# Communications

## Emergency Support Function (ESF) 2

**Coordinating:**

**Washington Military Department (WMD)**

| **Primary(s):** | |
|---|---|
| Washington Military Department (WMD) | |
| **Supporting:** | |
| Washington State Department of Corrections (DOC) | Washington State Department of Ecology (ECY) |
| Washington State Department of Fish and Wildlife (WDFW) | Washington State Department of Health (DOH) |
| Washington State Department of Natural Resources (DNR) | Washington State Patrol (WSP) |
| Telecommunications Network Service Providers | Washington State Technology Solutions (WATECH) |
| Washington State Department of Transportation (WSDOT) | Utilities & Transportation Commission (UTC) |

## Purpose

Emergency Support Function (ESF) 2: Communications coordinates government and industry efforts for the reestablishment and provision of critical communications infrastructure, facilitates the stabilization of systems and applications from malicious cyber activity, and coordinates communications support to response efforts through supporting the following core capabilities; however, this ESF's purpose is twofold:

1. To provide guidance for rapid alerting and warning to key state and local jurisdictions officials and the general public of an impending or occurring natural or technological emergency or disaster.
2. To provide guidance for organizing, establishing, and maintaining the telecommunications and information system capabilities necessary to meet the operational requirements of state and local jurisdictions in responding to, and recovering from, emergencies and disasters.

| **Primary Response Core Capability** | |
|---|---|
| **Operational Communications** | Ensure the capacity for timely communications in support of security, situational awareness, and operations, by any and all means available, among and between affected communities in the impact area and all response forces. |
| **Infrastructure Systems** | Stabilize critical infrastructure functions, minimize health and safety threats, and efficiently restore and revitalize systems and services to support a viable, resilient community. |

| Primary Response Core Capability | |
|---|---|
| **Logistics and Supply Chain Management** | Deliver essential commodities, equipment, and services in support of impacted communities and survivors, to include emergency power and fuel support, as well as the coordination of access to community staples. Synchronize logistics capabilities and enable the restoration of impacted supply chains. |

| Support Response Core Capabilities | |
|---|---|
| **Situational Assessment** | Provide all decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response. |

## Authorities and Policies

### Revised Code of Washington (RCW)

**RCW 43.105: Department of Information Services**

To achieve maximum benefit from advances in information technology the state establishes a centralized provider and procurer of certain information technology services as an agency to support the needs of state agencies. This agency shall be known as the consolidated technology services agency. State agencies shall rely on the consolidated technology services agency for those services with a business case of broad use, uniformity, scalability, and price sensitivity to aggregation and volume.

### Washington Advisory Code (WAC)

**WAC 480-120-412: Utilities and Transportation Commission – Telephone Companies – Major Outages**

All companies must make reasonable provisions to minimize the effects of major outages, including those caused by force majeure, and inform and train pertinent employees to prevent or minimize interruption or impairment of service.

### Important Agency/Organization Policies

**Substitute Senate Bill 5573 Refers us to RCW 43.105.331 and 43.105.020**

Two-way voice/data radio systems should be implemented in accordance with the State Interoperability Executive Committee (SIEC) Interoperability Plan also known as the SCIP (State Communications Interoperability Plan and managed under the Incident Command System (ICS) to ensure interoperability between federal, state, and local agencies.

## Situation Overview

The communications capabilities presently available to support emergency operations at the State EOC are:

- Commercial telephone, i.e. private line, leased line, regular telephone, SCAN, cellular telephone, satellite telephone, and facsimile.
- NAWAS (National Warning System, landline - voice, intra-state landline-voice.

- National Oceanic Atmospheric Association (NOAA) Weather Wire through ACCESS (A Central Computerized Enforcement Service System).
- EAS (Emergency Alert System) Relay Network (Public Safety radio and the broadcast industry).
- CEMNET (Comprehensive Emergency Management Network) two-way VHF radio system for backup direction and control.
- State Agency Emergency Network, 800 MHz two-way radio system for back-up direction and control.
- SECURE (State Emergency Communications Using Radio
- Effectively), a point-to-point high frequency two-way radio system.
- RACES (Radio Amateur Civil Emergency Services) and ARES (Amateur Radio Emergency Services) (two-way radio and/or packet systems via ham frequency bands).
- FNARS (Federal Emergency Management Agency National Radio System), a high frequency radio system.
- Unique dedicated circuits to Energy Northwest Columbia Generating System, U.S. Department of Energy – Hanford Site, and Umatilla Chemical Depot (Chemical Stockpile Emergency Preparedness Program)/Benton County. (Landline - voice/facsimile.
- E-mail and information sharing via the internet using WebEOC.

The communications capabilities, coordinated/controlled by WaTech, presently available to the state for emergency communications are:

- State Controlled Area Network (SCAN) – Blanket terminology for all SG/PG/IGN services.
- State Government Network (SGN) - the state of Washington's security boundary for its enterprise, managed internal network that is built around Internet technologies, security, and standards (such as OCIO Policy 141.10) to enable participating agencies to share mission critical applications and data within the statewide private network.
- Intergovernmental Network (IGN) - a private network with known end points and tenants that provides Washington state counties and cities, federal agencies, tribes, health districts, and other authorized customers secure access to managed gateways and applications owned by the State. This network allows application access and information sharing across all levels of government. The IGN has a physical network aggregation presence in all 39 Washington counties and select locations and governmental entities.
- Access Washington internet web portal - SecureAccess Washington allows businesses and citizens to access multiple government services via the Internet with a single user ID and password that they create and manage themselves. Protects the location of network resources, data, and applications by masking the URL.

## Concept of Operations

Reliable telecommunications and information system capabilities are necessary at all levels of government for day-to-day communications, warning of impending events, response and recovery operations, search and rescue operations, and coordination with other state and public safety agencies. Such capabilities must be available to the state for operations from the primary or alternate EOC as well as any other location selected because of existing conditions at the time of the emergency or disaster. ESF 2 relies upon our Private Sector partners to provide emergency communications resources during disasters and or when local and state resources have been exhausted. ESF 2 serves as the primary coordination entity/liaison and seeks to understand our private sector partners' core capabilities by persistent outreach. This allows ESF 2 to be able to anticipate and better understand potential solutions that might be needed to address an incident. Telecommunications, information systems, and warning support requirements which cannot be met at the lowest level of authority, will be escalated upward for resolution at the State Emergency Operations Center (SEOC). The federal government, under the National Security Emergency Preparedness procedures may, through the Department of Homeland Security, Emergency Preparedness and Response Directorate, provide temporary emergency communications assistance to state and/or local jurisdictions prior to or during an emergency or disaster. Some functions of this ESF include the following statements in support of the below critical tasks:

