITAC 1D	866.5125	156.7	Simplex	156.7	W
ITAC 2	867.0125	156.7	822.0125	156.7	W
ITAC 2D	867.0125	156.7	Simplex	156.7	W
ITAC 3	867.5125	156.7	822.5125	156.7	W
ITAC 3D	867.5125	156.7	Simplex	156.7	W
ITAC 4	868.0125	156.7	823.0125	156.7	W
ITAC 4D	868.0125	156.7	Simplex	156.7	W

NPSTC Name	Short Name (6 char)	Rx FREQ	Rx CTCSS	Tx FREQ	Tx CTCSS	Channeling
UHF						
UCALL40	UCAL40	453.2125	none*	458.2125	156.7	N
UCALL40D	CAL40D	453.2125	none*	Simplex	156.7	N
UTAC41	UTAC41	453.4625	none*	458.4625	156.7	N
UTAC41D	TAC41D	453.4625	none*	Simplex	156.7	N
UTAC42	UTAC42	453.7125	none*	458.7125	156.7	N
UTAC42D	TAC42D	453.7125	none*	Simplex	156.7	N
UTAC43	UTAC43	453.8625	none*	458.8625	156.7	N
UTAC43D	TAC43D	453.8625	none*	Simplex	156.7	N
800 MHz						
8CALL90	CAL90	851.0125	156.7	806.0125	156.7	W
8CALL90D	CAL90D	851.0125	156.7	Simplex	156.7	W
8TAC91	TAC91	851.5125	156.7	806.5125	156.7	W
8TAC91D	TAC91D	851.5125	156.7	Simplex	156.7	W
8TAC92	TAC92	852.0125	156.7	807.0125	156.7	W
8TAC92D	TAC92D	852.0125	156.7	Simplex	156.7	W
8TAC93	TAC93	852.5125	156.7	807.5125	156.7	W
8TAC93D	TAC93D	852.5125	156.7	Simplex	156.7	W
8TAC94	TAC94	853.0125	156.7	808.0125	156.7	W
8TAC94D	TAC94D	853.0125	156.7	Simplex	156.7	W

NOTE: For VHF Low Band, 156.7 Hz is recommended as a national standard for emergency use. However, it is advisable to follow the national law enforcement CTCSS plan to minimize atmospheric skip interference that can plague this band during periods of high sunspot activity.

NOTE: 6 character short name to only be used in radios that cannot support the full 8-character name. If the longer NPSTC-recommended name is 6 characters or less, it is also used for the short name, otherwise the name is abbreviated. 800 MHz short names have been approved by NPSTC. Other short names will be addressed during the ANSI standardization process.

NOTE: Tx CTCSS for paired UHF and 800 MHz channels may vary to permit transmitter steering for multi-site systems. However, use of multi-CTCSS base receivers is recommended so that systems always respond to 156.7 Hz as a national emergency tone. For 800 MHz channels, CTCSS plans and operational procedures often are addressed in 800 MHz Regional Plans.

(*) NOTE: At a future date to be determined during the ANSI standardization process, it is recommended that all nationwide interoperability channels have 156.7 Hz CTCSS on both receive and transmit frequencies. During the transition period, it is recommended that channels marked with an asterisk and already narrowbanded (VCALL/TAC and UCALL/TAC channels) should be programmed for CTCSS on subscriber transmit only, with carrier squelch on receive.

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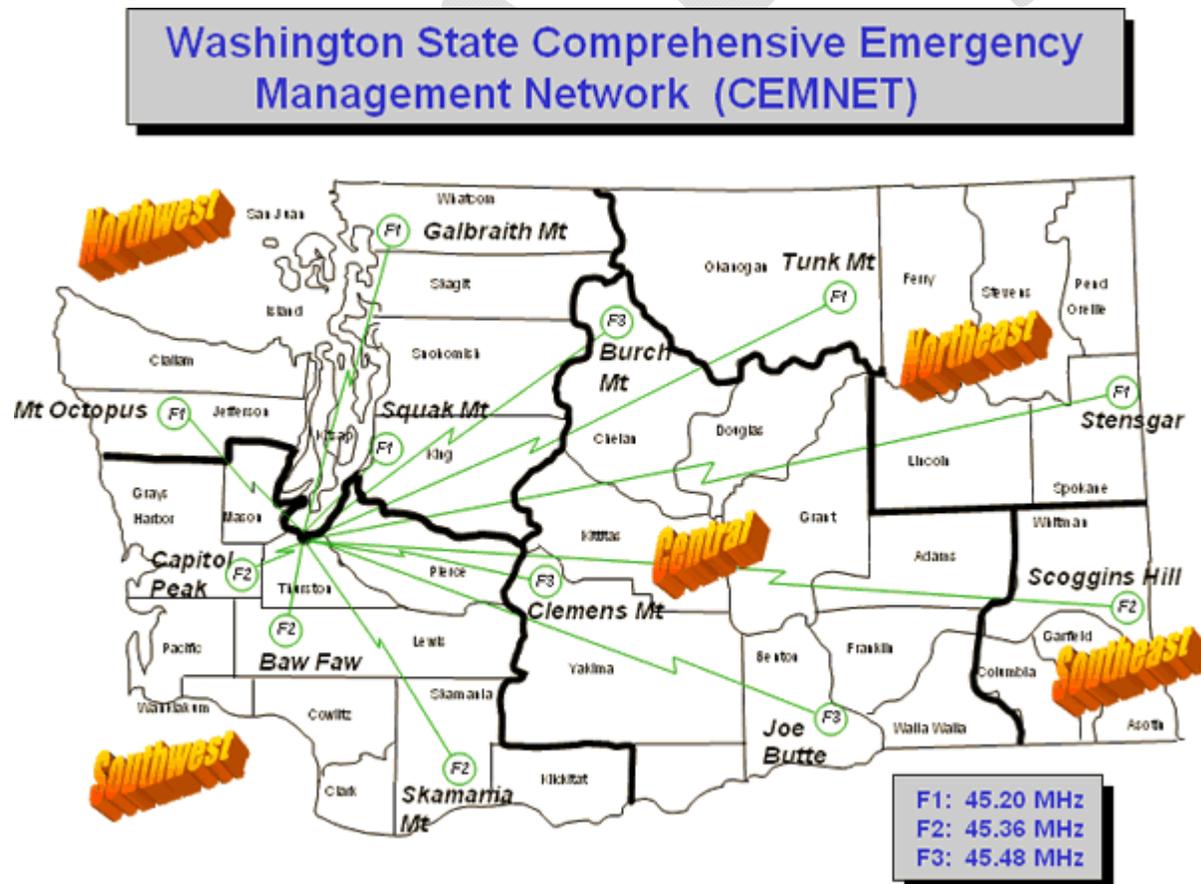
Comprehensive Emergency Management Network (CEMNET)

The Emergency Management Division (EMD) operates a statewide, very high frequency (VHF) low-band radio system, as the primary backup communication link between the state EOC and local EOC's throughout the state. It also serves as a link to other agencies such as:

- [Department of Ecology](#)
- [Department of Health](#)
- [University of Washington Seismology Lab](#)
- [National Weather Service](#), and
- [Harborview Medical Center](#).

The following map depicts the location of the twelve mountaintop base stations that comprise the backbone of the network. The CEMNET base stations are controlled from the state EOC through the Washington State Patrol microwave system.

CEMNET operates primarily on three (3) frequencies, designated for accountability purposes as F1- 45.200 MHz, F2 - 45.360 MHz, and F3- 45.480 MHz. In radios set up primarily for CEMNET use, this will usually correspond to channels 1, 2, and 3.¹²



¹² http://www.emd.wa.gov/telcom/telcom_cemnet.shtml

Channel Usage and Communications Protocols

It is essential for the incident commander and those responding to know, in advance, if they have the capability to communicate. Challenges to successful communication can begin with disparate radios and systems. To illustrate, a VHF radio cannot communicate directly to an 800 MHz without the proper bridging equipment. One must consider if they have the proper bridging/patching equipment, know where to acquire it, how to implement it, install it, and operate it. The proper operation of equipment is essential to successful communications.

Another consideration is having compatible frequencies or channels in the same system or radios among all types of responders. There will be times that cross disciplines will have to communicate effectively. There are a number of pre-determined frequencies on a state and national level that have been identified for use as interoperable channels. In addition, just because the same frequencies are in the same type of radios does not mean there will be effective communications. All channels must be labeled or identified the same. As an example, if one agency or discipline calls frequency “A” the “Blue” channel and another agency calls frequency “A” the “Brown” channel, they will never be able to communicate unless they each call frequency “A” by the same name. The identified interoperable channels have been named on a national and state level and they should be programmed into your display radios using that naming matrix. Some agencies use encryption in the radios or on certain channels. Even if the responders have the same frequency that is named the same, they will not be able to understand each other if one radio is encrypted and the other is not encrypted or if they have different encryption keys. The national interoperable channels are not allowed to be encrypted for this reason.

There can be differing capabilities on a channel by channel basis. For instance, simplex channels have less coverage or range than repeated channels. System-wide or multi-site channels have even greater coverage areas. Some channels may appear at the dispatch consoles while others may not. It is imperative to understand the capabilities and limitations of the various channels available for use. An example is the Law Enforcement Radio Network (LERN) channel. It is a non-repeated channel that has geographic limitations on its use. It may be possible for two mobile units to talk with each other on a non-repeated channel, but they may not be able to talk to a base station, depending on its location. This does not mean the channel cannot be used effectively. The Incident Commander (IC) and the responders need to know the limitations of the channel.

Users should also be familiar with the coverage areas as it pertains to geography so they are aware of “dead spots”, and other areas where communications may be impaired. These dead spots should be known and mapped out so an (IC) knows how to best use any particular channel. Some channels are not repeated while in some situations, responders have the option on their radios to make their channel “direct” or non-repeated.

There can be circumstances where user disciplines are very protective of their channels. Law enforcement and fire may each have their own channels, and as a rule, communications are limited to those disciplines on those channels. During situations when multiple agencies from multiple disciplines are responding to a significant event, the focus should be on communications

and the use of channels rather than based on who normally use the channel on a day-to-day basis. Most first responders want their message heard, even if it isn't the normal channel used. Successful operation of the communications portion of a critical event is paramount to a positive outcome of the event. Decisions are going to be made quickly and under stress during these types of events. The greater amount of planning and the number of these decisions that can be made and put in place prior to an incident will position your agency for a more positive outcome.

Protocols for Channel Assignment

Specialized Unit Communications

I. Purpose and Objective

This Policy has been approved by the Washington State Executive Interoperability Committee and applies to all public safety first responder agencies within Washington State. First responders may require or have a variety of multi-disciplinary specialized units (i.e. Air and Marine operations, etc.) providing law enforcement, fire, and EMS mutual aid assistance, and to whom they must communicate during initial response and in subsequent operating periods.

II. Technical Background

N/A

III. Operational Context

First responders must have processes and tools to effectively establish communications with responding specialized units, to support consistent, efficient, and safe operations for responders and the general public.

IV. Recommended Procedure

- Incident Commander will contact agency with specialized resource request.
- A communication frequency will be agreed upon.
- Agency with the specialized unit will advise of proper protocol for communication.
- Plain language will be used in accordance with ICS and NIMS.

V. Management

Management is the responsibility of the Incident Commander.

Radio Communications Caches

I. Introduction

During significant multi-operational period events, local and regional agencies may find themselves deficient in communications equipment capacity and / or capabilities. Communication caches (stockpiles: A supply stored for future use, usually carefully accrued and maintained) are located in a number of locations within the State with various levels of accessibility to emergency response agencies. This component of the Washington State

Interoperability Executive Committee Policies, Procedures and Best Practices Document will identify locations, contact persons, availability and requirements for accessing caches.

