Communications and Warning ESF 2

ESF 2 November 2023

Interim Adjutant General of Wisconsin

ESF 2

Emergency Support Function Approval and Implementation

Wisconsin Emergency Management has coordinated an update of this emergency support function (ESF). This ESF will be reviewed periodically in accordance with the timeline outlined in the state's Integrated Preparedness Plan.

DocuSigned by:	
Greg Engle	Date: 7/31/2024 3:00 PM CDT
Greg Engle, Administrator	
Wisconsin Emergency Management	
This emergency support function is hereby adopted as written and versions.	supersedes all previous
Brig Gu David May BFBC546B20CF4AA DAVID W. MAY, Brigadier General	Date: 8/6/2024 3:03 PM CDT



Wisconsin Emergency Response Plan Communications and Warning

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Table 1-1: Coordinating and Support Agencies

Lead Coordinating Agency	Department of Administration/Division of Enterprise Technology	
	(DOA/DET)	
	Department of Military Affairs/Wisconsin Emergency Management	
	(DMA/WEM)	
Wisconsin Governmental Support Agencies	Department of Justice (WI DOJ)	
	Department of Natural Resources (DNR)	
	Department of Transportation (WisDOT)	
	Department of Transportation/Wisconsin State Patrol	
	(WisDOT/WSP)	
	Department of Health Services (WI DHS)	
	Department of Military Affairs – Office of Emergency	
	Communications (OEC)	
Non-Governmental Support Organizations	American Red Cross	
	The Salvation Army (SA)	
	UW System Communications	
	Public Broadcasting Service	
	Wisconsin Amateur Radio Emergency Services/ Radio Amateur Civil	
	Emergency Service (WI ARES/RACES)	
	Wisconsin Telecommunicator Emergency Response Taskforce (WITERT)	
Private Sector Support Agencies	Telecommunications service providers	
Federal Coordinating Agencies	Federal Emergency Management Agency (FEMA)	
	FEMA Disaster Emergency Communications Response Division	
	National Weather Service (NWS)	

1. Introduction

1.1 Purpose

- 1.1.1 Adequate, reliable communications and information technology equipment, facilities, and capacity for first responders and emergency management officials at all levels are core necessities for developing incident situational awareness and providing a common operating picture. ESF 2:
 - 1.1.1.1 Coordinates strategic and tactical communications and information technology assets and statewide infrastructure.
 - 1.1.1.2 Supports the rapid and accurate dissemination of information relating to impending or occurring natural or technological incidents to federal, state, tribal, and local officials, and the public.

1.2 Scope

1.2.1 ESF 2 is an integral element of the WERP and applies to all state agencies and state-owned communications and warning resources and information technology systems during an emergency declared by the governor (§ 323.10, Wis. Stats.).



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1.2.2 ESF 2 may also support certain non-emergency events as determined by the Governor, the Adjutant General, or the WEM Administrator.

1.3 Policies

- 1.3.1 Except for cyber incidents, DMA is the lead ESF 2 agency and the WEM Communications and Warning Officer is the ESF 2 coordinator..
 - 1.3.1.1 Cyber emergencies declared by the Governor: DET may be designated as the lead agency for cyber related emergencies in accordance with § 323.10, Wis. Stats. See the Cyber Incident Response Annex for additional details.
- 1.3.2 Except for cyber-related emergencies, DET supports ESF 2 by providing robust and reliable information technology infrastructure for state and local agencies on a day-to-day basis and during pending or occurring emergencies.
- 1.3.3 On request, the WEM Communications and Warning Officer may make communications and warning assets assigned to WEM available to state, local, and non-government agencies during pending or occurring emergency incidents and certain non-emergency events.
 - 1.3.3.1 When WEM cannot directly support requests for communications resources, the WEM Communications and Warning Officer coordinates with other state agencies and private sector entities for assets under their control.
 - 1.3.3.2 Where WEM, or another state agency, cannot support a resource request, the WEM Communications and Warning Officer may request resources through ESF 7 *Resource Support*.
- 1.3.4 Through ESF 2, WEM provides emergency alerting capability for key state and local jurisdiction officials in the event of an emergency or in anticipation of a pending emergency.
- 1.3.5 In conjunction with ESF 15 *External Affairs*, WEM can provide emergency alerting capability for the public for impending or occurring emergencies.
- 1.3.6 ESF 2 supports state agency continuity of operations plans (COOP) addressing telecommunications and information technology requirements at alternate locations.