- Coordination with telecommunications and information technology industries;
- Coordination of the reestablishment and provision of critical communications infrastructure;
- Protection, reestablishment, and sustainment of cyber and information technology resources;
- Oversight of communications within the State response structures; and
- Facilitation of the stabilization of systems and applications from cyber events.

| Operational Communications | |
|---|---|
| **Critical Task I.D.** | **Critical Task Description** |
| **1** | Ensure the capacity to communicate with both the emergency response community and the affected populations and establish interoperable voice and data communications between Federal, tribal, state, and local first responders. |
| **2** | Re-establish sufficient communications infrastructure within the affected areas to support ongoing life-sustaining activities, provide basic human needs, and a transition to recovery. |

| Operational Communications | |
|---|---|
| **Critical Task I.D.** | **Critical Task Description** |
| **3** | Re-establish critical information networks, including cybersecurity information sharing networks, to inform situational awareness, enable incident response, and support the resilience of key systems. |

| Infrastructure Systems | |
|---|---|
| **Critical Task I.D.** | **Critical Task Description** |
| **2** | Re-establish critical infrastructure within the affected areas to support ongoing emergency response operations, life sustainment, community functionality, and a transition to recovery. |
| **4** | Formalize partnerships with governmental and private sector cyber incident or emergency response teams to accept, triage, and collaboratively respond to cascading impacts in an efficient manner. |

| Logistics and Supply Chain Management | |
|---|---|
| **Critical Task I.D.** | **Critical Task Description** |
| **1** | Mobilize and deliver governmental, nongovernmental, and private sector resources to save lives, sustain lives, meet basic human needs, stabilize the incident, and transition to recovery, to include moving and delivering resources and services to meet the needs of disaster survivors. |
| **2** | Enhance public and private resource and services support for an affected area. |

| Situational Assessment | |
|---|---|
| **Critical Task I.D.** | **Critical Task Description** |
| **1** | Deliver information sufficient to inform decision making regarding immediate lifesaving and life-sustaining activities, and engage governmental, private, and civic sector resources within and outside of the affected area to meet basic human needs and stabilize the incident. |
| **2** | Deliver enhanced information to reinforce ongoing lifesaving and life-sustaining activities, and engage governmental, private, and civic sector resources within and outside of the affected area to meet basic human needs, stabilize the incident, and transition to recovery. |

## Whole Community

ESF-2 collaborates with ESF-15 to ensure that the appropriate messaging is disseminated. ESF-2 focuses on establishing and maintaining the necessary core communication systems that ESF-15

utilizes. ESF-15 puts out messaging via many platforms: Phones (landline and cell), emails, WebEOC, Facebook, Twitter, our webpage, media interviews, and even fax (although very unlikely and as a last resort if other methods are failing). Those are systems that ESF-15 would utilize. They do not include the systems that the Alert and Warning Center uses (e.g. AlertSense). Day-to-day, that messaging is directed by the SEOC Manager and Alert and Warning Center Manager. With that said, if we were in an activation and ESF-15 needed to utilize those methods to get out rapid information, then we'd coordinate that with the AWC.

## Organization

The ESF 2 Telecommunications Cell consists of the state EMD Telecommunications Section, with WaTech, UTC, and representatives from the telecommunications network service providers, and other state agencies in supporting roles.

**Telecommunications Coordinating Committee:**
As requested by the EMD, may advise state EMD on the availability, selection, and use of telecommunications and information system capabilities during all four phases of emergency management. See Appendix 1, Tab G.

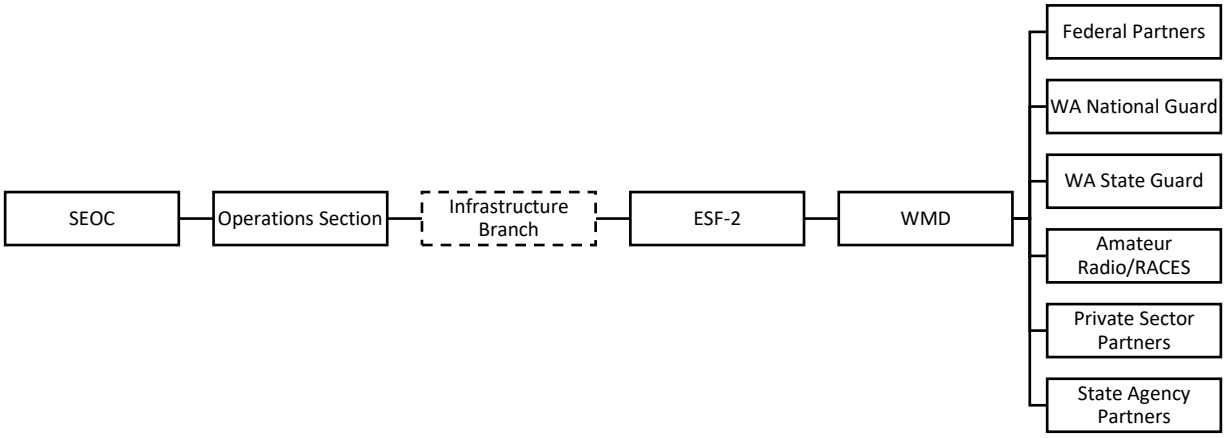
**Washington Computer Incident Response Center (WACIRC):**
A cooperative effort among state agencies to collect, evaluate, and disseminate information related to network-based security risks in order to defend the state's computer systems. WACIRC operates as a focal point for agencies as they communicate information and develop guidelines and best practices related to cyber security. WACIRC, when requested by the state EMD, may advise EMD on cyber security. See Appendix 1, Tab H.

**Washington Emergency Communication Coordination Working Group (WECCWG):**
A community of professionals and experts from the public, private and tribal sectors within emergency communications across the Pacific Northwest who work together to provide reliable and resilient emergency communications throughout Washington state in times of crisis. See Appendix 1, Tab I.

## Mobilization

Upon SEOC activation, the SEOC Supervisor will activate an Operations Section Chief. This Chief will determine if an ESF 2 function is needed and will activate ESF-2 through the Coordinating Agencies State Agency Liaison (SAL) point of contact. This point of contact will determine which primary and supporting agencies are required for a given operational period, and further mobilize contacts as needed. If the situation merits, the Operations Section Chief, in consultation with Operations Section staff and leads from ESF 1, 3 & 12, will activate an Infrastructure Branch director to accommodate more appropriate span of control and provide a streamlined process for critical infrastructure response information.

## Structure




# Direction, Control & Coordination

## Horizontal Integration

### State Agency Planning Integration

State agencies shall develop telecommunications/information system contingency plans, disaster recovery/business resumption plans, and information system security plans commensurate with the agency's requirements and needs. Agency plans should complement the state CEMP.