II. Purpose

Emergency response organizations, especially incident management teams, with a responsibility to effectively manage long term events recognize the value of having an adequate type and quantity of communications equipment and trained personnel available in a timely manner. Readily available information providing guidance for resource acquisition will be invaluable for pre-incident planning and incident management activities. Logisticians and communication section staff members depend on accurate and timely information for delivering communication needs in support of response and mitigation activities. This document will provide information that identifies;

- locations
- inventory
- potential access and requirements
- contact persons
- 24-hour contact for accessing equipment
- time required for deployment
- specialized training/ operator requirements
- cost
- other information useful for those with incident management responsibilities

III. Scope

This policy has been approved by the Washington State Interoperability Executive Committee and applies to all public safety first responder agencies and incident management teams within Washington State.

IV. Definitions

- Cache - stockpiles: A supply of communications equipment stored for future use and timely availability, usually carefully inventoried and maintained.
- COML – Communications Unit Leader within the incident command system. Requires specialized training and certification for assignment to Type I, II, and III incident management teams.
- Gateway - systems that interconnect channels of disparate systems (whether on different frequency bands or radio operating modes), allowing first responders using their existing radios and channels to be interconnected with the channels of other users outside of their agency.
- POC – agency point of contact

V. References

- NA

VI. Policies

- All equipment will be inventoried and tested on a monthly schedule, at a minimum.

- Review and update of the inventories identified in this document shall occur on an annual schedule – no later than March of each year. Coordination of inventory request and status review shall be conducted by SIEC staff.
- Portable radios are fully charged and maintained, ready for immediate deployment.
- Deployed equipment includes battery chargers to support extended deployments.
- All caches made available for deployment shall have a readily accessible inventory attached for use in the check-in process and demobilization.
- Personnel are available to transport equipment to the incident scene.
- Technicians are available for on-scene support during the deployment.

VII. Procedures

A. Radio Cache Request

The Incident Commander, or their designee, determines when a situation exists that requires the use of a regional radio cache and notifies the appropriate dispatch center / 24 hr. contact number. The dispatch center will follow internal agency procedures to contact the COML or Radio Cache Agency POC and relay pertinent information regarding the event. The requesting agency documents and provides the following information to the Radio Cache Agency POC, on request:

- Requesting agency
- On-scene agencies requiring interoperability
- Incident/event type of event (e.g., wild land fire, etc.)
- Equipment requirements
- Expected duration of event
- Location required/access information
- Incident POC
- User/requestor and/or servicing dispatch contact phone number
- Additional support services requested (e.g., technician, chargers, etc.)

The Radio Cache Agency determines what radio caches are available for use, identifies a specific cache, activates that cache, and coordinates the cache deployment with the requesting agency Incident Commander or their designee.

B. Region-wide Radio Cache Equipment Activation

Upon receiving a request for the deployment of a radio cache, the owning agency *dispatcher* should follow these deployment procedures:

- Contact the on-call technician responsible for radio cache deployment.
- Dispatch the radio cache technician (or an approved designee) to the incident scene.
- Inform the requesting agency that the radio cache is en route and provide an estimated time of arrival (ETA), if available.

The *radio cache technician (or designee)* should follow these deployment procedures:

- Provide dispatch with an ETA at the incident.
- Retrieve the radio cache from its storage location and deliver it to the incident scene.
- Report to the Incident Commander or Check-in on arrival.
- Once on-scene, sign the cache over to the requesting agency for incident use or, if assigned to remain on scene, coordinate radio cache deployment procedures with the Communications Unit.
- Each radio in the radio cache will have a unique identification number for inventory tracking. Ask the receiving agency to sign a property transfer form if they take responsibility for managing the radio cache on scene.
- The requesting Incident Commander, or their designee, will be responsible for:
 - Supporting radio deployments on-scene
 - Maintaining a record of each user and agency to whom a radio and associated accessories have been distributed
 - Documenting the identification number of each radio deployed
 - Documenting the channel(s) in use
- Each user and/or agency that receives a radio from the radio cache will be responsible for returning that radio and all associated accessories to the cache at the end of the incident.

C. Region-wide Radio Cache Equipment Deactivation

When the radio cache is no longer required, agencies should follow these deactivation procedures:

- Coordinate the return of all cache radios to the Communications Unit through the Incident Commander or their designee.
- The Communications Unit will be responsible for inventorying all radios and accessories returned to the cache. Before leaving the incident scene, the Communications Unit will determine if any radios have not been returned to the radio cache and note the user and agency to which the radio was distributed. Provide this information to the Incident Commander or their designee.
- If the missing radios cannot be recovered at the incident scene, the Communications Unit will provide this information to the Radio Cache Agency POC for resolution.

D. Radio Cache Problem ID and Resolution

During an incident:

- Report radio cache problems to the radio cache technician or their designee who will follow established agency procedures to resolve the problem.

Following an incident, the following general problem ID and resolution processes apply to all regional radio caches:

- Report any problems with the radio cache to the appropriate POC for the owning agency listed. The POC will be responsible for ensuring effective resolution to problems that exist with the radio cache.
- Report unresolved radio cache problems directly to the State/Region/Urban Area or Communications Coordinator/COML/designee. The State/Region/Urban Area or

Communications Coordinator/COML/designee ensures effective resolution to reported radio cache problems.

- VIII. Practices
Noted above.

Mobile and Fixed Gateway Patch

For the purpose of this Standard Operating Procedure (SOP), there are two types of gateway devices that are addressed. A Mobile Gateway Patch is defined as a system that allows mobile users, such as Incident Management Teams (IMT) and police, fire, and emergency medical services (EMS) command vehicles, to have the ability to establish the patches needed to cross-connect disparate wireless resources. These devices are generally field deployable, and may be housed in a variety of field deployable configurations such as in a deployable communication unit, mobile command post, or in other means. Fixed gateway devices generally are associated with more permanent communication installations where interconnection between radio channels and resources are always available either as an “always on” or as an “on demand” connection to dispatchers and field personnel. Mobile gateways also provide users with the ability to control their radio/wireless resources from remote locations. For purposes of this procedure, emphasis is placed on field deployable gateway devices and to those gateway devices which are in fixed locations, but not connected to the home systems of agency controlling the device and not generally considered to be part of the fundamental design and day-to-day use of the home system.

- I. Purpose/Objectives
Establish SOPs for the use of a mobile gateway to connect disparate wireless systems to support communications interoperability between dissimilar wireless systems in the field at the incident scene. The resource connection, provided by the mobile gateway, will be between each agency (Federal, State, regional, etc.) or when utilized on as an identified resource needed to establish interoperable communications requirement(s) in need of interoperability using the gateway patched to the wireless resource of the on-scene agency. The objective is to have an SOP in place for the agencies to have pre-established mobile gateway wireless resources available to external responding on-scene agencies with the need to interoperate during the incident.
- II. Technical Background
A mobile gateway patch between each agency (Federal, State, regional, etc.) will enable access by a disparate wireless resource to another agency’s connected wireless resource. There may be a wireless resource connecting other resources to support multi-agency, multi-jurisdictional communications during mutual aid incidents.

III. Operational Context

Established mutual aid response protocols between agencies and disciplines will provide the basis for operational activation of the mobile gateway. The following is a hierarchy of projected operations based on priority, with the first operation holding the highest priority:

- A large-scale emergency incident that requires a multi-agency, multi-jurisdictional response (e.g., a natural disaster such as a hurricane, a terrorist incident involving weapons of mass destruction).
- Everyday response-level communications to emergency or urgent incidents that require mutual aid response from multiple agencies (e.g., high-speed pursuits crossing jurisdictional boundaries, a large warehouse fire requiring mutual aid response).
- Special event control activities, generally of a pre-planned nature, involving joint participation of two or more agencies (e.g., a large sporting event such as a college football game, a dignitary visit).
- Drill, maintenance, and test exercises.

IV. Recommended Protocol/Standard

Established mutual aid response protocols between the agencies will provide the basis for operational activation of the mobile gateway. The following is a hierarchy of projected operations based on priority, with the first operation holding the highest priority:

- Gateway technology use is encouraged where a user can justify the use of “bridged” or “gateway” technologies to meet the operational or tactical interoperable requirements of the agency and where the absence of other solutions to meet those needs can be demonstrated.
- When such devices are acquired, the necessary interconnection to any system must be accomplished in a manner that will insure that their use will not impact system accessibility or performance for other users. Therefore, the use of these technologies to tie radios to talkgroups or systems for interoperability is permitted under clearly defined guidelines outlined in this standard.
- **Establish National Incident Management System (NIMS)** – Depending on the size of the incident, the use of an Incident Command System (ICS) compliant with the National Incident Management System (NIMS) is recommended when using any regional interoperability resource for large-scale multi-agency, multi-jurisdictional incidents.
- **Plain Language** – All interoperable communications during multi-agency, multi-discipline incidents should be in plain language. Avoid using radio codes, acronyms, and abbreviations as they may cause confusion between agencies. Ensure that all verbal requests for assistance or backup specify the reason for the request.
- **Unit Identification** – Announce your home agency prior to announcing your unit identifier during interoperable communications situations when utilizing the mobile gateway.
- **Encryption** – All encrypted radio users must operate in a “clear” mode when a mobile gateway is used, unless otherwise arranged in advance. Never assume that a mobile gateway can manage encryption between systems.

- **Monitoring** – If ICS is established and it is deemed appropriate, the Incident Commander, or his/her designee, will ensure that each channel or talkgroup connected by the gateway is monitored while in use. In a smaller mutual aid response, the Agency Lead may also require that each channel or talkgroup connected by the gateway be monitored. In situations where recording of radio traffic or talkgroups is available, it should be used.

V. Recommended Protocol Procedure

Caution and care shall be utilized at all times during the process of gateway activations since any missteps during the process have the potential impair communications on a large scale.

A. Mobile Gateway Request

The agency requesting the use of a cross-patch with the mobile gateway connection for incident or event communications support should provide the following information to the agency supporting the operation:

- Name of the agency and appropriate authorization verification (e.g., name of authorized user, lead responder for this agency, security credentials).
- The type of wireless resource needed (e.g., cell phone to radio, disparate agency radio to local tactical operational radio).
- The responsible party for requesting agency command or the lead relevant to the mutual aid request.
- The talkgroups/channels/wireless resources required to be connected.
- The duration of the patch activation.
- The process for patch audio monitoring and the responsible agent for recording (e.g., dispatch center, Incident Commander, Radio Operator).
- The designation or type of patch: “Command and Control” or “Tactical Operational.”

B. Mobile Gateway Activation

Once agencies agree to cross-patch their wireless resource, the procedures for establishing communications connectivity are:

- The use of existing system-based interoperability (console patches, CEB patches, etc.) resources should be explored to meet the need prior to interfacing one of these devices to system channels or Regional 800MHz. talkgroups.
- The system manager(s) must be notified prior to the deployment of the device. The deploying agency will provide the system manager with information on the device being used to accomplish the patch and in the case where it is to be patched to a trunked radio system, the 800MHz. ID of the radio(s) that will be used to bridge to the 800MHz. radio system, and the name of the talkgroup(s) that the device will be bridged to.
- This technology should only to be employed for short-term interoperability with conventional and trunked systems and talkgroups. Use for on-going operations is not permitted, without the approval of the System Managers or licensees.
- Setup will be by a trained operator of the device.