2. Concept of Operations

2.1 General

2.1.1 The WEM Communications and Warning unit is responsible for providing trained communicators and reliable communications and, in conjunction with the DMA Information Technology Section, information technology infrastructure and capabilities



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at primary and alternate SEOCs as well as other locations due to exigent circumstances.

- 2.1.2 As necessary, the WEM Communications and Warning unit may request communications assistance through state-to-state mutual aid compacts, Emergency Management Assistance Compact (EMAC) requests, the State and Province Emergency Management Assistance Compact (NEMAC), and from FEMA through federal ESF 2.
- 2.1.3 The SEOC has connectivity with local jurisdictions, Canadian provinces, and state agencies as well as the federal government.
 - 2.1.3.1 SEOC communication methods
 - (1) Voice communications
 - (A) Telephone
 - (i) Commercial landline telephone
 - (ii) Commercial wireless telephone
 - (iii) Commercial satellite telephone
 - (B) Two-way radio (see attachment 1 for specific radio frequencies)
 - (i) Wisconsin Interoperable System for Communications (WISCOM) statewide trunked radio system
 - (ii) WEM two-way radio repeater system
 - (iii) FEMA Federal Emergency Management Agency National Radio Systems (FNARS)
 - (iv) WI Amateur Radio Emergency Service/Radio Amateur Civil Emergency Service (ARES/RACES).
 - (v) State and national standard interoperable channels
 - (vi) Direct line to American Transmission Company
 - (2) Data communications
 - (i) WebEOC®
 - (ii) Email
 - (iii) Microsoft Teams
 - (iv) Facsimile
 - (v) WI Trac (for hospital-to-hospital information)
 - (vi) State Patrol Mobile Architecture for Communications Handling (MACH)
 - (vii)Homeland Security Information Network (HSIN)



(3) WI ARES/RACES

2.2 Organization

- 2.2.1 The WEM Communications and Warning unit, organized under the Mission Support Section of the Bureau of Operations and Planning Support, is staffed by a Communication Officer and an Assistant Communications Officer.
- 2.2.2 When the SEOC is operating at Level 3 or above, the WEM Communications and Warning unit supports ESF 2 in the Logistics Section.

2.3 WEM Communications Capabilities and Assets

- 2.3.1 WEM may establish a warning center which can operate on a 24 hour/365-day basis, if needed.
- 2.3.2 WEM works with the JOC to serve as a 24/7 agency contact. The JOC may be utilized to request communications support.
 - 2.3.2.1 A landline telephone system is the primary notification system to communicate with Federal Agencies.
 - 2.3.2.2 WEM provides a 24-hour hotline (800-943-0003) as a primary means for the public, local, county, and tribal officials to contact the JOC. Callers to the 24-hour hotline will hear a voice recording with the following options:
 - (1) Press 1 for Hazardous Substance Spills or to report a DNR emergency.
 - (A) Between 7:00 AM and 10:00 PM routes calls to the DNR Hotline. DNR Hotline staff will notify the appropriate spill coordinators, DNR Duty Officer, and DNR staff as necessary. The DNR Duty Officer will notify the JOC as appropriate
 - (B) Between 10:00 PM and 7:00 AM and during weekends this routes calls to District 1 State Patrol. District 1 State Patrol staff will notify the DNR Duty Officer, as necessary.
 - (2) Press 2 to report an emergency to the WEM Duty Officer
 - (A) This routes call to the Wisconsin National Guard Joint Operations Center (JOC). JOC staff will handle the calls and notify the appropriate personnel.
 - (3) Press 3 for MABAS third alarm fire activations and to contact Badger Red Dispatch Call Center.
 - 2.3.2.3 The WEM Radiological Emergency Preparedness Program utilizes 2-1-1 as a just-in-time call center. The State Emergency Operations Center (SEOC) manager can activate 2-1-1 for radiological as well as all hazards drills, exercises, emergency incidents, and planned events, as needed.