### On-Scene Command and Coordination Radio (OSCCR) Plan

This On-Scene Command and Coordination Radio Plan establishes a common radio frequency, 156.135MHz, for use throughout the state, by two or more entities during periods of emergencies or disasters, or times when mutual aid assistance is required from two or more agencies involving multiple disciplines. The OSCCR channel has also been designated by the SIEC as the “Primary On-Scene Command Channel” for the State of Washington.

### Radio Amateur Civil Emergency Services (RACES) Plan

The purpose of this plan is to provide guidance, establish responsibility, and ensure coordinated operations between State of Washington government officials (state/local) and the RACES organizations during times when there are extraordinary threats to the safety of life and/or property. Maximum benefits from the RACES organizations can be obtained only through careful planning which identifies the organizations, agencies, and individuals concerned and assigns a definitive role to each. This plan enables agencies and organizations having emergency responsibilities to include the RACES organizations in local emergency plans and programs.

### Telecommunications Service Priority Plan

The purpose of this planning guide is to describe the State of Washington's policy and procedures for the Telecommunications Service Priority (TSP) system. It summarizes the legal and regulatory basis and procedures for all non-federal government agencies in Washington (including public medical facilities). It will

aid potential users in determining eligibility for TSP and outlines the procedures for submitting TSP applications in Washington.

### Washington Statewide AMBER Alert Plan

The Washington Statewide AMBER Alert Plan solely governs and authorizes the use of EAS and the Portal for AMBER Alerts throughout Washington State. AMBER Alert in Washington is a program of voluntary cooperation between broadcasters, cable systems, and local and state law enforcement agencies to enhance the public's ability to assist in recovering abducted children. AMBER Alert notification is supported by the AMBER Alert Web Portal (Portal) and the Emergency Alert System (EAS).

### Washington Statewide Communication Interoperability Plan (SCIP)

Stakeholder-driven, multi-jurisdictional, and multi-disciplinary statewide plan to enhance interoperable and emergency communications. The SCIP assists Washington with addressing the results of the National Emergency Communications Plan Goals.

### Washington State Public Safety Answering Point (PSAP) Continuity of Operations Plan (COOP)

The PSAP COOP (in development) identifies backup and failover sites for PSAPs and outlines continuity of operations procedures and plans for catastrophic incidents and major outages.

## Vertical Integration

### Local Planning Integration

Local jurisdictions shall develop telecommunications/information systems and warning plans and systems commensurate with local jurisdiction emergency management requirements and needs. Local jurisdiction plans should complement state plans and systems should be interoperable with the state system when and where feasible. Additionally, many local jurisdictions have MOU's with neighbors that have designated mutual aid channels.

### National Emergency Communications Plan (NECP)

Establishes a vision for the emergency responders at all levels of government to strive to achieve: ensuring the availability of communications as needed, on demand, and as authorized across all disciplines and jurisdictions.

### Regional Tactical Interoperable Communications Plans (TICP)

Establishes regional interoperability agreements and will outline what resources have been designated as available for request by ESF2. Each region will have different levels of TICP or mutual aid agreements in place, and this will need to be verified on a case-by-case basis depending on the impacted region.

# Information Collection, Analysis, & Dissemination

## Information Collection

ESF 2 utilizes WebEOC, Vendor notifications, Email, telephony, wireless voice comms (cell, radio, satellite) as the primary tools for collecting and disseminating information. WebEOC is utilized by the vast majority of our public sector partners and where the ESF-2 staff will look to first.

**Essential Elements of Information (EEIs)**

The following categories are a baseline list of facilities and systems which should be considered for information collection. They may not include all relevant EEIs as the impact of a given disaster may require unique information collection needs.

| | |
|---|---|
| • **Federally-focused EEIs** | • Status and content of a communications snapshot assessment.<br>• The anticipated communications impact (on landlines and cellphones) based on current models. In particular:<br>  ○ Number of customers without service.<br>  ○ Identification of communities without communications capabilities.<br>  ○ Identification of critical facilities without communications capabilities.<br>• Potential requirements for satellite and radio equipment.<br>• Status of Public Safety Answering Points (911 Dispatch), including which, if any, are inactive.<br>• Status of the availability of communication resources. In particular, the number of available Cell on Wheels.<br>• Number of Public Safety Answering Points in the affected area.<br>• Number and location of Mobile Emergency Operations Vehicles.<br>• Number and location of available Radio Amateur Civil Emergency Service groups.<br>• Number of Land Mobile Radio networks established.<br>• Limiting factors or shortfalls. |
| • **Disaster Impact Numbers** | ○ Number of people without internet connectivity<br>○ Number of people without cell phone coverage |
| • **Broadcasting Structures and Facilities** | ○ Status (operational, damaged, destroyed, unknown)<br>○ Approximate restoration date |
| • **Internet Structures and Facilities** | ○ Status (operational, damaged, destroyed, unknown)<br>○ Approximate restoration date |
| • **Satellite Communications Structures and Facilities** | ○ Status (operational, damaged, destroyed, unknown)<br>○ Approximate restoration date |

| | |
|---|---|
| • **Regulatory, Oversight and Industry Organization Facilities** | ○ Status (operational, damaged, destroyed, unknown)<br>○ Approximate restoration date |
| • **Telecomm Hotels** | ○ Status (operational, damaged, destroyed, unknown)<br>○ Approximate restoration date |
| • **Public Safety Answering Points (PSAP) and Emergency Services IP Network (ESInet)** | ○ Status of all state PSAPs<br>○ Approximate restoration date<br>○ Status of Statewide ESInet<br>○ Approximate restoration date<br>○ Availability to handle other traffic |
| • **Wireless Communication & Cellular Telephone Structures and Facilities** | ○ Status (operational, damaged, destroyed, unknown)<br>○ Approximate restoration date |

## Information Analysis

Describe the process the information collected goes through to verify accuracy of the information and any details necessary to inform operations and decision-making.

The ESF-2 Staff will receive information through one of the reporting tools or GIS overlays they are monitoring at all times. Once steps are taken to determine the veracity of the information, the proper resources are requested through one of our partners, and the Logistics section.

This is not a function of ESF-15. ESF-15 does not verify information about communications systems. However, ESF 15 monitors news and social media and provides relevant information to ESF 2.

## Information Dissemination

Describe what process this ESF takes to share the information once it has been verified and analyzed (e.g. the ESF shares the information with the Operations Section Chief in the SEOC and the ESF 15/PIO, or Situation Unit in the Planning Section if applicable).