- The use of the Call Alert and Private Call features, system status messaging, etc, should not be used by patched resources unless the impact of the use of such features is approved by the trunked system managers.
- When interconnecting a gateway device to trunked radio system, the system managers of the trunked system should be consulted prior to interconnection of the of the gateway device so that specific features and requirements of the trunked system are known (such as shuffle band plan, etc.) prior to the activation of the device.
- Verify that the necessary elements for connectivity are available (e.g., patch cables, connection slots).
- Select the predetermined talkgroups or channels to establish a cross-patch with the disparate wireless resource.
- Verify the system-wide availability of required resources (coordinate among control point dispatchers).
- Provide radio call sign/designator information to connected agencies as necessary.
- Notify the requested unit/agency to the talkgroup or channel availability.
- Notify the responding units to the appropriate talkgroup and have the units switch to the designated shared talkgroup or channel, if required.
- Confirm responding units are operating on the appropriate talkgroup or channel.
- Identify users on the connected talkgroup or channel using their agency name and unit identifier through a roll call when appropriate (users in a secure setting or a mutual aid response may not require dispatcher validation).
- Announce to users at predetermined time intervals, specifically, that a mobile gateway connection is in place, and interoperable communications procedures are in effect as deemed necessary by the Incident Commander or Agency Lead.
- Monitor the connected talkgroup or channel to address requests as required.
- Monitor the system for problems that may require technician intervention.
- Monitor for system problems that may require a deactivation of the mobile gateway.
- Record the talkgroup(s) or channel(s), if required or where appropriate.
- Monitor designated calling channel where required.
- Establish recording and verify recording is active.

C. Mobile Gateway Deactivation

When the gateway connections are no longer required, agencies should follow these deactivation procedures:

- The authorizing agent requests the mobile gateway be deactivated.
- Announcement will be made over connected talkgroups or channels that connections will be deactivated prior to the connection being disabled.
- Prior to mobile gateway deactivation, agencies should ensure that all personnel have returned to their appropriate home talkgroups or channels.
- Agencies may want to conduct a roll call of all affected personnel to confirm they returned to their home systems.
- After deactivation of the mobile gateway, talkgroups or channels should be returned to their normal mode of operations.

D. Mobile Gateway Problem ID and Resolution

- Report any problems with the mobile gateway connections to the appropriate point of contact (POC) for that agency.
- A routine mobile gateway test schedule should be established periodically to confirm availability and operational use.
- After action reports should be utilized to help identify potential problems and prospective solutions.

VI. Management

The cooperating agencies are responsible for the operational management of their system. A governance structure will be established to ensure that legal, operational, technical, training, and funding issues are addressed.

Alternate Methods of Communications

I. Purpose and Objectives

There are instances where traditional radio communications between dispatch centers and first responders may be unavailable, limited, or otherwise impacted. The purpose of this section is to describe alternate methods of communications and illustrate how those options may be implemented for interoperable communications and planning.

II. Technical Background

N/A

III. Operational Context

N/A

IV. Recommended Standard

N/A

V. Recommended Procedure

There are a variety of methods to provide alternate communications when the traditional methods of communications fail, are limited, or otherwise impacted. The following are examples of alternate methods of communication that can be used in response planning and should be used as available or necessary as a best practice.

Method	Benefit	Limitation
Telephone/Conference Bridge	<p>They can usually be set up and operated quickly using existing PSTN.</p> <p>They can be mobile and can be set up in a variety of locations and conditions.</p>	<p>May not function in an emergency.</p> <p>May be limitations on long distance depending on location or servicer.</p> <p>May tie up several lines.</p> <p>Possible long distance costs.</p> <p>Ensure proper training and test setup as an exercise.</p>
Satellite Phone	<p>Works off of the PSTN. Independent of local land line carrier and cell provider.</p>	<p>May not work well inside building unless outside antenna is installed.</p> <p>Know the operation. Some have “push-to-talk, release-to-listen” rather than full duplex operation.</p> <p>Be aware of latency and delays.</p>
Video Teleconference (VTC)	<p>Can bring many locations together with video technology. Can be easy to illustrate a situation or demonstrate a procedure or activity.</p>	<p>Requires VTC equipment or configuration at each location.</p> <p>Requires large bandwidth to work properly.</p> <p>Ensure proper training and test setup as an exercise.</p>
Email/Internet/Intranet/E-fax	<p>Easy to deploy with mass communication capability.</p> <p>Several connection types available – in-house network, public network, WiFi, aircard, cable.</p> <p>Provides ability to post messages.</p>	<p>Requires a connection to the world wide web.</p>

Method	Benefit	Limitation
CAD Messaging / Dispatch-to-Dispatch Messaging / ACCESS	Convenient messaging that doesn't use PSTN or voice resources.	Requires CAD system compatibility. May be subject to public disclosure.
Commercial cellular, PTT, and text services	Many people have cell phones and are easy to contact.	Cell service may be busy or interrupted. Commercial rates may apply to services.
Social Networks	Many people follow and check their accounts and profiles for messages.	Use carefully and assign a single PIO to speak for all partners in a unified command.
Runner System	Does not require electronics or someone to pay the bill.	Slow and possibly inefficient depending on the situation.

VI. Management
N/A

Data Interoperability Best Practice -- Basic Data/File Interchange

I. Background

Occasionally during incidents or events first responders encounter the need to exchange information in a format that is held as an electronic file. This is particularly true when an incident expands to the degree that a significant amount of over head-staff is needed or is predicted to last beyond one operational period. Furthermore, the National Incident Management System requires that plans be in place as an incident enters the second operation period and for each subsequent operation period. These requirements and factors drive the need to interchange electronic data files, in real time, between first responders and incident management team members. Required records retention requirements are not discussed in this document but must be adhered to.

II. Policy

The Washington SIEC adopts this Data Interoperability Best Practice for Basic Data and File Interchange as a first step to ensure that responders operating under the conditions outlined above are able to exchange information in the field, as needed, in real time. Nothing in this best practice should be interpreted as prohibiting a more advanced method of exchanging data should one exist that will serve the incident's needs.

III. Procedure

- This procedure assumes that first responders' are using a computing device which has an available USB port. Furthermore it assumes that the computer is running reasonably

current version software and that the user has “permissions” in the operating system to be able to manipulate files and documents.

- Information should be exchanged using a self contained “USB Drive” or “USB Memory Stick”. This memory device shall have pre-installed drivers for all current operating systems that would likely be encountered. The memory capacity of the device shall be determined by the user given their need. The practical implementation of this may require that each person who will likely be involved in incident management must have a USB Memory Stick or USB Drive that can be dedicated into an incident.
- All computers involved in the data exchange shall be running current antivirus software. If possible, a separate computer is recommended to check for viruses on USB and other external drives before accessing the drive on an incident-critical computer.
- File Types: When creating, editing, or saving documents be sure to use common readily manipulated file types for your work. Examples of these are: (.txt, .pdf, .bmp, .jpg, .doc, .xls). You need to know which document processing software will be used by those who will continue your work once it is published and then save in file formats that allow for the transition. Do not save in the “most recently released” versions since many users could be using legacy versions of document processing software. (Example, save the file as “.doc” as opposed to “.docx” or, if operating with really old systems perhaps as “.txt”.)
- Consider what the document file will be used for now, in the near future, and in the distant future; and save your files accordingly. As an example, you may choose to edit an Incident Action Plan (IAP) using MS Word 2003 and then save it as a “.doc” file for future use and manipulation during the next shift. However, at the point the IAP is issued to the oncoming shift, a copy should be saved in a less-editable format, such as PDF. Finally, strongly consider embedding the date and time of creation or version in each file name for future reference.
- Plan for the exchange and continuity of the incident information. Develop and stick to a plan on how to control the flow of data at an incident that ensures that the stored information is complete, current and backed up.
- Exchanging Drives/Devices vs. Copying Files to Hard Drives; it may make sense to have one memory storage device for an Incident Management Team the spans all operational periods of any given incident which contains the historical as well as current versions of all relevant documents. Then, at each handoff, the parties involved in the handoff copy the entire drive to a separate folder on their computer’s hard drive for archiving and for backup. Thus, the portable drive would be backed up to the off-going shift’s hard drive, handed off to the oncoming shift, and backed up again to the oncoming shift’s hard drive.
- Handling Sensitive Information requires that extra steps and precautions be taken to ensure the security of sensitive data and to prevent unintended dissemination. Encrypted Drives should be used for this process. In some cases you may need two additional drives to insure that the sensitive data is backed up in a location that can’t be accessed by parties not privileged to view the data. Certain law enforcement data may require encryption devices that meet the FIPS 140.2 CJIS standard.
- Note that the Federal agencies may be prevented from file sharing in many circumstances due to federal information sharing regulations.

Amateur Radio Service (ARS) and Auxiliary Communications Services

I. Purpose and Objectives

Amateur radio emergency communications volunteers offer a flexible backup communications system to their stakeholders. They add value to an integrated interoperable communications plan. Services may include staff in an agency facility, at a command post during an emergency or disaster, or shadows accompanying supervisory/command officers to ensure relay of time urgent radio traffic.

During the preparations for the 2010 Winter Olympics the amateur radio emergency communications community, under the leadership of the Western Washington Section American Radio Relay League, planned, trained and exercised for the event. Hams from Northwest Washington and Southwest British Columbia attended training provided by the Department of Homeland Security, Office of Emergency Communications. Hams from Canada and the U.S. are supporting each other by sharing of staff and resources to provide the best possible back up communications to their stakeholders. Leadership of the American Radio Relay League and Radio Amateurs of Canada work closely to obtain transparency for handling emergency/disaster communications in the Pacific Northwest. Emergency Communications teams near Idaho and Oregon work closely with each other. Amateur radio emergency communications teams in Washington are ideal partners in helping stakeholders who have roles to fill when the Pacific Northwest Emergency Management Agreement (PNEMA) agreement is invoked and information must be shared in a timely manner between participating provinces and states.

II. Technical Background

Classes of Federal Communications Commission Amateur Radio Service Licenses and Interoperability provided for in FCC Rules.

The Amateur Radio Service (ARS) is governed by the Federal Communications Commission in accordance with 47 CFR Part 97. There are currently three license classes:

- **Technician Class** - this is the entry level license. It gives privileges on all amateur frequencies above 50 MHz and is the most popular.
- **General Class** - this is the mid-level license. It enables privileges on most amateur frequencies below 50 MHz and includes global HF (shortwave) communications.
- **Extra Class** - this is the highest level license. It grants privileges on all amateur frequencies. The technician and general class written tests are required.

The Amateur Radio Service role in interoperability is provided for in the FCC Rules. Amateur Radio Service Emergency Communications (EMCOMM) is provided by various groups including: Amateur Radio Emergency Service (ARES), Radio Amateur Civil Emergency Service (RACES) or Auxiliary Communications Service (ACS). Emergency Communications support is provided for in 47 CFR 97.1. Another purpose of the Amateur

Radio Service is the “Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.”

Types of communications service include voice and data, often referred to as digital communications, on HF, VHF low, VHF High, and UHF. Some hams may be willing to bring equipment with them to provide service to their stakeholders, however, it would best if the agency has equipment installed and ready for use. Hams will hold drills or exercises with installed equipment to help insure it will be in working order during an emergency or disaster.

III. Operational Context

A. Tasking Amateur Radio Service Volunteers

- Amateur radio resources may be used by governmental and non-governmental organizations (NGO) when regular communications systems have become overloaded or rendered inoperative by an emergency or disaster.
- Do not assign tasking to amateur radio frequencies that can be done by other means.
- Do not ask amateur radio staff to serve as a link to the news media refer to 47 CFR Part 97.113.

B. Standardized Training and Certification of Amateur Radio Service Volunteers

Standardized training for emergency communications volunteers is a topic of interest not only for stakeholders, but for the amateurs themselves. There are no required courses for ham radio emergency communicators. They are required to meet training requirements identified by their stakeholders. Many hams have taken courses in ICS, NIMS, and emergency communications provided by FEMA Emergency Management Institute (EMI) and the American Radio Relay League (ARRL). The SIEC Policies and Procedures Work Group feels it is important to have an objective standard by which amateur radio operators can be evaluated for service across the state. The work group has modified the National Wildfire Coordinating Group Radio Operator (RADO) Task Book to meet this need. The work group also recommends that the volunteer emergency communicator complete FEMA EMI ICS 100, 200 and 700 courses. Each agency should develop an orientation for their communications volunteers to include such things as dress code, deportment, and other applicable rules, regulations and policies.