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- (1) WEM provides, uses, and maintains facsimile machines at several locations at WEM headquarters in Madison and at the six regional offices.
- (2) WEM provides most employees with a wireless telephone for voice, text, and email messages.
- (3) WEM provides, uses, and maintains a limited number of satellite telephones capable of using the wireless telephone networks as a backup for key WEM facilities including the SEOC, the six regional offices, and for all key WEM staff members.
- (4) WEM has the capability to initiate or participate in secure video teleconferences (VTC) using equipment disbursed from the WEM communications and warning office.
- 2.3.2.4 A secure telephone (STE) is available in the State Emergency Operations Center Radio Room. Note: A limited number of key staff have the required DoD or DHS security clearances to operate the STE equipment during regular office hours. Backup and off-hours STE operations may be accomplished with a STE located in the Joint Operations Center.
- 2.3.3 To enhance situational awareness, WEM conducts teleconferences between the SEOC and WEM headquarters with counties, tribes, municipalities, and other emergency management partners.
- 2.3.4 Information technology assets
 - 2.3.4.1 WebEOC provides a secure, compartmentalized, internet-based application for emergency management communication, collaboration, situational awareness, and information management.
 - 2.3.4.2 RAVE is the primary method for sending alerts and notification messages via email, telephone, or text to WEM staff and other state, tribal, municipal, and county agencies. RAVE alerts are sent to all public and private emergency management partners as needed during an incident.
 - 2.3.4.3 Email and Network Connectivity
 - 2.3.4.4 Microsoft Teams Microsoft Teams is utilized to conduct meetings and communicate with stakeholder organizations.
- 2.3.5 Two-way radios
 - 2.3.5.1 WEM maintains communications assets on both conventional analog, and Association of Public-Safety Communications Officials (APCO) Project 25 (P25) digital Phase 22 conventional channels including a system of seven conventional analog VHF two-way radio repeaters throughout the state. These repeaters are augmented by two mobile dual-mode analog/P25 repeaters on WEM's mobile



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- 80-foot light tower.
- (1) All WEM radios can communicate on common national and state interoperable channels as well as key fire and law enforcement channels.
- (2) All WEM vehicles and regional offices have radios programmed for the WEM repeater system and interoperable channels.
- (3) WEM maintains:
 - (A) A cache of P25 capable VHF portable radios at WEM headquarters in Madison.
 - (B) A cache of 700/800MHz portable radios, UHF portable radios, a portable VHF repeater, and a portable UHF repeater at WEM headquarters in Madison.
 - (C) A limited cache of P25 WISCOM dual-band portable radios at each WEM region director's office.
- 2.3.6 Other assets maintained by WEM
 - 2.3.6.1 A NIMS Type 2, self-sustaining, all weather, interoperable mobile communications center (MCC) trailer containing:
 - (1) Limited conference facilities
 - (2) Dispatch stations
 - (3) A suite of radios capable of operating on all interoperable communications channels used in Wisconsin.
 - (4) In addition, the MCC has:
 - (A) Two onboard VHF analog radio repeaters for key interoperable radio repeaters
 - (B) Banks of VHF-Lo, VHF-Hi, UHF, 700/800MHz, Marine, Citizen's Band, Aviation, and high frequency radios to communicate with various conventional and trunked radio systems
 - (C) Other equipment allowing it to function as an on-scene emergency operations and dispatching center.
 - (5) The MCC can create:
 - (A) A local area wireless, internet connected computer network.
 - (B) Ad hoc radio networks by interconnecting otherwise incompatible radio systems.
 - 2.3.6.2 A mobile 80-foot, self-erecting, telecommunication and lighting tower available for rapid deployment and short or long-term use. The light tower contains:



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- (1) A high-powered lighting system capable of illuminating a wide area
- (2) Two multi-mode analog and P25 digital two-way radio repeaters capable of operating on and patching communications between the WEM two-way radio network and various inter-agency statewide radio channels.
- 2.3.6.3 A NIMS Type 4, 22-foot, all-weather, self-sustaining trailer containing:
 - (1) Equipment capable of operating on and interconnecting disparate radio communications networks.
 - (2) A dispatch and communications area.
 - (3) A small meeting area.

2.4 Other State Agency Communications Capabilities and Assets

- 2.4.1 Human assets
 - 2.4.1.1 Communications Unit Leaders (COMLs)
 - (1) An Incident Command System (ICS) position under the Logistics Section responsible for developing plans for the effective use of communications resources during an incident or event.
 - (2) COMLs are available through several state agency incident management teams (IMTs) including DNR and WSP, as well as regional IMTs. The current primary COML resource is the Communications Asset Team (CAT), run by OEC.
 - (3) COMLs may also be available through other local and state agencies.
- 2.4.2 Landline and wireless telephone assets
 - 2.4.2.1 Backup voice-over-IP (VoIP) telephone system
 - (1) Operating on the DOT/WSP network and maintained by WSP.
 - (2) Phones are located in all WSP district headquarters, the WI DOT Traffic Management Center, WEM regional offices, and key locations in the SEOC and WEM.
 - 2.4.2.2 Wisconsin Interoperable System for Communications (WISCOM)
 - (1) A shared, P25 phase 1 trunked radio system available to first responders and emergency management partners.
 - (2) The WISCOM system is administered by OEC and maintenance is provided by the Wisconsin Department of Transportation.
 - 2.4.2.3 VHF two-way radio network
 - (1) Operated by WSP primarily for communications between each district



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- headquarters and their cars in the field and with other county, tribal, and federal law enforcement agencies.
- (2) WSP shares this system with multiple state agencies, including the DNR for communications with their wardens and rangers. Users have access to this system via State Patrol posts statewide.
- 2.4.3 Network Communications: The Department of Administration (DOA), Division of Enterprise Technology (DET) provides a wide array of Network and telecommunication support for State and local government entities including:

2.4.3.1 Application Services:

- (1) <u>Email exchange</u>: Enterprise e-mail provides state agencies with a centrally managed, enterprise-wide messaging system. In addition to e-mail and calendar functions, the enterprise e-mail system provides anti-spam and anti-virus protection, file-sharing services, outbound faxing, and the ability to send encrypted e-mail. This service offers a variety of mailbox sizes designed to meet the diverse business needs of state agencies and their employees.
 - (A) Components of this system include:
 - (i) Operating system
 - (ii) Storage hardware
 - (iii) Server hardware
 - (iv) E-mail software and support
 - (B) Agency technical support staff provides support for the client-based email component.
- (2) Enterprise instant messaging and collaboration: Enterprise Instant Messaging and Collaboration (IMC) is a Unified Communications service based on Microsoft Teams. The Enterprise IMC service connects people everywhere, on Windows and other operating systems including mobile devices, as part of their everyday productivity experience. Enterprise IMC provides a consistent, single client experience for Presence, Instant Messaging, User-to-User Voice and Video as well as a great meeting experience.

2.4.3.2 Infrastructure services:

(1) BadgerNet: BadgerNet is Wisconsin's state-wide network serving all 72 counties by providing wide area network, Internet transport, and video applications to state government and educational entities. BadgerNet also provides network services to authorized users and other governmental entities such as municipalities, tribal nations, and technical colleges in the state. BadgerNet is a flexible high-capacity network for the transportation of



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electronic information across the state in an efficient and cost-effective manner.