The Emergency Alert System (EAS) operates through designated radio and television stations and is intended to provide federal, state, and local jurisdictions with the means to disseminate prompt alerting information concerning emergency or disaster type events.

ESF-15 communicates directly with ESF-2 to share relevant information. WebEOC is also monitored for updates from ESF-2. Particularly when there are disruptions to mass-communication (phone, cell, internet, etc.) in the state. ESF-15 would likely be called from the

media about the number of people affected. ESF 15 would also share information to the public via social media.

## Responsibilities

The table below outlines the responsibilities of entities in support of this ESF. These actions are tied to executing the Critical Tasks noted in the "Concept of Operations" section, which contribute to the primary and support Core Capabilities listed in the "Purpose" section. The Critical Task I.D. is used to identify the specific Critical Task the action addresses. Multiple entities can perform the same action, and an action can address more than one Critical Task.

| Response Mission Area | | | |
|---|---|---|---|
| **Core Capability** | **Critical Task I.D.** | **Activity/Action** | **State Agency / Organization** |
| **Operational Communications** | 1 | Establish situational awareness and crisis communications with partner Emergency Coordination Centers, consolidating damage reports, assessing functional capabilities following an outage. | Washington Military Department, Information Technology (WMD IT) |
| **Situational Assessment** | 1 | | |
| **Operational Communications** | 1 | Utilizes interoperability agreements and resource requests to reestablish lost communication between agencies and affected areas, through leveraging RACES, the WMD's own critical communications resources, as well as commercial partnerships. | WMD IT |
| | 2 | | |
| **Infrastructure Systems** | 2 | | |
| **Logistics & Supply Chain Management** | 2 | | |
| **Operational Communications** | 1 | Coordinate the acquisition and deployment of ESF-2 assets, personnel, and resources to establish temporary communications capabilities. | WMD IT |
| | 2 | | |
| **Logistics & Supply Chain Management** | 1 | | |
| **Operational Communications** | 1 | Maintain a Teletype Device, as well as the many forms of visual (primarily email) and audio (telephony, wireless voice, multilingual mass alerting)-alternative methods of communications. | WMD IT |
| **Operational Communications** | 1 | Establish communications with PSAP, EM and On Scene Personnel as needed. | Emergency Management Division (EMD E911) |

| Response Mission Area | | | |
|---|---|---|---|
| **Core Capability** | **Critical Task I.D.** | **Activity/Action** | **State Agency / Organization** |
| **Operational Communications** | 1 | Maintain agency Communication Centers/911 Public Safety Answering Points (PSAP) | EMD E911 |
| **Situational Assessment** | 1 | | |
| | 2 | | |
| **Operational Communications** | 1 | Establish capability to leverage ESInet for transportation of other traffic. | EMD E911 |
| **Operational Communications** | 1 | Oversee all interoperable communications plans and compatible frequencies at the state level by the SIEC. | Statewide Interoperability Coordinator |
| | | | State Point of Contact |
| **Operational Communications** | 1 | In a supporting role, establish situational awareness and crisis communications with partner Emergency Coordination Centers, consolidating damage reports, assessing functional capabilities following an outage. | Washington State Technology Solutions (WaTech) |
| **Situational Assessment** | 1 | | |
| **Operational Communications** | 1 | Leverages short-range radio equipment for crisis communication and coordination within the Jefferson building and Olympia State Data Center. | WaTech |
| **Operational Communications** | 1 | Assists WMD IT in coordinating the acquisition and deployment of ESF-2 assets, personnel, and resources to establish temporary communications capabilities. | WaTech |
| | 2 | | |
| **Logistics & Supply Chain Management** | 1 | | |
| **Infrastructure Systems** | 4 | Identify the real-time and planned recovery activities of internal and external network and telecommunications vendors identified as mission essential dependencies. | WaTech |
| **Logistics & Supply Chain Management** | 2 | | |
| **Situational Assessment** | 1 | Determine what and how mission essential ESF 2 services are impacted, and notification to SEOC and other impacted parties. | WaTech |
| | 2 | | |
| **Logistics & Supply Chain Management** | 1 | Prioritize the deployment of services and equipment based on State, Military, WaTech leadership working in coordination with the governor to identify most essential functions during and following an incident. | WaTech |

| Response Mission Area | | | |
|---|---|---|---|
| **Core Capability** | **Critical Task I.D.** | **Activity/Action** | **State Agency / Organization** |
| **Operational Communications** | 1 | Access the statewide Health Alert Network (HAN)/WA SECURES communications systems for direct contact to timely situation/status reports. | Department of Health (DOH) |
| **Situational Assessment** | 1 | | |
| | 2 | | |
| **Operational Communications** | 1 | Maintain and provide support to communications infrastructure with local health departments and hospitals. | DOH |
| **Operational Communications** | 1 | Maintains a deployable Call Center for use during the initial phase of an incident to route incoming phone calls on behalf of local health jurisdictions, tribal partners, or healthcare facilities. | DOH |
| **Situational Assessment** | 1 | | |
| **Operational Communications** | 1 | Manage the Regional Information Technology Services (RITS) system for unified communications support. | Department of Ecology (ECY) |
| | 3 | | |
| **Operational Communications** | 1 | Monitor the operational status of mission-critical enterprise circuits agency-wide. | ECY |
| | 2 | | |
| | 3 | | |
| **Infrastructure Systems** | 2 | Analyze, troubleshoot, and resolves complete enterprise network related issues related to network outages and mission-critical networking equipment failures. | ECY |
| **Operational Communications** | 1 | | |
| | 2 | | |
| | 3 | | |
| **Situational Assessment** | 1 | Participates in the state Emergency Operations Center response efforts and obtains information from regulated utility members. | Utilities and Transportation Commission (UTC) |
| | 2 | | |
| **Infrastructure Systems** | 2 | WSP leverages redundancy in all communication systems and prioritizes restoration to the statewide LMR and Microwave networks. | Washington State Patrol (WSP) |
| **Operational Communications** | 1 | | |
| | 3 | | |
| **Operational Communications** | 1 | Are responder agencies with LMR and Microwave communication systems in use 24x7 and maintain caches of portable radios and associated frequencies. | WSP |
| | | | DOC |
| | | | WDFW |
| | | | DNR |
| | | | WSDOT |