C. Quarterly and Annual Training Opportunities

The Washington State Emergency Management Division’s amateur radio staff conducts quarterly drills on months that have five Saturdays. This drill is referred to as the EOC to EOC (Emergency Operations Center) drill. During the drill each county and agency participating works on objectives published before the drill. In June, the American Radio Relay League sponsors the annual Field Day. During Field Day amateurs go to places accessible by the public to set up communications facilities. They set up tents or put trailers/motor homes in place. Next they install antennas and feed lines. Many teams place antennas as high as possible in adjacent trees. During the weekend they make as many contacts as possible. On HF they can make contacts across the U.S. in Canada and Mexico. V/UHF contacts are made using simplex and local repeaters. During October, the ARRL

sponsors the annual Simulated Emergency Test or SET. During the SET teams go to their mobilization site and handle simulated emergency traffic using as many modes as they can during the duration of the exercise. Agency employees are encouraged and welcome to visit and/or participate in Field Day or SET as time allows.

D. Other Auxiliary Communications Services

The Civil Air Patrol (CAP), Coast Guard Auxiliary (CGAUX) and Military Auxiliary Radio System (MARS) provide backup communications services to their stakeholders. Most communicators for CAP, CGAUX and MARS are licensed amateur radio operators, but use U.S. Government allocated frequencies controlled by the National Telecommunications and Information Administration (NTIA). Each of these groups vet their volunteers and have training qualification processes. Volunteers for CAP, CGAUX and MARS are mobilized through their organizational chain of command.

IV. Recommended Protocol Standard

A. Use of Amateur Radio Operators

Amateur radio emergency communicators are volunteers and in accordance with 47 CFR 97.113 cannot receive compensation for their services. Agency staff members who are hams may participate in drills and exercises in enhance preparedness and teamwork. Management needs to insure that the drill or exercise traffic is appropriate for the use of the Amateur Radio Service (47 CFR Part 97 113-a-5). Hams may also, assist their stakeholders with communications needs other than amateur radio. When a public safety agency needs to move communications across town or across country the Amateur Radio Service is here to help. This makes them truly value added in communications interoperability.

B. Vetting of Amateur Radio Service Emergency Communications Volunteers

Individual amateur radio operators or hams that make themselves and equipment available for emergency communications support duties for governmental agencies do so through their local emergency management agency. They are then enrolled as emergency communications workers as provided for in Washington Administrative Code (WAC) 118.04.100. WAC 118.04.080 (1) (a) indicates that the information supplied in the emergency worker registration may be used to conduct a criminal history and driving record background checks. Public safety agencies should verify with their emergency management agency that background checks have been conducted. In addition, volunteers working for a criminal justice agency need to be in compliance with the Federal Bureau of Investigation (FBI) Criminal Justice Information Services (CJIS) Policy CSP 4.5, Personnel Security. Volunteers who work for Non-Governmental Organizations are vetted by the NGO.

C. Mobilization of Amateur Radio Emergency Communicators

Government agencies seeking assistance from amateur radio emergency communications volunteers will need to contact their local emergency management agency in accordance with WAC 118.04.220. By following this procedure the volunteer may be covered for personal injury, property loss and damage and travel expenses related to the mobilization. Non-Governmental Organizations will follow their individual policies regarding volunteer mobilizations.

V. Recommended Protocol Procedure

Have your Amateur Radio Support Team in Place before the Emergency or Disaster. Agencies are encouraged to contact their local amateur radio emergency communications group to coordinate support before the emergency or disaster occurs. The local Amateur Radio Emergency Service (ARES) Emergency Coordinator (EC) can assist with the identification of the location for amateur radio equipment that best meets the need of the agency and the volunteers who will be using it. The EC or the local Radio Amateur Civil Emergency Service (RACES) Radio Officer (RO) are good resources for selecting equipment for your agency. Many teams also have talented and knowledgeable volunteers who can assist with the installation of antennas, feed line, radios and associated equipment. Communications procedures, including phonetic alphabet, will follow International Telecommunication Union (ITU) standards and FCC Rules and Regulations.

VI. Management

Each Amateur Radio Service Emergency Communications unit has a leadership team in the Amateur Radio Emergency Service the leadership team is comprised of the Section Emergency Coordinator (SEC), District Emergency Coordinator (DEC), Emergency Coordinator (EC) and Assistant Emergency (AEC). At the local level the government agency will be working with the EC or AEC. In the Radio Amateur Civil Emergency Service the leadership team is made up of the State RACES Radio Officer (SRO), Assistant State RACES Radio Officers (ASRO), RACES Regional Coordinators (RRC) and county RACES RADIO officers (RO). At the county and local level agencies will be working with the county RACES RO. Some areas of the State of Washington have implemented an Auxiliary or Alternate Communications Service and their leadership team may be program managers or assistant program managers.

Management or leadership of the Civil Air Patrol is provided by the Washington CAP Wing or unit commander. Coast Guard Auxiliary guidance is provided by staff of the 13th Coast Guard District. The Military Auxiliary Radio System is managed by a Region MARS Director and a State MARS Director. The State MARS Director for Army, Air Force or Navy-Marine Corps MARS is the point of contact for their programs.

5. REFERENCES

I. Reference Documents

APCO/ANSI Channel Naming Standards

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

Communication Asset Survey and Mapping Tool (CASM)

http://siec.wa.gov/success/files/casm_fb_overview_final.pdf

Comprehensive Emergency Management Network (CEMNET)

http://www.emd.wa.gov/telcom/telcom_cemnet.shtml

Incident Command System (ICS)

<http://www.fema.gov/emergency/nims/IncidentCommandSystem.shtm>

Interoperability Continuum Brochure

[http://www.safecomprogram.gov/NR/rdonlyres/54F0C2DE-FA70-48DD-A56E-3A72A8F35066/0/!%20interoperability Continuum Brochure 2.pdf](http://www.safecomprogram.gov/NR/rdonlyres/54F0C2DE-FA70-48DD-A56E-3A72A8F35066/0/!%20interoperability%20Continuum%20Brochure%202.pdf)

National Emergency Communications Plan (NECP)

http://www.safecomprogram.gov/SAFECOM/library/interoperabilitybasics/1375_nationalemergency.htm

National Incident Management System (NIMS)

<http://www.fema.gov/emergency/nims/>

National Interoperability Field Operations Guide (NIFOG)

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

SAFECOM Interoperability Continuum

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

State Communications Interoperability Plan (SCIP)

<http://siec.wa.gov/plan/files/SCIP.pdf>

Washington State All-Hazards Emergency Preparedness Strategic Plan

http://www.emd.wa.gov/plans/documents/2009-2014_Washington_Statewide_Strategic_Plan.pdf

II. Forms

ICS-205

<http://training.fema.gov/EMIWEB/IS/ICSResource/assets/ics205.pdf>

ICS-214

<http://training.fema.gov/EMIWeb/IS/ICSResource/assets/ics214.pdf>

ICS-216

<http://training.fema.gov/EMIWeb/IS/ICSResource/assets/ics216.pdf>

ICS-217

<http://training.fema.gov/EMIWeb/IS/ICSResource/assets/ics217.pdf>

DRAFT

Sample ICS-205 Form

INCIDENT RADIO COMMUNICATIONS PLAN			1. Incident Name	2. Date/Time Prepared	3. Operational Period Date/Time
4. Basic Radio Channel Utilization					
System/Cache	Channel	Function	Frequency/Tone	Assignment	Remarks
5. Prepared by (Communications Unit)					

Sample ICS-205 Form, Completed

INCIDENT RADIO COMMUNICATIONS PLAN ICS 205		1. Incident Name U.S. HONOR FLAG	2. Date/Time Prepared Jun 21, 2010 13:17 hrs	3. Operational Period Date/Time 0700-1700	
4. Basic Radio Channel Utilization					
Radio Type/Cache	Channel	Function	Frequency/Tone	Assignment	Remarks
GC VHF	PRIMARY	Command	154.295 / 100.0		CMD to Motorcade/Intramotorcade
GC VHF	NORTH TAC 1	Tactical	156.150 / 156.7		On Scene Command at Venue
		Logistics			
		Air Support			
GC VHF	WEST TAC 2	Security	155.915 / 203.5		Security Elements at Venue
5. Prepared By (Communications Unit)					



Sample ICS-216 Form

RADIO REQUIREMENTS WORKSHEET			1. Incident Name			2. Date			3. Time		
4. Branch			5. Agency			6. Operational Period			7. Tactical Frequency		
8. Division/Group			Division/Group			Division/Group			Division/Group		
Agency			Agency			Agency			Agency		
9. Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements
Page 63 of			10. Prepared by (Name and Position)								

III. Acronyms and Definitions

AAR	After Action Review
ACS	Auxiliary Communications Service
APCO	Association of Public-Safety Communications Officials
ARRL	American Radio Relay League
ARS	Amateur Radio Service
ARES	Amateur Radio Emergency Service
Cache	Stockpiles or reserves
CAD	Computer Aided Dispatch
CAP	Civil Air Patrol
CASM	Communication Asset Survey and Mapping Tool
CEMNET	Comprehensive Emergency Management Network
CGAUX	Coast Guard Auxiliary
CJIS	Criminal Justice Information Services
CP	Command Post
COML	Communications Unit Leader
DEM	Department of Emergency Management
DHS	Department of Homeland Security
DoD	Department of Defense
DOH	Department of Health
EMS	Emergency Medical Services
EOC	Emergency Operations Center
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FUA	Frequency Use Agreement
Gateway	Short-term system modification. Uses specialized interfaces to connect disparate radio systems. Coverage equals the sum of the systems being patched.
HSEEP	Homeland Security Exercise and Evaluation Program
HSPD-5	Homeland Security Presidential Directive-5
IC	Incident Commander
ICS	Incident Command System
IECGP	Interoperable Emergency Communications Grant Program
IMT	Incident Management Team
JIC	Joint Information Center
JIS	Joint Information System
LMR	Land Mobile Radio
MARS	Military Auxiliary Radio Service
Narrowband	Refers to 12.5 kHz bandwidth of a transmitted radio signal in the LMR service

NECP	National Emergency Communications Plan
NGO	Non-governmental organizations
NIFOG	National Interoperability Field Operations Guide
NIMS	National Incident Management System
NPSTC	National Public Safety Telecommunications Council
NRF	National Response Framework
OEC	Office of Emergency Communications
PNEMA	Pacific Northwest Emergency Management Agreement
POC	Point of Contact
PSAP	Public Safety Answering Point
PSTN	Public Switched Telephone Network. A formal name for the world-wide telephone network.
PTT	Push-to-Talk
RACES	Radio Amateur Civil Emergency Service
SAFECOM	Public safety-driven communications program managed by DHS
SCIP	State Communications Interoperability Plan
SIEC	State Interoperability Executive Committee
SO	Safety Officer
SOP's	Standard Operating Procedures
Talkgroup	A talk group is a predefined group of mobile radios that are capable of receiving and decoding the group messages to or from group members
TICP	Tactical Interoperable Communication Plans
Trunking	An infrastructure dependent technique where communications resources, comprised of more than one logical channel (trunk) are shared amongst system users by means of an automatic resource allocation management technique based upon statistical queuing theory and resident in the systems fixed infrastructure.
UASI	Urban Areas Security Initiative
UC	Unified Command
VTC	Video Teleconference
WAC	Washington Administrative Code
Wideband	Refers to kHz bandwidth of a transmitted radio signal in the LMR service
Wi-Fi	A wireless data networking protocol generally used to connect PCs and laptops to a network. Also known as 802.11b/g/n and WLAN(Wireless LAN), it is the most common means of wireless networking and operates at 2.4 GHz.