2.4.3.3 Telecommunication services:

- (1) Local Voice (Centrix, Long Distance) Service: Local Voice Service provides Centrex telephone service for State of Wisconsin agencies, universities, campuses, and authorized users. These services are provided under contract as negotiated by DOA with ATT, Lumen, Verizon, Solarus, and Frontier Telephone.
- (2) Mobile Device Management: The Mobile Device Management Service provides state agencies with mobile device security protection, device management, email management, application management, and Bring your own Device (BYOD) support.
- (3) Microsoft Teams (Unified Communications): Microsoft Teams is a Unified Communications (UC) service that connects people on Windows as well as other operating systems and platforms, including most mobile devices. It provides a consistent, single-client experience for Presence, Instant Messaging, User-to-User Voice and Video, as well as a meeting experience. Teams for Business also delivers seamless and secure integration with other Microsoft collaboration products such as Outlook, SharePoint, and Office applications.

2.4.3.4 Platform Services:

- (1) Office 365: Office 365 is a subscription-based cloud service from Microsoft that provides productivity software and related services for its users.
- (2) SharePoint management: SharePoint service provides a web-based business productivity platform that allows for collaborative content to be centrally created and managed, with appropriate contextual metadata, customized to fit the business needs of the users.
- 2.4.3.5 Staff with technical expertise in all functions listed above.
- 2.4.3.6 Deployable Communications: During an emergency the DOA can deploy the following equipment in support of response personnel:
 - (1) Cellular phones 100 (U.S. Cellular)
 - (2) iPads -7
 - (3) Smart phones 10 (Verizon)
- 2.4.4 Mobile routers: Wisconsin National Guard (WING) maintains a secure videoconference (SVTC) system located at Joint Forces Headquarters and at the State Capitol building in Madison.



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- 2.4.5 WI DOJ maintains the Transaction of Information for Management of Enforcement (TIME) System consisting of a central computer facility with terminals located at WEM and approximately 2,850 law enforcement agencies throughout Wisconsin. Operating over dedicated telephone lines, the TIME system is used primarily to transmit law enforcement information.
- 2.4.6 Two-way radio (see Attachment 4 for a map of key state-owned two-way radio tower sites):
 - 2.4.6.1 WI DHS manages two medical-based communications systems:
 - (1) An EMS communications system using VHF and UHF conventional radio channels for ambulance and hospital communications. The system provides:
 - (2) Rapid access to emergency medical services (EMS) providers.
 - (3) EMS dispatch and response coordination.
 - (4) Medical control communications.
 - (5) 800MHz interoperability channels
 - (6) EMS-related interagency communications.
 - (7) The Wisconsin Tracking, Resources, Alerts and Communications (WI Trac) system, an internet-based tool for hospitals and their emergency response partners. WI Trac provides:
 - (8) Near real time hospital bed availability.
 - (9) Emergency alerting.
 - (10) Other hospital related emergency communications.
 - 2.4.6.2 WI DHS maintains the Wisconsin Emergency Medical Services Communications Plan.
 - 2.4.6.3 The Wisconsin Interoperable System for Communications (WISCOM) is a P25 Phase 1 digital two-way trunking radio system for use statewide by federal, tribal, state, county, local, and non-governmental public safety agencies. WISCOM operates from a backbone of 140 radio tower sites operating primarily on VHF with some 800 MHz overlays. This includes local enhancement sites that have been added to the system by some WISCOM daily users. WISCOM is utilized for both daily and interoperable communications across the state. WISCOM is managed by the Department of Military Affairs-Office of Emergency Communications and maintained by the Department of Transportation, Division of State Patrol.
 - 2.4.6.4 WSP and/or counties maintain fixed Wisconsin Mutual Aid Radio Channel (MARC) repeaters for use by public safety agencies at all levels. The MARC network



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comprises base stations and radio repeaters throughout Wisconsin. MARC channels may be used any time interagency communications are required.