| Response Mission Area | | | |
|---|---|---|---|
| **Core Capability** | **Critical Task I.D.** | **Activity/Action** | **State Agency / Organization** |
| **Infrastructure Systems** | 4 | Provide representation to SEOC upon notification of activation, as requested by the ESF 2 primary entity. | General Commercial Sector |
| **Logistics & Supply Chain Management** | 2 | | |
| **Situational Assessment** | 1 | | |
| | 2 | | |
| **Logistics & Supply Chain Management** | 2 | Maintain updated status of deployable assets (COWs, COLTs, etc.) for SEOC situational awareness. | General Commercial Sector |
| **Situational Assessment** | 1 | | |
| | 2 | | |
| **Situational Assessment** | 1 | Provide status reports of deployable assets to SEOC and/or ESF 2 primary entity. | General Commercial Sector |
| | 2 | | |
| **Infrastructure Systems** | 4 | Work with ESF #2 and other providers on asset deployment plan in order to maximize support and coverage based on the needs of the incident | General Commercial Sector |
| **Logistics & Supply Chain Management** | 2 | | |
| **Infrastructure Systems** | 4 | Provide telecommunications systems, services, and support to state agencies. | General Commercial Sector |
| **Logistics & Supply Chain Management** | 1 | | |
| | 2 | | |
| **Operational Communications** | 1 | | |
| **Infrastructure Systems** | 2 | Assist with other long-term identifying recovery communications projects related to the successful transition to recovery, as appropriate. | General Commercial Sector |
| **Operational Communications** | 2 | | |
| | 3 | | |
| **Infrastructure Systems** | 2 | Implement a statewide wireless communications system for state and local governments that enables interoperability between various wireless communications technologies. | General Commercial Sector |
| | 4 | | |
| **Operational Communications** | 2 | | |
| **Situational Assessment** | 1 | Employees can assist in the SEOC. | Sprint |
| | 2 | | |

| Response Mission Area | | | |
|---|---|---|---|
| **Core Capability** | **Critical Task I.D.** | **Activity/Action** | **State Agency / Organization** |
| **Infrastructure Systems** | 2 | Provide temporary communications to the community, government agencies and businesses. | Sprint |
| | 4 | | |
| **Logistics & Supply Chain Management** | 1 | | |
| | 2 | | |
| **Operational Communications** | 1 | | |
| | 2 | | |
| | 3 | | |
| **Infrastructure Systems** | 2 | Restore Sprint's Wireless and Wireline networks. | Sprint |
| **Operational Communications** | 2 | | |
| | 3 | | |
| **Logistics & Supply Chain Management** | 1 | Satellite Equipped Assets (COWS/COLTS) are staged in North Bend. There are additional FirstNet assets staged across the nation, and over 150 National Disaster Recovery Assets staged nationwide as well, which includes assets at the AT&T National Disaster Recovery center in Reno, Nevada. | AT&T Wireless |
| | 2 | | |
| **Situational Assessment** | 1 | Communicate with the SEOC regarding AT&T's network and FirstNet network status. | AT&T FirstNet |
| | 2 | | |
| **Logistics & Supply Chain Management** | 1 | Respond to request for assets made by SEOC and other entities. | AT&T FirstNet |
| | 2 | | |
| **Logistics & Supply Chain Management** | 1 | Coordinate delivery of assets and on-site equipment set-up, monitor activated assets, and coordinate return of assets. | AT&T FirstNet |
| | 2 | | |
| **Situational Assessment** | 1 | AT&T monitors the health of the networks 24/7. | AT&T FirstNet |
| | 2 | | |
| **Infrastructure Systems** | 2 | In the case of an outages, AT&T works 24/7 on network restorations of the AT&T and FirstNet networks. | AT&T FirstNet |
| | | | |
| **Operational Communications** | 1 | | |
| | | | |
| | | | |

| Response Mission Area | | | |
|---|---|---|---|
| **Core Capability** | **Critical Task I.D.** | **Activity/Action** | **State Agency / Organization** |
| **Situational Assessment** | 1<br>2 | Provide network outage alerts, upon request from FirstNet customers. First Net customers have access to network diagnostics via the FirstNet Local Control Portal. | AT&T FirstNet |
| **Situational Assessment** | 1<br>2 | Communicate network status to the SEOC. | AT&T FirstNet |
| **Situational Assessment** | 1<br>2 | When available, the primary and back-up POCs can work in the SEOC. The POC is available to assist remotely. | AT&T FirstNet |
| **Infrastructure Systems**<br>**Operational Communications** | 2<br>2<br>3 | Our Business Continuity and Disaster Recovery ("BC/DR") program team is responsible for minimizing the impact of a disruption to our customers, employees, infrastructure, and business operations. | Verizon Wireless |
| **Infrastructure Systems**<br>**Operational Communications** | 2<br>2<br>3 | Identify critical functions, infrastructure and risks. | Verizon Wireless |
| **Infrastructure Systems**<br>**Operational Communications** | 2<br>2<br>3 | Develop Business Continuity and Disaster Recovery plans, and Crisis Management Teams to recover operations in the event of a disruption. | Verizon Wireless |
| **Infrastructure Systems**<br>**Logistics & Supply Chain Management**<br>**Situational Assessment** | 4<br>2<br>1<br>2 | The cross-functional Crisis Management Teams in place across our national footprint enhance coordination and response activities during crisis events. These teams provide a command-and-control structure that allows management to gather and report information about crisis events, for the teams to escalate decision-making as needed, and to facilitate resource allocation. | Verizon Wireless |
| **Infrastructure Systems** | 4 | We have developed numerous plans to recover critical functions. Business functions have implemented strategies and procedures that not only support routine operations, but also help the function continue to operate in the event of a disaster. Robust operational | Verizon Wireless |

| Response Mission Area | | | |
|---|---|---|---|
| **Core Capability** | **Critical Task I.D.** | **Activity/Action** | **State Agency / Organization** |
| | | strategies are at the core of our ability to provide reliable and resilient services. | |
| **Situational Assessment** | 1 | Verizon is prepared to provide staff as available to the state EOC to augment ESF-2 functions. Our personnel have received a basic EOC operations course. | Verizon Wireless |
| | 2 | | |

## Resource Requirements

### Micro-level

The SEOC is fully outfitted for incoming staff, with specific SOP's housed digitally on accessible file share locations, and hard copies available at the pod. Should the need arise for more staff than seating positions, they may bring their own laptops, pending approval by on site WMD IT CIO, WMD IT DCIO, WMD IT Network Operations Manager or WMD IT CISO.

**Training Requirements**

IS-100, 200, 700, 800

SEOC Foundations

**Recommended Training**

ICS-300, 400

COM-T

COM-L

## References and Supporting Guidance

Internationally designated mutual aid agreements, see FEMA EMAG agreements as well as MAA's such as PANEMA, inform state and local interoperable communications.

**National Interoperable Field Operations Guide (NIFOG)**

A technical reference for emergency communications planning and for radio technicians responsible for radios that will be used in disaster response. The NIFOG includes rules and regulations for use of nationwide and other interoperability channels, tables of frequencies and standard channel names, and other reference material, formatted as a pocket-sized guide for radio technicians to carry with them.