APPENDICES TABLE OF CONTENTS

- A. Regional and Mutual Aid Channels
- B. HLS Regions w/ map
- C. Interoperable Communications Resources
- D. Sample Frequency Use Agreements
- E. Amateur Radio Service Emergency Communications Task Book
- F. Contacts

APPENDIX A
Regional and Mutual Aid Channels

Homeland Security Region 9 Interoperability Channels

Name	LCD Display	Receive	Code	Transmit	Code	Wide / Narrow	Description
Law Enforcement Radio Network	LERN	155.370	CSQ	155.370	CSQ	Wide	Law enforcement Interop channel
Hospital Emergency Administrative Radio	HEAR	155.340	CSQ	155.340		Wide	Use between area hospitals and ambulances.
On Scene Command and Control Radio Network	OSCCR	156.135	CSQ	156.135	CSQ	Wide	Interop outside of Grant County. Interference with Law Data within Grant County.
Search and Rescue	SAR	155.160	CSQ	155.160	CSQ	Wide	Search and Rescue
Scene TAC	DNR Common	151.415	CSQ	151.415	103.5	Narrow	On scene tactical channel
Fire Mutual Aid	Red Net	153.830	CSQ	153.830	CSQ	Wide	Fire Service Mutual Aid
Interop	VCALL	155.7525	CSQ	155.7525	203.5	Narrow	Common VHF Hailing channel – multi agency Interop only
Interop	VTAC 1	151.1375	CSQ	151.1375	203.5	Narrow	Multi agency Interop channel – not departmental TAC channel
Interop	VTAC 2	154.4525	CSQ	154.4525	203.5	Narrow	Multi agency Interop channel – not departmental TAC channel
Interop	VTAC 3	158.7375	CSQ	158.7375	203.5	Narrow	Multi agency Interop channel – not departmental TAC channel
Interop	VTAC 4	159.4725	CSQ	159.4725	203.5	Narrow	Multi agency Interop channel – not departmental TAC channel
Miscellaneous	Misc	Receive	Code	Transmit	Code	Wide / Narrow	Optional
Weather	Chelan WX	162.475	CSQ	NA	NA	Wide	Wenatchee weather station - RX only
Weather	Okngn WX	162.525	CSQ	NA	NA	Wide	Okanogan weather station - RX only
Weather	Benton WX	162.450	CSQ	NA	NA	Wide	Richland weather station - RX only
WSP Ephrata	WSP Ephrata	155.505	CSQ	NA	NA	Wide	RX only
WSP Comm	WSP Comm	155.970	CSQ	NA	NA	Wide	RX only
Marine	Marine 16	156.800	CSQ	156.800	CSQ	Wide	International Distress, Safety, and Calling

APPENDIX B
Washington State Homeland Security Map

Washington State Homeland Security Map



Homeland Security Region 1



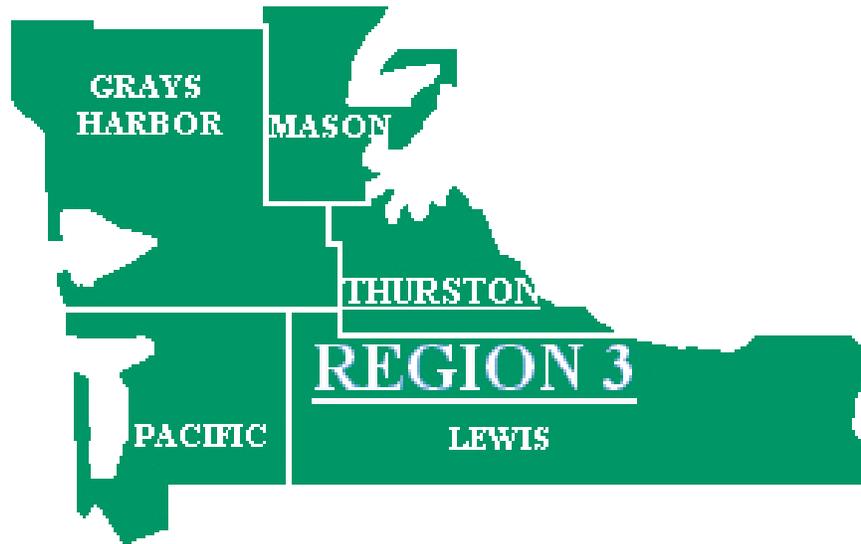
Island County
San Juan County
Skagit County
Snohomish County
Whatcom County

Homeland Security Region 2



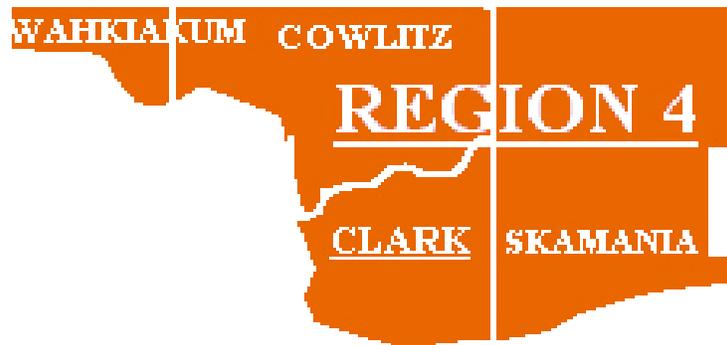
Clallam County
Jefferson County
Kitsap County

Homeland Security Region 3



- Grays Harbor County
- Lewis County
- Mason County
- Pacific County
- Thurston County

Homeland Security Region 4



Clark County
Cowlitz County
Skamania County
Wahkiakum County

Homeland Security Region 5



Pierce County

Homeland Security Region 6



King County

Homeland Security Region 7



Chelan County
Douglas County
Grant County
Kittitas County
Okanogan County

Homeland Security Region 8



Benton County
Franklin County
Klickitat County
Walla Walla County
Yakima County

Homeland Security Region 9



- Adams County
- Asotin County
- Columbia County
- Ferry County
- Garfield County
- Lincoln County
- Pend Oreille County
- Spokane County
- Whitman County

APPENDIX C
Interoperable Communications Resources

Communication Cache Resources

Tumwater – DNR (Dept. of Natural Resources)

Agency: Department of Natural Resources

24 Hr Contact: State Emergency Operations Center – DEM

Agency Contact: Jeannie

Equipment Description: Bendix King Radios 148 qty
VHF Repeaters 3 qty

Mode of Deployment: 3 individual trailers
BK radios 30 qty ea.
Repeaters 1 qty ea.

Availability: Statewide

Timeline for Deploy: 2 hrs from time of call to wheels rolling

Specialized Knowledge: COML certification

Cost:

Restrictions:

Additional Information:

Clark County (Clark County Fire District 13)

Agency: Clark County Fire District 13

24 Hr Contact: Clark [County] Regional Emergency Services Agency (CRESA):
360.696.4461

Agency Contact: Tom McDowell: 360.686.3271

Equipment Description: Bendix King Radios 40 qty
UHF radios 30 qty

VHF Daniels Repeaters	6 qty
UHF Daniels Repeaters	2 qty
ICRI Gateway	2 qty
Satellite Link – Internet / Phone	1 qty

<u>Mode of Deployment:</u>	3 trailer package with minimum 1 COML
<u>Availability:</u>	Regional or State Mobilization Request – generally with IMT Team deployment
<u>Timeline for Deploy:</u>	1 hr from time of call to wheels rolling
<u>Specialized Knowledge:</u>	COML certification
<u>Cost:</u>	Regional – no cost. Statewide - State Mobilization fee schedule
<u>Restrictions:</u>	
<u>Additional Information:</u>	

Spokane County – DEM (Dept of Emergency Management)

<u>Agency:</u>	Spokane Department of Emergency Management								
<u>24 Hr Contact:</u>	Spokane County Combined Communications Center: 509.532.8900								
<u>Agency Contact:</u>	Jeff Hunt								
<u>Equipment Description:</u>	<table> <tr> <td>Bendix King Radios</td> <td>40 qty</td> </tr> <tr> <td>UHF radios</td> <td>30 qty</td> </tr> <tr> <td>VHF Daniels Repeaters</td> <td>2 qty</td> </tr> <tr> <td>ICRI Gateway</td> <td>1 qty</td> </tr> </table>	Bendix King Radios	40 qty	UHF radios	30 qty	VHF Daniels Repeaters	2 qty	ICRI Gateway	1 qty
Bendix King Radios	40 qty								
UHF radios	30 qty								
VHF Daniels Repeaters	2 qty								
ICRI Gateway	1 qty								
<u>Mode of Deployment:</u>	1 trailer package with minimum 1 COML								
<u>Availability:</u>	Regional or State Mobilization Request – generally with IMT Team deployment								
<u>Timeline for Deploy:</u>	1 hr from time of call to wheels rolling								
<u>Specialized Knowledge:</u>	COML certification								

Cost: Regional – no cost. Statewide - State Mobilization fee schedule

Restrictions:

Additional Information:

Spokane County (Spokane Valley Fire Department)

Agency: Spokane Valley Fire Department

24 Hr Contact: Spokane County Combined Communications Center:
509.532.8900

Agency Contact: Andy Hail: 509.928.1700 / 509.892.4103

Equipment Description:

Bendix King radios	GPH / VHS	36 qty
UHF radios	400 – 470 MHz	8 qty
UHF radios	450 - 512 MHz	7 qty
ICOM AM band VHF	for aircraft	1 qty
VHF Daniels repeaters		2 qty
UHF tactical repeater		1 qty
ICRI Gateway		1 qty
Satellite phone – mobile		1 qty

Mode of Deployment: 1 trailer package with minimum 1 COML

Availability: Regional or State Mobilization Request – generally with IMT Team deployment

Timeline for Deploy: 1 hr from time of call to wheels rolling

Specialized Knowledge: COML certification

Cost: Regional – no cost. Statewide - State Mobilization fee schedule

Restrictions:

Additional Information: COML will deploy with resources unless specifically arranged otherwise; i.e., partial deployment of radios only.

Information contained in this index was compiled from data provided by agencies and jurisdictions who responded to a survey which requested information regarding the availability of communications resources which could be deployed to help resolve interoperability and communications challenges.

The table lists information which could be used by an IC or incident management team to locate potential communication resources to support an incident or event. In addition to contact information and availability, the table details information on radio caches, mobile communications units, and deployable gateway systems (including radios).