- (1) To enhance state access to local governments, WEM and WSP can communicate with county sheriffs' offices via radio using most standard statewide and national interoperable radio channels including the MARC channel.
- 2.4.6.5 The Wisconsin Office of Emergency Communications (OEC) was established within the Department of Military Affairs in October 2017 to serve as a resource to public safety stakeholders and coordination of public safety interoperable communications in Wisconsin. As part of the 2017-19 biennial budget, the Interoperability Unit housed at the Wisconsin Department of Justice (DOJ) was moved under DMA/OEC and included specific program areas. These areas include the Statewide Interoperability Coordinator position (SWIC), the Wisconsin Interoperable System for Communications (WISCOM), Next Generation 9-1-1 (NG9-1-1), Land Mobile Radio (LMR), and Public Safety Broadband. In addition, OEC is responsible for providing staff support to the Interoperability Council which oversees the implementation of the Statewide Communications Interoperability Plan (SCIP).
- 2.4.6.6 Agency Websites and Social Media: Most state agencies maintain websites and social media sites which allow citizens and other stakeholders the ability to obtain information about relevant programs and/or view press releases from those agencies.

2.5 County and Local Government Two-Way Radio Systems

2.5.1 County and municipal governments provide two-way radio systems to support their public safety and business needs. Provisions are in place at the local level to leverage these systems to support emergency management during an emergency.

2.6 Federal Agency Communications Capabilities

- 2.6.1 FEMA operates the Federal Emergency Management Agency National Radio Systems (FNARS), a high frequency (HF) radio network providing long distance non-secure voice communications capability and long-distance common telephone service. A FNARS radio is in the WEM communications room adjacent to the SEOC.
- 2.6.2 Mobile Emergency Response Support (MERS) and Mobile Air Transportable
 Telecommunications System (MATTS) resources support local, state, and federal
 responders with transportable communications support elements. Both MERS and
 MATTS provide mobile telecommunications, operational support, life support, and power
 generation assets for the on-site management of disaster and all-hazards activities.



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- 2.6.3 FEMA operates the National Warning System (NAWAS) landline telephone system used for disseminating national level threat warnings to state and local jurisdictions throughout Wisconsin. FEMA permits and encourages states to use NAWAS for disseminating state level warnings to local jurisdictions. Both national and regional/state NAWAS terminals are in the WEM communications room and main office, with multiple state NAWAS terminals in other key WEM office areas. Additionally, the WI DOT's Traffic Management Center has a NAWAS terminal. NAWAS is WEM's designated backup communication system to communicate with federal emergency response organizations. Point Beach Nuclear Plant and Prairie Island Nuclear Generating Plant both utilize NAWAS as backup notification methods for key stakeholders.
- 2.6.4 The National Oceanic and Atmospheric Administration (NOAA) all-hazards weather radio system is a network of over 1,000 nationwide transmitters broadcasting continuous weather information directly from the nearest National Weather Service (NWS) office. This network continually broadcasts official weather warnings, watches, forecasts, and other hazard information. See attachment 3 for information on NOAA weather radio facilities in Wisconsin.
- 2.6.5 The Emergency Alert System (EAS), part of the Integrated Public Alerting System (IPAWS), is a national public warning system providing the President the ability to address the American public during periods of national emergency. EAS operates through broadcast radio and television stations, cable and satellite television and radio systems, and direct broadcast satellite (DBS) providers.
 - 2.6.5.1 State and local authorities can use EAS to deliver important emergency information, such as America's Missing: Broadcast Emergency Response (AMBER) alerts and weather information targeted to specific areas.
 - 2.6.5.2 IPAWS also allows geo-specific alerting via the Wireless Emergency Alerts (WEA).
 - 2.6.5.3 WEM has access to the statewide EAS and IPAWS networks and can make emergency broadcasts directly from WEM headquarters. WEM regularly transmits required monthly tests to broadcasters statewide via this system.