**Tactical Interoperable Communications Field Operations Guide (TICFOG)**

Based on the OEC National Interoperability Field Operations Guide (NIFOG), the TICFOG is a compendium of TICP reference material for use by emergency response and communications personnel responsible for

establishing and maintaining interoperable communications during events or incidents. The TICFOG is designed as a pocket-sized quick reference guide that can always be carried by radio operators and technicians .

## Terms and Definitions

### Critical Infrastructure:

Systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters.

### Information Technology:

Any services or equipment, or interconnected system(s) or subsystem(s) of equipment, that are used in the automatic acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the agency. This includes computers, ancillary equipment (including imaging peripherals, input, output, and storage devices necessary for security and surveillance), peripheral equipment designed to be controlled by the central processing unit of a computer, software, firmware and similar procedures, services (including provisioned services such as cloud computing and support services that support any point of the lifecycle of the equipment or service), and related resources.

### Land Mobile Radio (LMR):

Any mobile or portable radio communications infrastructure. Both Conventional Analog and P25 radios fall under the umbrella of LMR.

### Telecommunications:

The transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.

### Telecommunications Carrier:

Any provider of telecommunications services, except that such term does not include aggregators of telecommunications services.

### Telecommunications Equipment:

Equipment, other than customer premises equipment, used by a carrier to provide telecommunications services, and includes software integral to such equipment (including upgrades).

### Telecommunications Service:

The offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.

# ESF 2 – Appendix 1: Communication Systems Conditions

## Purpose

This appendix supports the ESF 2 – Communications Annex by elaborating on the capabilities and assignments for use of the communications systems available; this appendix details the conditions for the use and coordinated integration of such systems.

## Concept of Operations

Tabs A-E focus on the frequencies, channels, and assignments of various communications systems to promote interoperability, direction, control, and coordination. Tab F focuses on the voice and data communication systems; while Tabs G-I identify the crucial groups, commissions, committees, and other organizations actively involved in the continual improvement of ESF 2-related functions and capabilities.

# Tab A: Priority Channels for Interoperability

## Very-High Frequency (VHF)

| | |
|---|---|
| **On-scene (OSCCR):** | 156.135 MHz |
| **Control and Coordination** | |
| **Search and Rescue (SAR):** | 155.160 MHz |
| **Law Enforcement (LERN):** | 155.370 MHz |
| **Fire (FIRECOM):** | 153.830 MHz |
| **Mutual Aid** | |
| **Fire (DNR Common):** | 151.415 MHz |
| **EMS/Trauma (HEAR):**<br>**(Medical Control)** | 155.340 MHz |
| **Direction and Control** | |
| **CEMNET**[1] | |
| **Channel F1:** | 45.20 MHz |
| **Channel F2:** | 45.36 MHz |
| **Channel F3:** | 45.48 MHz |

## High Frequency (HF)

| | | |
|---|---|---|
| **Washington Emergency Net:** | *Primary* | *Alternate* |
| **(RACES/ARES)** | 3.985 MHz | 7245 MHz |

## Ultra-High Frequency (UHF)

| | |
|---|---|
| **EMS/Trauma (MED-7):** | TX 463.150 MHz |
| **(Local On-scene Medical Control)** | RX 468.150 MHz |
| **EMD/Trauma (MED-1):** | TX 463.000 MHz |
| **(State Medical Control)** | RX 468.000 MHz |
| **Talk-around (MED-1):** | 463.000 MHz |

[1] See Tab B for Further details concerning CEMNET.

## Ultra-High Frequency (800 MHz NPSPAC)[2]

| | | |
|---|---|---|
| **National Calling Channel (ICALL)[3]:** | 821/866.0125 MHz | Channel 601 |
| **National Working Channel (ITAC-1)[4]:** | 821/866.5125 MHz | Channel 639 |
| **National Working Channel (ITAC-2):** | 822/867.0125 MHz | Channel 677 |
| **National Working Channel (ITAC-3):** | 822/867.5125 MHz | Channel 715 |
| **National Working Channel (ITAC-4):** | 823/868.0125 MHz | Channel 753 |
| **Multi-agency Coordination[5]** | | |
| **Tactical, Fire/EMS (STATEOPS-1):** | 822/867.5375 MHz | Channel 716 |
| **Tactical, Fire/EMS (STATEOPS-4):** | 822/867.6125 MHz | Channel 722 |
| **Tactical, Law Enforcement (STATEOPS-2):** | 822/867.5625 MHz | Channel 718 |
| **Tactical, Law Enforcement (STATEOPS-5):** | 822/867.6375 MHz | Channel 724 |
| **Tactical, Local Government/Others (STATEOPS-3):** | 822/867.5875 MHz | Channel 720 |

[2] All ten interoperability channels cited above shall be controlled by sub-audible tone 156.7 Hz. All interoperability repeaters shall have an input and output tone of 156.7 Hz.

[3] The ICALL channel shall be used to contact other users in the Region for the purpose of requesting incident related information and assistance. If necessary, the calling party will be asked to move to one of the ITAC channels for continuing incident operations or other interoperability communication needs. This channel can be implemented in full repeat mode.

[4] The ITAC channels are to be used primarily for coordination activity between different agencies in a mutual aid situation, or emergency activities of a single agency.

[5] Incidents requiring multi-agency participation will be coordinated over these channels by the agency controlling the incident. These channels can be implemented in full repeat mode.

# Tab B: Comprehensive Emergency Management Network (CEMNET)

CEMNET serves as the "PRIMARY" back-up communications system for direction and control of emergency operations, statewide.

CEMNET is a low band VHF system employing twelve (12) remote mountaintop base stations. The 12 stations are operated and controlled at the state Emergency Operations Center (EOC) through the Washington State Patrol microwave radio system. The 12 base stations and call signs are:

| | |
|---|---|
| Capitol Peak | **KOM575** |
| Skamania Mountain | **WNBQ335** |
| Mount Spokane | **KOM570** |
| Clemans Mountain | **WNUD825** |
| Joe Butte | **KBI807** |
| Galbraith Mountain | **WNBQ380** |
| Burch Mountain | **KOM560** |
| Scoggins Hill | **WNUB969** |
| Tunk Mountain | **WNBW539** |
| Octopus Mountain | **WNUF654** |
| Baw Faw | **WPKE716** |
| Squak Mountain | **WPKE718** |

The system controls/operates three (3) channels supporting state and local government operations. Each channel has been assigned for use in one of five CEMNET operating regions[6]. The channels are monitored on a 24-hour basis by the State Duty Officer; callsign "State EOC".

| REGION | CHANNEL | FREQUENCY |
|---|---|---|
| Northwest and Northeast | F1 | 45.20 MHz |
| Southwest and Southeast | F2 | 45.36 MHz |
| Central | F3 | 45.48 MHz |

[6] Private Line (PL) tone on all channels is 127.3 Hz.