Washington State Homeland Security Region	Agency	24 hour Contact Number	Available To Regions	Lead Time to Deploy	Radio Cache	Mobile Communications Unit	Deployable Gateway and Connected Radios	CommL CommT
All Regions Statewide	WA Department of Natural Resources	1-800-562-6010 Resource Protection Dispatch	All Regions	One Hour	128 VHF Narrow-band analog portable radios – located in Tumwater. 5 VHF portable repeaters (3 in Tumwater, 1 in Ellensburg, and 1 in Colville) They come supplied with “AA” Batteries.	3 mobile communications unit trailers, located in Tumwater (with one stationed at Moses Lake during the summer fire season). Units have VHF and UHF bases, and 6 work stations. They are deployed with a mobile generator. Also 1 Type 3 Command Post with mobile radios		3 Type II COMLs (1 in Tumwater, 1 in Forks, 1 in Ellensburg. 10 COMTs (2 in Chehalis, 3 in Tumwater, 1 in Forks, 2 in Ellensburg, 2 in Colville

Washington State Homeland Security Region	Agency	24 hour Contact Number	Available To Regions	Lead Time to Deploy	Radio Cache	Mobile Communications Unit	Deployable Gateway and Connected Radios	CommL CommT
Statewide	Dept. of Fish and Wildlife – Enforcement Program	None – Use the following numbers: 360-485-7661; 509-539-3787 Or 360-902-2600 (unlisted to WILDCOMM)	State wide	12-24 hrs.	Yes: 3 Portable VHF Base Stations; 1 VHF portable cache w/ 12 units; 2 portable Repeater Kits VHF (ICOM) w/ Erectable Antennas (All assets Use VHF DNR and WDFW Channels & Some WSP Capability)	No	No	No
1	Snohomish County Dept of Emergency Management (DEM-10)	425 407-3930 Ask for call back from DEM Duty Officer	All	1.5 hrs	2ea 800T	Ambulance, 2WS, 1kW Gen, sat phone	ACU1000 1ea VHF 1ea UHF 1ea 900C 1ea 800T 1ea Air	3 CL3t 0 CT
1	Snohomish County Dept of Emergency Management (COM1/2)	425 407-3930 Ask for call back from DEM Duty Officer	1, 5, 6, 7	1.5 hrs	6ea 800T	40' Coach, 4WS, 13kW Gen, sat phone, sat Internet	ACU1000 1ea VHF 1ea UHF 1ea 800T	3 CL3t 0 CT
3	Riverside Fire Authority & Centralia PD	Central Dispatch 360-740-1105 Request RFA Duty Chief	3, 4, 5	3 hours	n/a	Large former Snap on tool truck, 4ws, limited to VHF hi and amateur, 5kw generator	n/a	
3	Washington State Dept of Corrections	State EOC 1-800-562-6108	All	1 hour	15-800 MHz	Ford F450 4X4 PTO 10KW generator 3 Work Station with laptops Wireless Internet Satellite Phone 2 cell phones Photocopier/fax/printer	ACU 1000 4-800 MHz 3-VHF 1-UHF	3 CUL
5/6	City of Auburn Emergency Management	253-931-3094 Ask for Emergency Manager	All	~1 hr	30-800MHz portables	None	None	None
6	Snoqualmie EMD	425-888-3333 Police Dispatch On Duty Sgt.	1,5,6,7	2 hrs	12 VHF F3 12 VHF P25	FRGHTLR 24'MOD 2kGEN,2WS + VHF/UHF RPTR	0	2COML3
6	City of Issaquah	Not imported, was not formatted as a table.						

Washington State Homeland Security Region	Agency	24 hour Contact Number	Available To Regions	Lead Time to Deploy	Radio Cache	Mobile Communications Unit	Deployable Gateway and Connected Radios	CommL CommT
7	Grant County Sheriff's Office	509 762-1160 MACC Dispatch Ask for call from GCSO on duty supervisor	Region 7 and counties adjoining Grant County in region 8 and 9. Available statewide for fuel and wages.	1.5 hrs	No	24' command space on medium duty truck. 2 VHF radio positions, 2 networked computer positions, one position with ERSI Map info, color laser printer, scanner, Verizon cellular, Wifi, 900MHz Wifi and wired connectivity. Twenty foot crank up masts. 10 KW on board generator. AC and heater in work space. Truck and generator are gasoline powered. 700/800MHz radio to be added 4 th quarter 2011. COML available with unit. Possible IT support.	None	1 COML Possible IT support

Washington State Homeland Security Region	Agency	24 hour Contact Number	Available To Regions	Lead Time to Deploy	Radio Cache	Mobile Communications Unit	Deployable Gateway and Connected Radios	CommL CommT
9	Spokane Valley Fire Department	(509) 532-8900 (Area Coordinator)	7,8,9	1.5 hrs	<p>36 x VHF P-25 BK DPH Portables.</p> <p>15 x UHF portables, 7 in lower range, 8 in upper range</p> <p>2 x ICOM VHF mobiles.</p> <p>2 x ICOM UHF mobiles (1 upper, 1 lower freq rng). 1 x AM VHF mobile.</p> <p>1 x Satellite Phone.</p> <p>2 x VHF Daniels repeaters with UHF uplink.</p> <p>1 x UHF BK repeater using BK radios).</p> <p>2 x VHF AM band portable radios.</p>	<p>4WD F250 Pickup-30 ft Camper, 7 KW generator Air card Copy/Printer/Fax 2 x GPS (hand held) 1 x Mobile GPS Trac Phone Plotter 1x workstations (1 desktop computer)</p>	ICRI Gateway	1 xCOML 1 x COMT(t)

APPENDIX D
Sample Frequency Use Agreements

Sample Frequency Use Agreement

FREQUENCY USE AGREEMENT
BETWEEN
LICENSEE
AND XXX

1. Parties

This Frequency Use Agreement (hereinafter referred to as “FUA”) is made and entered into by and between the Licensee (hereinafter referred to as “LICENSEE”), whose address is 123 Main Street, Seattle, WA 99837, and the XXX (hereinafter referred to as “XXX”), whose address is 123 Main Street, Anytown, WA 99999.

2. Purpose

The purpose of this FUA is to establish the terms and conditions under which radio frequencies licensed to LICENSEE by the Federal Communications Commission may provide mutual aid and emergency radio communications between LICENSEE and XXX’s personnel for safety purposes in the XXX County, WA area.

3. Term of FUA

This FUA is effective upon the day and date last signed and executed by the duly authorized representatives of the parties to this FUA and the governing bodies of the parties’ respective agency or organization and shall remain in full force and effect for not longer than two (2) years from the date last signed and executed. This FUA may be terminated, without cause, by either party upon 60 days written notice, which notice shall be delivered by hand or by certified mail to the address listed above. Immediate termination of the agreement may result if the terms or frequency use is not in accordance with this agreement.

4. Payment

No payment shall be made to either party by the other party as a result of this FUA.

5. Frequencies

The frequencies subject to this FUA are commonly known as and used as the “Law Dispatch” channel by the XXX County, WA law users. This is a repeated channel located throughout the county and configured in a “simulcast” mode, therefore, any radio traffic operated on this frequency is repeated throughout the entire county to all users. XXX is authorized to use the following frequencies in the following manner, in accordance with the LICENSEE FCC license:

Mobile transmit frequency – 155.000MHz

Mobile transmit Private Line – 156.7Hz
Mobile receive frequency – 159.990MHz
Mobile receive Private Line – 156.7Hz
Maximum power out – 95W ERP
Channel bandwidth – 25kHz

6. Responsibilities of LICENSEE

LICENSEE shall perform the following duties and responsibilities as a result of this FUA:

- A. Secure and maintain FCC licensing for the frequencies subject to this FUA.
- B. Incur expenses associated with securing, licensing, and maintaining the subject frequencies.
- C. Maintain the channel in working order according to manufacturer’s specifications and in accordance with the FCC license.
- D. Establish a Single Point of Contact for technical information related to this FUA.
- E. LICENSEE makes no warrants or guarantees to XXX regarding radio frequency coverage, interference, audio quality, or other characteristics of the radio signal.
- F. LICENSEE maintains full control and responsibility for these frequencies and may “close” the frequencies during times of crisis or critical events. LICENSEE retains the rights and responsibilities to instruct users to vacate the channel in these instances.

7. Responsibilities of XXX

XXX shall perform the following duties and responsibilities as a result of this FUA:

- A. Accepts the quality and coverage of the radio signal “As is” and does not hold LICENSEE responsible for any missed calls or other communication issues related to the frequencies subject to this FUA.
- B. Use of the frequencies shall be limited to initial contact to and from LICENSEE to report an emergency incident.
- C. In no case shall XXX use the frequencies for dispatching purposes, day-to-day communications, training, or other use not directly described as mutual aid or emergency communications with LICENSEE.
- D. XXX will program the frequencies only into their own law agency radios at their sole cost and responsibility.
- E. XXX shall not use PTT-ID signaling, Emergency features, encryption, or other signaling on these frequencies.

8. General Provisions

A. Amendments

Either party may request changes to this FUA. Any changes, modifications, revisions or amendments to this FUA which are mutually agreed upon by and between the parties to this FUA shall be incorporated by written instrument, and effective when executed and signed by all parties to this FUA.

B. Applicable Law

The construction, interpretation and enforcement of this FUA shall be governed by the laws of the State of Washington. The courts of the State of Washington shall have jurisdiction over any action arising out of this FUA and over the parties, and the venue shall be the Superior Court of XXX County, WA.

C. Entirety of Agreement

This FUA, consisting of three pages, represents the entire and integrated agreement between the parties and supersedes all prior negotiations, representations and agreements, whether written or oral.

D. Severability

Should any portion of this FUA be judicially determined to be illegal or unenforceable, the remainder of the FUA shall continue in full force and effect, and either party may renegotiate the terms affected by the severance.

E. Sovereign Immunity

LICENSEE and XXX and their respective governing bodies do not waive their sovereign immunity by entering into this FUA, and each fully retains all immunities and defenses provided by law with respect to any action based on or occurring as a result of this FUA. XXX is not recognized as a LICENSEE User Agency under this FUA.

F. Third Party Beneficiary Rights

The parties do not intend to create in any other individual or entity the status of a third party beneficiary, and this FUA shall not be construed so as to create such status. The rights, duties and obligations contained in this FUA shall operate only between the parties to this FUA, and shall inure solely to the benefit of the parties to this FUA. The provisions of this FUA are intended only to assist the parties in determining and performing their obligations under this FUA. The parties to this FUA intend and expressly agree that only parties signatory to this FUA shall have any legal or equitable right to seek to enforce this FUA, to seek any remedy arising out of a party's performance or failure to perform any term or condition of this FUA.

9. Signatures

In witness whereof, the parties to this FUA through their duly authorized representatives have executed this FUA on the days and dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this FUA as set forth herein. The effective date of this FUA is the date of the signature last affixed to this page.

Licensee Agency

Date

XXX Agency

Date

Sample Letter of Concurrence

May 9, 2010

From: Licensee Agency

To: Grantee Agency

Re: Letter of Concurrence for radio frequency usage of callsign KHQ123

The Licensee Agency hereby authorizes the Grantee Agency, through this Letter of Concurrence, the use of frequency 155.730MHz for their fire user agencies in accordance with the terms of Licensee Agency's Federal Communications Commission (FCC) license ABC123.

The use of this frequency by Grantee Agency fire agencies is granted in the spirit of public safety for improving fire ground and tactical communications, and to enhance mutual aid operations in the north areas of XXX County and surrounding areas. The use of this frequency outside the licensed parameters is not authorized to Grantee Agency agencies. Licensee Agency shall remain the licensee of the frequency and, as such, keep all control and responsibilities associated with the license.

If in the discretion of Licensee Agency, such use does not in fact meet said goals, Licensee Agency reserves the right to terminate this authorization upon giving 60 days prior advance written notice.

Licensee Agency

APPENDIX E
Amateur Radio Service Emergency Communications Task Book



NWCG Task Book for the Position of:

**RADIO OPERATOR
(RADO)
Modified for
Amateur Radio Service
Emergency
Communications
State of Washington**



PMS 311-97 (ARS WA)

October 2010

Task Book Assigned To:

Trainee's Name: _____

Home Unit/Agency: _____

Home Unit Phone Number: _____

Task Book Initiated By:

Official's Name: _____

Home Unit Title: _____

Home Unit/Agency: _____

Home Unit Phone Number: _____

Home Unit Address: _____

Date Initiated: _____

The material contained in this book accurately defines the performance expected of the position for which it was developed. This task book is approved for use as a position qualification document in accordance with the instructions contained herein.

**Verification/Certification of Completed Task Book
for the Position of:**

RADIO OPERATOR
Amateur Radio Service – Emergency Communications – State of Washington

Final Evaluator's Verification

*To be completed **ONLY** when you are recommending the trainee for certification.*

I verify that (trainee name) _____ has successfully performed as a trainee by demonstrating all tasks for the position listed above and should be considered for certification in this position. All tasks are documented with appropriate initials.

Final Evaluator's Signature: _____

Final Evaluator's Printed Name: _____

Home Unit Title: _____

Home Unit/Agency: _____

Home Unit Phone Number: _____ Date: _____

Agency Certification

I certify that (trainee name) _____ has met all requirements for qualification in the above position and that such qualification has been issued.