2.7 Private and Leased Services

- 2.7.1 Each SEOC workstation has a telephone connected to the commercial telephone network using AT&T Unified Communications (UC) Voice-over-IP (VoIP) telecommunications network. This network is cloud-based, (i.e., uses no on-premise servers), and traverses WEM's computer network. Two backup systems are provided in case of network outages:
 - 2.7.1.1 Department of Transportation (DOT) VoIP phones on the DOT network serving WEM region director offices and other key locations.
 - 2.7.1.2 POTS (Plain Old Telephone System) phones in key locations throughout WEM and on the UC VoIP network, allowing VoIP phones to continue communications.



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2.7.2 Local and county governments: Local and county governments often contract with private internet and communications service providers.

2.8 Non-Governmental Agencies Capabilities and Assets

2.8.1 Amateur radio

- 2.8.1.1 Amateur radio offers a robust distributed communications system operating in various portions of the radio spectrum using a variety of operating modes for worldwide and last-mile communications capabilities. The value of amateur radio to the emergency management community is well-documented as a critical asset in incidents where other radio services are overloaded, degraded, or inoperative.
- 2.8.1.2 WI ARES/RACES is a NIMS-compliant organization of volunteer amateur radio communicators located throughout the state who donate their time, skills, and equipment to provide a reliable backup communications system available to all public, private, and volunteer emergency management partners.
- 2.8.1.3 WEM maintains the WEM RACES Radio Room capable of using multiple amateur radio bands and modes. When activated by the WEM communications and warning officer, WI ARES/RACES provide credentialed volunteer communicators to operate the equipment.
- 2.8.1.4 More than 60 Wisconsin counties have ARES/RACES organizations grouped together into districts with boundaries identical to WEM Regions.
- 2.8.1.5 WI ARES/RACES teams mobilize through their county emergency managers for local incidents and by the WEM communications and warning officer for statewide incidents.

2.8.2 American Red Cross

The American Red Cross maintains a sophisticated radio communications network for its offices, mobile units, and personnel operating in the field. The American Red Cross supports victims of emergencies by passing health and welfare messages on their behalf. The American Red Cross makes their communications assets available to other emergency management partners as time and resources allow.

2.8.3 The Salvation Army (SA)

SA maintains some communications capabilities for its offices and units operating in the field. SA also sponsors the Salvation Army Team Emergency Radio Network (SATERN), a corps of amateur radio operators who volunteer their time, skills, and equipment to provide communications for SA and for victims of emergencies and disasters.

- 2.8.4 Wisconsin Telecommunicator Emergency Response Taskforce (WI-TERT)
 - 2.8.4.1 WI-TERT is an organized network of trained public safety dispatchers available for deployment to assist a dispatch center or to staff a mobile communications



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center in the event an incident overwhelms or otherwise compromises a state or local public safety communications staff.

2.8.4.2 When requested, WI-TERT, through its memorandum of understanding (MOU) with WEM, deploys teams of communicators to support public safety agencies statewide. Agencies request assistance from WI-TERT through the WEM Duty Officer.

2.9 ESF Activities

The WERP Basic Plan defines standardized tasks that constitute response responsibilities of any agency that serves a role in emergency management. The following defines those responsibilities that are unique to ESF 2 and is intended to be used in conjunction with the common tasks outlined in **the WERP** Basic Plan and with specific duties assigned in the other ESFs.