Each local jurisdiction (county/city) with CEMNET may operate on the assigned region channel for local operations. The following table indicates the region/channel assignment to be used by local jurisdictions.

## CEMNET Region and Channel Assignments

| NORTHWEST (F1 - 45.20 MHz) | SOUTHWEST (F2 - 45.36 MHz) | CENTRAL (F3 - 45.48 MHz) | NORTHEAST (F1 - 45.20 MHz) | SOUTHEAST (F2 - 45.36 MHz) |
|---|---|---|---|---|
| Island Co. | Clark Co. | Adams Co. | Ferry Co. | Asotin Co. |
| Jefferson Co. | Cowlitz Co. | Benton Co. | Lincoln Co. | Columbia Co. |
| Kitsap Co. | Grays Harbor Co. | Chelan Co. | Okanogan Co. | Garfield Co. |
| San Juan Co. | King Co. | Douglas Co. | Pend Oreille Co. | Whitman Co. |
| Skagit Co. | Lewis Co. | Franklin Co. | Spokane Co. | |
| Snohomish Co. | Mason Co. | Grant Co. | Stevens Co. | |
| Whatcom Co. | Pacific Co. | Kittitas Co. | | |
| Clallam Co. | Pierce Co. | Klickitat Co. | | |
| | Skamania Co. | Yakima Co. | | |
| | Thurston Co. | Walla Walla Co. | | |
| | Wahkiakum Co. | | | |
| | | | | |
| ESCA | Lacey | | | |
| Auburn | Puyallup | | | |
| Bellevue | Shelton | | | |
| Kent | Tacoma | | | |
| Mercer Island | Kirkland | | | |
| Port Angeles | | | | |
| Redmond | | | | |
| Seattle | | | | |
| Snoqualmie | | | | |

Local jurisdictions listed above are authorized to use the assigned region channel for local operations. Each local license holder is authorized to operate up to five (5) mobiles.

# Tab C: State Emergency Communications Using Radio Effectively (SECURE)

SECURE serves as a "secondary" limited back-up communications system for direction and control use within the state, as needed. It also serves as a capability to communicate with FEMA Region X, Idaho, and Oregon.

SECURE is an HF radio system employing two stations located in the state Emergency Operations Center (EOC), the Spokane EOC, and a mobile station operated by the Military Department.

Frequencies authorized by FCC and FEMA for use on the system are:

| | |
|---|---|
| Primary (Day): | 5.192 MHz |
| Primary (Night): | 2.411 MHz |
| Primary (Day - Interstate): | 7.805 MHz |
| Primary (Night - Interstate): | 2.326 MHz |
| | |
| Other assigned frequencies: | 2.801 MHz |
| | 2.414 MHz |
| | 2.587 MHz |
| | 7.935 MHz |

Frequencies are operated upper sideband (USB).

A local jurisdiction EOC will operate on this system when the need is identified, and the capability is provided by the state EMD Telecommunications and Warning Program Manager.

# Tab D: Radio Amateur Civil Emergency Services (RACES)

RACES serves as a "tertiary" back-up communications system for direction, control, warning, and coordination, statewide.

RACES is the employment of amateur radio operators/equipment in support of state and local government emergency operations. Amateur radio support, RACES, is established and available at the state Emergency Operations Center (EOC). Systems that can be employed are HF (voice and Packet), VHF (2 meter), VHF (Packet), and UHF.

The frequencies most commonly used to support state EOC operations are listed below. Other frequencies within the amateur band, which are not listed, will be coordinated and used as needed. The call sign for the state EOC RACES is W7EMD (State RACES Radio Officer).

| **HF - Used statewide by all amateur radio operators for any/all emergencies.** | |
|---|---|
| Voice (as needed): | 3985 kHz |
| Pactor (24-hours): | 3624 kHz |
| **VHF (2 meter)** | |
| Primary Frequency (P.L. 136.5 HZ) | 145.37 MHz |
| Olympia Repeater | 145.47 MHz |
| Olympia Repeater | 146.80 MHz |
| Olympia Repeater | 145.15 MHz |
| Baw Faw Mountain Repeater | 147.06 MHz |
| **VHF (220 MHz band)** | |
| Olympia Repeater | 224.46 MHz |
| **UHF (440 MHz band)** | |
| Olympia Repeater | 444.275 MHz |
| Olympia Repeater | 444.45 MHz |
| **VHF (PACKET) - Call Sign W7EMD, Air Mail via Winlink National/Global Radio Email Network.** | |
| ELYSSA Node (Primary) | 145.630 MHz |
| SMTN Node (Alternate) | |
| **VHF (APRS) – Call Sign W7EMD-3 144.390 MHZ** | |
| **Echolink RoIP Amateur Radio Network** | |
| **Call sign: W7EMD-L. Link on UHF 445.825 MHz (Simplex) Node No. 43173** | |
| **Call sign: W7EMD, SysOp RACES Radio Room Node No. 28180** | |

# Tab E: Other Frequencies Monitored

To provide a list of other frequencies which the state EOC can monitor or employ, as needed.

The scope of this list focuses on those systems and frequencies which state EMD, through agreement with other agencies, can monitor or access during times of emergencies and/or disasters.

## Frequency Assignments

| **High Frequency** | |
|---|---|
| **State Area Command (STARC):** | 4.580 MHz (Pri) |
| | 4.520 MHz (Alt) |
| **US Coast Guard:** | 2670 KHz |
| | 2103.5 KHz |
| **Civil Air Patrol:** | 4.585 MHz (Pri) |
| | 4.582 MHz (Alt) |
| **FEMA Region 10:**<br>**(FNARS)** | 2.320 MHz |
| | 4.780 MHz |
| | 7.348 MHz |
| | 10.493 MHz |
| | 11.801 MHz |
| | 11.957 MHz |
| | 12.216 MHz |
| | 14.450 MHz |
| | 17.649 MHz |
| **Very High Frequency (VHF)** | |
| **Department of Natural Resources** | |
| • *Common:* | 151.415 MHz |
| • *State:* | RX 159.420 MHz |
| | TX 151.295 MHz |
| • *CAPTEL:* | RX 159.285 MHz |
| | TX 151.430 MHz |
| • *Aeronautical Multi-comm:* | 122.900 MHz (Initial Contact) |
| | 122.850 MHz (Air-to-Air/Gnd) |

| | |
|---|---|
| **Civil Air Patrol:** | 148.150 MHz |
| **NOAA Weather Radio:** | 162.550 MHz |
| | 162.475 MHz |
| **NLECS (EAS radio relay only):**<br>**(National Law Enforcement Communications System)** | 155.475 MHz |
| **US Coast Guard (Mar. Ch. 81A):**<br>**(Pollution Response Coordination Channel, On-scene use only)** | 157.075 MHz |
| **FEMA MERS Operations** | RX 150.6625 |
| | TX Net 50 141.37 |
| | NB Digital |
| **Ultra-High Frequency (UHF)** | |
| **State Agency Emergency Net** | DOT 800 MHz, System 2, Group 2 |

# Tab F: Other Voice/Data Systems

To provide a list of dedicated voice/data systems that would be employed by the state EOC, as needed.