Certifying Official's Signature: _____

Certifying Official's Printed Name: _____

Title: _____

Home Unit/Agency: _____

Home Unit Phone Number: _____ Date: _____

NATIONAL WILDFIRE COORDINATING GROUP (NWCG) POSITION TASK BOOK

NWCG Position Task Books (PTBs) have been developed for designated National Interagency Incident Management System (NIIMS) positions and adapted in the State of Washington for qualification of Amateur Radio Service Emergency Communications Workers.. Each PTB lists the competencies, behaviors and tasks required for successful performance in specific positions. Trainees must be observed completing all tasks and show knowledge and competency in their performance during the completion of this PTB.

Trainees are evaluated during this process by qualified evaluators, and the trainee's performance is documented in the PTB for each task by the evaluator's initials and date of completion. An Evaluation Record will be completed by all evaluators documenting the trainee's progress after each evaluation opportunity.

Successful performance of all tasks, as observed and recorded by an evaluator, will result in a recommendation to the agency that the trainee be certified in that position. Evaluation and confirmation of the trainee's performance while completing all tasks may occur on one or more training assignments and may involve more than one evaluator during any opportunity.

INCIDENT/EVENT CODING

Each task has a code associated with the type of training assignment where the task may be completed. The codes are: O = other or I = incident. The codes are defined as:

- O = Task can be completed in any situation (classroom, simulation, daily job, incident, prescribed fire, etc.).
- I = Task must be performed on an incident managed under the Incident Command System (ICS). Examples include wildland fire, structural fire, oil spill, search and rescue, hazardous material, and an emergency or non-emergency (planned or unplanned) event. Teams that do not have ICS incidents to participate in on a regular basis may use the annual Simulated Emergency Test (SET) or other formal training for qualification purposes.

Team leaders must take steps to protect the integrity of the qualification process by insuring the volunteer has gone through a bona fide qualification certification process.

Tasks within the PTB are numbered sequentially; however, the numbering does NOT indicate the order in which the tasks need to be performed or evaluated.

The bullets under each numbered task are examples or indicators of items or actions related to the task. The purpose of the bullets is to assist the evaluator in evaluating the trainee; the bullets are not all-inclusive. Evaluate and initial ONLY the numbered tasks. DO NOT evaluate and initial each individual bullet.

INSTRUCTIONS FOR THE POSITION TASK BOOK EVALUATION RECORD

Evaluation Record #

Each evaluator will need to complete an evaluation record. Each evaluation record should be numbered sequentially. Place this number at the top of the evaluation record page and also use it in the column labeled “Evaluation Record #” for each numbered task the trainee has satisfactorily performed.

Trainee Information

Print the trainee’s name, position on the incident/event, home unit/agency, and the home unit/agency address and phone number.

Evaluator Information

Print the Evaluator’s name, position on the incident/event, home unit/agency, and the home unit/agency address and phone number.

Incident/Event Information

Incident/Event Name: Print the incident/event name.

Reference: Enter the incident code and/or fire code.

Duration: Enter inclusive dates during which the trainee was evaluated.

Incident Kind: Enter the kind of incident (wildfire, prescribed fire, search and rescue, flood, hurricane, etc.).

Location: Enter the geographic area, agency, and state.

Management Type: Circle the ICS organization level (Type 5, Type 4, Type 3, Type 2, Type 1, Area Command)

Evaluator’s Recommendation

For 1 – 4, initial only one line as appropriate; this will allow for comparison with your initials in the Qualifications Record.

Record additional remarks/recommendations on an Individual Performance Evaluation, or by attaching an additional sheet to the evaluation record.

Evaluator’s Signature

Sign here to authenticate your recommendations.

Date

Document the date the Evaluation Record is being completed.

Evaluator’s Relevant Qualification (or agency certification)

List your qualification or certification relevant to the trainee position you supervised.

Note: Evaluators must be either qualified in the position being evaluated or supervise the trainee; Final Evaluators must be qualified in the trainee position they are evaluating.

Radio Operator (RADO) – ARS EMCOMM – WA

Competency: Assume position responsibilities.

Description: Successfully assume role of Radio Operator and initiate position activities at the appropriate time according to the following behaviors.

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
Behavior: Ensure readiness for assignment.			
1. Obtain and assemble information and materials needed for assignment. Suggested items: <ul style="list-style-type: none"> • <i>Personal gear</i> • <i>Copies of FCC License and Emergency Worker Card</i> • <i>Appropriate office supplies</i> 	O		
2. Obtain complete information from dispatch upon assignment. <ul style="list-style-type: none"> • <i>Incident name</i> • <i>Incident mission number</i> • <i>Point of contact at incident site</i> • <i>Incident phone number</i> • <i>Reporting time</i> • <i>Reporting location</i> • <i>Transportation arrangements/travel routes</i> • <i>Contact procedures during travel (telephone/radio)</i> 	O		
3. Arrive at incident and check in. <ul style="list-style-type: none"> • <i>Arrive properly equipped at assigned location within acceptable time limits.</i> 	I		
Behavior: Ensure availability, qualifications, and capabilities of resources to complete assignment.			
4. Coordinate obtaining work materials and equipment. <ul style="list-style-type: none"> • <i>Tables</i> • <i>Chairs</i> • <i>Lights</i> • <i>Office supplies</i> 	I		

Evaluate the numbered tasks ONLY. DO NOT evaluate bullets; they are provided as examples/additional clarification.

Radio Operator (RADO) – ARS EMCOMM – WA

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
5. Demonstrate familiarity with communications equipment, procedures, and basic functions/capabilities <ul style="list-style-type: none"> • <i>Hand-held, portable, multi-channel radios.</i> • <i>Radio check-in/out procedures (e.g., respond with proper frequency when requested; use accountability forms for radio check-in/out; issue new/replacement batteries; check-in/out appropriate radio accessories).</i> • <i>Remote phone system (If applicable).</i> • <i>Facsimile machine.</i> 	I		

Behavior: Gather, update, and apply situational information relevant to the assignment.

6. Obtain initial briefing from Incident Communications Center Manager or immediate supervisor. <ul style="list-style-type: none"> • <i>Location of functional units at incident base camp and Incident Command Post (ICP)</i> • <i>Time of first work period and work schedule</i> • <i>Specifics of Incident Action Plan (IAP) or other relevant plan(s)</i> • <i>ICS 204, Assignment List</i> • <i>Specifics of ICS 203, Organization Assignment List</i> • <i>Specifics of ICS 205, Incident Radio Communication Plan (This includes local, County, Regional and State frequency plans regardless of form or format)</i> • <i>Allocation of phones to units and existence of a phone directory</i> • <i>Message protocols</i> • <i>Current situation</i> 	I		
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Behavior: Establish effective relationships with relevant personnel.

7. Conduct self in a professional manner. <ul style="list-style-type: none"> • <i>Respectful and courteous</i> • <i>Respectful of public and private property</i> 	I		
8. Establish and maintain positive interpersonal and interagency working relationships.	I		

Evaluate the numbered tasks ONLY. DO NOT evaluate bullets; they are provided as examples/additional clarification.

Radio Operator (RADO) - ARS EMCOMM – WA

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
Behavior: Understand and comply with ICS concepts and principles.			
9. Apply the ICS. <ul style="list-style-type: none"> • <i>Follow chain of command.</i> • <i>Maintain appropriate span of control.</i> • <i>Use appropriate ICS forms.</i> • <i>Use appropriate ICS terminology.</i> 	I		
Behavior: Understand and comply with work place safety principles			
10. Quickly locate the following. <ul style="list-style-type: none"> • <i>First aid kit</i> • <i>AED, if applicable</i> • <i>Biohazard protection kit</i> • <i>Electrical panels for work space</i> • <i>Emergency exit(s)</i> • <i>Work place evacuation meeting points</i> • <i>Know who to inform in the event of an on the job injury or illness</i> • <i>How to report and handle work place safety concerns</i> 	O		
Behavior: Understand principles of maintaining information confidentiality			
11. Handle and store sensitive and potentially sensitive Information in accordance with agency guidelines <ul style="list-style-type: none"> • <i>Access to sensitive information is on a need to know basis only.</i> • <i>Keep sensitive information off the air unless it is vital to public safety.</i> 	I		
12. Refer all media requests to the incident or Agency public information officer. <ul style="list-style-type: none"> • <i>Know how to reach the Joint Information Center (JIC) if operating</i> 	I		

Evaluate the numbered tasks ONLY. DO NOT evaluate bullets; they are provided as examples/additional clarification.

Radio Operator (RADO) – ARS EMCOMM – WA

Competency: Communicate effectively.

Description: Use suitable communication techniques to share relevant information with appropriate personnel on a timely basis to accomplish objectives in a rapidly changing, high-risk environment.

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
Behavior: Ensure relevant information is exchanged during briefings and debriefings.			
13. Participate in daily Communications Unit briefings and meetings. <ul style="list-style-type: none"> • <i>Provide information on communication issues (e.g., radio equipment performance).</i> 	I		
Behavior: Ensure documentation is complete and disposition is appropriate.			
14. Correctly fill out and process appropriate forms. <ul style="list-style-type: none"> • <i>ICS 213, General Message</i> • <i>ARRL NTS, General Message</i> • <i>Tactical Message</i> • <i>Radio Logs</i> • <i>Telephone Logs</i> 	O		
15. Correctly file communications paperwork. <ul style="list-style-type: none"> • <i>Radio logs</i> • <i>Telephone logs</i> • <i>ICS 213, General Message</i> • <i>ARRL NTS Message</i> • <i>Tactical Message</i> • <i>Radio check-in/out information</i> 	O		
Behavior: Gather, produce and distribute information as required by established guidelines and ensure understanding by recipient.			
16. Communicate information effectively to incident personnel. <ul style="list-style-type: none"> • <i>Use correct radio/telephone protocols.</i> • <i>Speak clearly and write legibly.</i> • <i>Use standard terminology, symbols, designators, and acronyms.</i> • <i>Acknowledge requests and provide feedback.</i> 	I		

Evaluate the numbered tasks ONLY. DO NOT evaluate bullets; they are provided as examples/additional clarification.

Radio Operator (RADO) – ARS EMCOMM - WA

Competency: Ensure completion of assigned actions to meet identified objectives.

Description: Identify, analyze, and apply relevant situational information and evaluate actions to complete assignments safely and meet identified objectives. Complete actions within established timeframe.

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
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Behavior: Take appropriate action based on assessed risks.

17. Use appropriate communication protocol when responding to emergency situations. <ul style="list-style-type: none"> • <i>Medical transport request</i> • <i>Medevac request</i> • <i>Aircraft emergency</i> • <i>Evacuation</i> • <i>Search and Rescue</i> • <i>Fatality</i> • <i>Flooding</i> • <i>Tsunami</i> 	I		
18. Use appropriate communication protocol when responding to routine requests/information.	I		

Behavior: Transfer position duties while ensuring continuity of authority and knowledge and taking into account the increasing or decreasing incident complexity.

19. Coordinate an efficient transfer of position duties when mobilizing/demobilizing. <ul style="list-style-type: none"> • <i>Document follow-up action needed and submit to supervisor.</i> 	I		
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Behavior: Plan for demobilization and ensure demobilization procedures are followed.

20. Demobilize and check out. <ul style="list-style-type: none"> • <i>Receive demobilization instructions from incident supervisor.</i> • <i>If required, complete ICS 221, Demobilization Checkout and submit completed form to the appropriate person.</i> 	I		
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Evaluate the numbered tasks ONLY. DO NOT evaluate bullets; they are provided as examples/additional clarification.

Trainee Information

Printed Name:

Trainee Position on Incident/Event:

Home Unit/Agency:

Home Unit /Agency Address and Phone Number:

Evaluator Information

Printed Name:

Evaluator Position on Incident/Event:

Home Unit/Agency:

Home Unit /Agency Address and Phone Number:

Incident/Event Information

Incident/Event Name:

Reference (Incident Number/Fire Code):

Duration:

Incident Kind: Wildfire, Prescribed Fire, All Hazard, Other (specify):

Location (include Geographic Area, Agency, and State):

Management Type (circle one): Type 5, Type 4, Type 3, Type 2, Type 1, Area Command

Evaluator's Recommendation

(Initial only one line as appropriate)

- _____ 1) The tasks initialed and dated by me on the Qualification Record have been performed under my supervision in a satisfactory manner. The trainee has successfully performed all tasks in the PTB for the position. I have completed the Final Evaluator's Verification section and recommend the trainee be considered for agency certification.
- _____ 2) The tasks initialed and dated by me on the Qualification Record have been performed under my supervision in a satisfactory manner. However, opportunities were not available for all tasks (or all uncompleted tasks) to be performed and evaluated on this assignment. An additional assignment is needed to complete the evaluation.
- _____ 3) The trainee did not complete certain tasks in the PTB in a satisfactory manner and additional training, guidance, or experience is recommended.
- _____ 4) The individual is severely deficient in the performance of tasks in the PTB for the position and additional training, guidance, or experience is recommended prior to another training assignment.

Record additional remarks/recommendations on an Individual Performance Evaluation, or by attaching an additional sheet to the evaluation record.

Evaluator's Signature: _____

Date: _____

Evaluator's Relevant Qualification (or agency certification): _____

Trainee Information

Printed Name:
 Trainee Position on Incident/Event:
 Home Unit/Agency:
 Home Unit /Agency Address and Phone Number:

Evaluator Information

Printed Name:
 Evaluator Position on Incident/Event:
 Home Unit/Agency:
 Home Unit /Agency Address and Phone Number:

Incident/Event Information

Incident/Event Name: _____ Reference (Incident Number/Fire Code): _____
 Duration: _____
 Incident Kind: Wildfire, Prescribed Fire, All Hazard, Other (specify): _____
 Location (include Geographic Area, Agency, and State): _____
 Management Type (circle one): Type 5, Type 4, Type 3, Type 2, Type 1, Area Command

Evaluator's Recommendation
 (Initial only one line as appropriate)

- _____ 1) The tasks initialed and dated by me on the Qualification Record have been performed under my supervision in a satisfactory manner. The trainee has successfully performed all tasks in the PTB for the position. I have completed the Final Evaluator's Verification section and recommend the trainee be considered for agency certification.
- _____ 2) The tasks initialed and dated by me on the Qualification Record have been performed under my supervision in a satisfactory manner. However, opportunities were not available for all tasks (or all uncompleted tasks) to be performed and evaluated on this assignment. An additional assignment is needed to complete the evaluation.
- _____ 3) The trainee did not complete certain tasks in the PTB in a satisfactory manner and additional training, guidance, or experience is recommended.
- _____ 4) The individual is severely deficient in the performance of tasks in the PTB for the position and additional training, guidance, or experience is recommended prior to another training assignment.

Record additional remarks/recommendations on an Individual Performance Evaluation, or by attaching an additional sheet to the evaluation record.

Evaluator's Signature: _____ Date: _____

Evaluator's Relevant Qualification (or agency certification): _____

APPENDIX F
Contacts

STATE PERSONNEL CONTACTS

Mr. Alan Komenski SIEC Project Manager Washington State Patrol 425-401-7802 Alan.Komenski@wsp.wa.gov	Ms. Laura Kingman SIEC Special Deputy Washington State Patrol 360-507-3881 Laura.Kingman@wsp.wa.gov
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STATE 9-1-1 COORDINATORS (11/17/2010)

Adams County

Angie Fode
Phone: (509) 659-3327
Email: angief@co.adams.wa.us

Benton County

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STATE EMERGENCY MANAGEMENT CONTACTS

Adams County

Adams County Emergency Services
2069 W. Highway 26
Othello, WA 99344
Office Phone: 509.488.3704
24hr Phone: 509.488.2061

[Adams County Emergency Services](#)

Benton County

Benton County Emergency Services
651 Truman Avenue
Richland, WA 99352-9104
Office Phone: 509.628.2600

[Benton County Emergency Services](#)

Clallam County

Clallam County Emergency Management
223 E. 4th Street, Suite 6
Port Angeles, WA 98362-0149
Office Phone: 360.417.2305
24hr Phone: 360.417.2459

[Clallam County Emergency Management](#)

Columbia County

Columbia County DEM
341 E. Main
Dayton, WA 99328
Office Phone: 509.382.2534
24hr Phone: 509.382.2518

[Columbia County Emergency Management](#)

Douglas County

Douglas County DEM Sherriff's Office
Administrative Building
110 2nd Street N.E., Suite 2
East Wenatchee, WA 98802-4846
Office Phone: 509.884.0941
24hr Phone: 509.663.9911

[Department of Emergency Management](#)

Asotin County

Asotin County Emergency Services
095 2nd Street - 2nd Floor
Asotin, WA 99402-0250
Office Phone: 509.243.2088
24hr Phone: 509.758.1668

[Asotin County Emergency Services](#)

Chelan County

Chelan County Sherriff's Office
401 Washington Street - Lower Level
Wenatchee, WA 98801-0036
Office Phone: 509.667.6863
24hr Phone: 509.663.9911

[Chelan County DEM](#)

Clark County

Regional Emergency Services Agency
710 W. 13th Street
Vancouver, WA 98660-2810
Office Phone: 360.737.1911
24hr Phone: 360.696.4461

[CRESA Emergency Services](#)

Cowlitz County

Sheriff's Office DEM
312 S.W. 1st Avenue
Kelso, WA 98626
Office Phone: 360.577.3130
24hr Phone: 360.577.3098

[Department of Emergency Management](#)

Ferry County

Ferry County DEM
175 N. Jefferson
Republic, WA 99166-1099
Office Phone: 1.800.342.4344
24hr Phone: 509.775.3132

[Ferry County Sheriff](#)

Franklin County

Franklin County Emergency Management
502 Boeing Street
Pasco, WA 99301
Office Phone: 509.545.3546
24hr Phone: 509.545.3510

[Franklin County Emergency Management](#)

Grant County

Grant County DEM
1525 E. Wheeler Road
Moses Lake, WA 98837
Office Phone: 509.762.1462
24hr Phone: 509.762.1160

[Grant County Emergency Management](#)

Island County

Department of Emergency Management
1 NE 6th, RM B129 Cty. Annex
P.O. Box 5000
Coupeville, WA 98239
Office Phone: 360.679.7370
24hr Phone: 360.679.9567 (ICOM Dispatch)

[Department of Emergency Management](#)

King County

King County Office of EM
3511 N.E. 2nd Street
Renton, WA 98056
Office Phone: 206.296.3830
24hr Phone: 206.296.3830

[King County Office of Emergency Management](#)

Kittitas County

Sheriff's Office - Emergency Management
205 W. 5th Avenue
Ellensburg, WA 98926
Office Phone: 509.962.7525
24hr Phone: 509.925.8534

[Kittitas Emergency Management](#)

Garfield County

Garfield County DEM
789 W. Main Street
P.O. Box 338
Pomeroy, WA 99347
Office Phone: 509.843.3494
24hr Phone: 509.843.3494

[County Sheriff's Office](#)

Grays Harbor County

Division of Emergency Management
310 W. Spruce Street, Suite 212
Montesano, WA 98563
Office Phone: 360.249.3911
24hr Phone: 360.580.2281

[Division of Emergency Management](#)

Jefferson County

Department of Emergency Management
81 Elkins Road
Port Hadlock, WA 98339
Office Phone: 360.385.9368
24hr Phone: 360.385.3831 ext. 1

[Department of Emergency Management](#)

Kitsap County

Department of Emergency Management
911 Carver
Bremerton, WA 98312
Office Phone: 360.307.5870
24hr Phone: 360.307.5910

[Kitsap County DEM](#)

Klickitat County

Department of Emergency Management
501 N.E. Washington, Room 239
M.P.O. Box 2137
White Salmon, WA 98672
Office Phone: 509.493.6029
24hr Phone: 509.773.4545

[Klickitat County Emergency Management](#)

Lewis County

Division of Emergency Management
345 W. Main Street
Chehalis, WA 98532
Office Phone: 360.740.1151
[Lewis County Emergency Management](#)

Mason County

Department of Emergency Management
100 W. Public Works Drive
Building 1
Shelton, WA 98584
Office Phone: 360.427.7535
24hr Phone: 360.427.7761
[Mason County DEM](#)

Pacific County

Emergency Management Agency
300 Memorial Drive
P.O. Box 101
South Bend, WA 98586-0101
Office Phone: 360.875.9340
24hr Phone: 360.875.9397
[Pacific County Emergency Management](#)

Pierce County

Pierce County DEM
2501 S. 35th Street
Tacoma, WA98409
Office Phone: 253.798.6595 (DEM)
24hr Phone: 253.798.7470 (EOC)
[Pierce County Emergency Management](#)

Skagit County

DEM
2911 E. College Way, Suite B
Mount Vernon, WA 98273
Office Phone: 360.428.3250
24hr Phone: 360.428.3209
[Skagit County Department of Emergency Management](#)

Lincoln County

Department of Emergency Services
404 Sinclair
P.O. Box 36000
Davenport, WA 99122
Office Phone: 509.725.9263
24hr Phone: 509.725.3501

Okanogan County

Okanogan County Sheriff's Office
123 5th Avenue N., Room 200
Okanogan, WA 98840
Office Phone: 509.422.7207
24hr Phone: 509.422.7232
[Okanogan Sheriff](#)

Pend Oreille County

Pend Oreille County EM
231 S. Garden Avenue
P.O. Box 5035
Newport, WA 99156-5035
Office Phone: 509.447.3731
24hr Phone: 509.447.3151
[Pend Oreille Emergency Preparedness](#)

San Juan County

San Juan Sheriff's Office
96 N. 2nd Street
P.O. Box 669
Friday Harbor, WA 98250
Office Phone: 360.378.9932
24hr Phone: 360.378.4151
[San Juan DEM](#)

Skamania County

Department of Emergency Management
200 Vancouver Avenue
Stevenson, WA 98648
Office Phone: 509.427.8076
24hr Phone: 509.427.9490
[Skamania County Emergency Management](#)

Snohomish County

Snohomish County DEM
3509 109th Street S.W.
Everett, WA 98204
Office Phone: 425.338.5060
[Snohomish County DEM](#)

Stevens County

Department of Emergency Services
215 S. Oak, Room 108
P.O. Box 186
Colville, WA 99114
Office Phone: 509.684.5296
24hr Phone: 509.684.2555

Wahkiakum County

Department of Emergency Management
64 Maine St.
P.O. Box 65
Cathlamet, WA 98612
Office Phone: 360.795.3242
24hr Phone: 360.795.3242

Whatcom County

Whatcom County Sherriff's Office
311 Grand Ave.
Bellingham, WA 98225
Office Phone: 360.676.6681
Disaster Hotline: 360.778.8500
[WhatcomReady](#)

Yakima County

Yakima Valley Emergency Management
128 N. 2nd St., Room B-10
Yakima, WA 98901
Office Phone: 509.574.1900
24hr Phone: 509.574.2500
[Yakima Office of Emergency Management](#)

Spokane County

Emergency Operations Center
1618 North Rebecca
Spokane, WA 99217
Office Phone: 509.477.2204
[Spokane County Emergency Management](#)

Thurston County

Thurston County Emergency Management
2703 Pacific Ave. S.E., Suite B
Olympia, WA 98501-2036
Office Phone: 360.754.3360
24hr Phone: 360.704.2740
[Thurston County Emergency Management](#)

Walla Walla County

Department of Emergency Management
27 N. 2nd Ave.
Walla Walla, WA 99362
24hr Phone: 509.527.1960 (911)
[Walla Walla County Emergency Management](#)

Whitman County

Department of Emergency Management
310 N. Main St., Suite 108
Colfax, WA 99111
Office Phone: 509.397.6280
[Whitman County Emergency Management](#)

Washington State Emergency Management

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253-512-7000
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