The scope of this list focuses on the landline systems currently used by the state EMD to support any/all emergencies and/or disasters.

National Warning System (NAWAS): (see Appendix 2, Warning, for additional information about NAWAS)

1. Consists of 31 local Primary Warning Points and 15 Duplicate Warning Points located in EOCs.
2. State Warning Point:
    a. Primary - Emergency Management, state EOC, Camp Murray
    b. Alternate - Washington State Patrol (WSP) Communications Center, Yakima
3. NAWAS, if available, in addition to supporting warning requirements, will be employed as an additional direction, control, and coordination capability to those jurisdictions having a NAWAS terminal.

A Central Computerized Enforcement Service System (ACCESS): (see Appendix 2, Warning, for additional information on use of ACCESS)

1. Consists of a web-based data network supporting state and local law enforcement agencies. This network is managed by WSP ACCESS Operations and is supported through the WSP microwave radio system and leased circuits, statewide.
2. ACCESS is employed by the state EMD for dissemination of warning, alert, and notification information to local jurisdiction emergency managers. EMD ACCESS terminal addresses are OLYEM or OLEM2.
3. ACCESS, if available, in addition to supporting the above needs, will be employed as an additional direction, control, and coordination capability to all jurisdictions.

Energy Northwest and Columbia Generating Station Special Circuits: All circuits are supported through the WSP microwave radio system and GTE leased lines.

1. One (1) - Dial "400" CRASH line
2. One (1) - Select Dial line
3. One (1) - Facsimile line

4. One (1) - Public Information Officer (PIO) Select Dial line

U.S. Department of Energy, Richland - One (1) - Dial "400" CRASH line supported through the WSP microwave radio system and GTE leased lines.

Umatilla Chemical Depot, Chemical Stockpile Emergency Preparedness Program:

1. One (1) - Automatic Ringdown Line
2. One (1) - Select Dial line
3. Two (2) - Facsimile lines
4. One (1) - PIO Select Dial line
5. Two (2) - Tie lines

# Tab G: Telecommunications Coordinating Committee (TCC)

The Telecommunications Coordinating Committee (TCC) is a committee that was established to advise the Director, Emergency Management Division of the telecommunications resources that exist within the state and their availability for supporting emergency response, recovery, and restoration activities particularly when the telecommunications systems infrastructure has been impacted as a result of an emergency or disaster situation.

Members of the TCC are comprised of representatives from both government and industry telecommunications providers and administrators. Current standing members include:

- Washington State Military Department, Emergency Management Division
- Washington State Department of Information Services
- Washington State Utilities and Transportation Commission
- Washington State Patrol
- Washington State Department of Transportation
- Washington State Department of Natural Resources
- Washington National Guard
- Department of Homeland Security, ESF 2 Liaison from GSA Qwest
- AT&T
- Verizon

Other government agencies and commercial telecommunications providers may be requested to participate as necessary.

Should a disaster situation occur which severely impacts the telecommunications and information systems within the state, member organizations may be requested to provide a representative to the ESF 2 cell to assist in monitoring and addressing critical telecommunications and information system issues.

# Tab H: Washington Computer Incident Response Center (WACIRC)

The Washington Computer Incident Response Center (WACIRC) is a cooperative effort among state agencies and other governmental jurisdictions to collect, evaluate and disseminate information related to network-based security risks in order to defend the state's computer systems. WACIRC operates as a focal point for agencies as they communicate information and develop guidelines and best practices related to cyber security. WACIRC, when requested by the state EMD, may advise EMD on cyber security during all four phases of emergency management.

All DIS Customers who use the State Governmental Network (SGN) are required to appoint a representative to the WACIRC. All DIS Customers who use the Intergovernmental Network (IGN) are requested to appoint a representative to the WACIRC.

Current WACIRC organizational structure includes six subcommittees:

1. Reporting Subcommittee
2. Communications Subcommittee
3. Joint Intergovernmental Website Subcommittee
4. Law Enforcement Subcommittee
5. Wireless Subcommittee
6. Security Training Subcommittee WACIRC website is at http://wacirc.wa.gov

# Tab I: Washington Emergency Communication Coordination Working Group (WECCWG)

A community of professionals and experts from the public, private and tribal sectors within emergency communications across the Pacific Northwest who work together to provide reliable and resilient emergency communications throughout Washington state in times of crisis.

Goals of this outreach effort:

**1. Understand the threats we face in Washington state**

- Natural (Earthquake, Wildfires, Wind and Ice Storms, Flooding, Avalanche, Landslide, Volcano, Tornado, Tsunami)
- Technological (Cyber, Hazardous Materials, Pipelines, Public Health, Terrorism, Urban Fire, Dam Safety, Public Events, Outages)

**2. Know one another**

- Establish and maintain active relationships
- Understand the capabilities and limitations of what each entity provides to the larger picture
- Strive to know our interdependencies
- Identify and understand private, tribal and public sector response priorities & timelines
- Know who, how and when to call
- Develop the expectations and ability to share situational awareness among partners

**3. Plan and exercise together**

- Prepare partners with realistic scenarios and expectations
- Figure out interoperability challenges before disasters strike
- Overcome information sharing challenges
- Identify/establish and refine policies, guidelines and/or agreements for companies, governments and tribes to work together

**4. Establish and maintain Washington state ESF 2 roster**

- Document our experts, how to reach them and when/where they will be needed
- Ensure all partners understand ICS/NIMS and ESF 2
- Recommend trainings and job aids
- Ensure all partners understand activation levels, procedures and limitations for various EOCs/ECCs
- Review/update the CEMP, ESF 2 Annex and other public communication documents

**5. Seek out and engage other contributors**

- Routinely identify other contributors
- Provide opportunities for expanded participation
- Recruit other participants
- Market and showcase WECCWG