Table 2-1: Response Activities

Action Item	Agency
 Provide intra-agency communications services when operating in support of state and local emergency management agencies. Provide support to victims of emergencies and disasters by transmitting health and welfare messages into and out of disaster areas. 	American Red Cross SA
 In conjunction with WEM, support private utility operators in the restoration of voice, video, and data transmission capabilities. Work with ISPs and telecommunication providers to establish or restore necessary communications capabilities during an emergency. Work with other state and local agencies to restore network and IT service, as appropriate. 	DOA/DET
Provide agency personnel and communications support statewide.	DOT/WSP
 Provide and maintain communications infrastructure in support of commercial communications networks. Restore communications capabilities when outages occur. Assist state, tribal, county, and local governments with communications capabilities, when requested and able. 	Private Sector
 As requested, provide backup voice and data communications services in support of local and state emergency management agencies. 	WI ARES/ RACES
 Communications and Warning Unit Work with telecommunications partners to identify areas where deployable communications assets may be required. Support communications and information technology equipment in the SEOC while it is operating at Level 3 or above. Supplement state emergency communications systems with a mobile communications center and other WEM-operated equipment. Issue IPAWS messages as requested by the Governor or the Governor's authorized representative or other municipalities, as needed. Coordinate with DET and other state agencies to identify communications needs. Deploy WEM radios as needed to facilitate response activities to public and private entities during emergencies. 	DMA/WEM



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Action Item	Agency
 Coordinate COML support to local governments and private sector partners, when requested. 	
 Coordinate with the SEOC Operations and Logistics Sections (when elevated to level 3 or above) or the WEM Duty Officer (Level 4 & 5) to deploy communications and information technology resources, when requested. 	
 Provide trained public safety communicators to assist state and local jurisdictions when requested in an emergency. 	WI-TERT

Table 2-2: Short Term Recovery Activities

Action Item	Agency
 Assume a lead role in managing the recovery of communications- related activities from a human health-related incident. 	
 In conjunction with WEM, support private utility operators in the restoration of voice, video, and data transmission capabilities. 	DOA/DET
 In conjunction with WEM, coordinate acquisition and deployment of additional 	
telecommunications equipment and personnel necessary to establish temporary communications capabilities within the affected area.	
 As necessary, support private utility operators in the restoration of voice, video, and data 	DOT/WSP
transmission capabilities.	DOT/WSP
 In conjunction with DOA/DET, support utility operators in the restoration of voice, video, 	
and data transmission capabilities. This support may include, but is not limited to:	
o Communications Liaison Officer	
o Portable and mobile radio asset deployment	DMA/WEM
o Technical advice	DIVIA, WEIVI
 In conjunction with DET, coordinate acquisition and deployment of additional 	
telecommunications equipment and personnel necessary to establish temporary	
communications capabilities within the affected area.	

3. Supporting Documents

3.1 Attachments

- 3.1.1 ICS Form 217a Communications Resource Availability Worksheet (This document is not included as it is U//FOUO but is available at the WEM Communications Office.)
- 3.1.2 NOAA Radio Tower Locations
- 3.1.3 WISCOM Tower Site Map

3.2 Agency-Specific Plans and Procedures

- 3.2.1 SEOC Operations Manual
- 3.2.2 Wisconsin ARES/RACES Communications Reference Plan
- 3.2.3 Wisconsin TERT Memorandum of Understanding



ESF 2

Communications and Warning

3.2.4 Wisconsin Interoperable Field Operations Guide (WI-FOG)Wisconsin Emergency Medical Services Communications Plan

3.3 National Response Framework ESF 2

National Interoperable Field Operations Guide (NI-FOG)

Wisconsin Emergency Response Plan Communications and Warning

Table 3-1: Record of Change

#	Date	Agency/Individual	Change
1.			
2.			
3.			
4.			
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ESF 2 Attachment 1

Attachment 1

ICS Form 217a Communications Resource Availability

The State of Wisconsin's ICS form 217a Communications Resource Availability is intended for the State of Wisconsin's emergency management partners. The ICS form 217a contains information not for public distribution or disclosure. Distribution is restricted.

The State of Wisconsin's ICS form 217a is maintained by the Mission Support Section of:

Wisconsin Emergency Management 2400 Wright Street Madison, WI 53707-7865

ESF 2 Attachment 1

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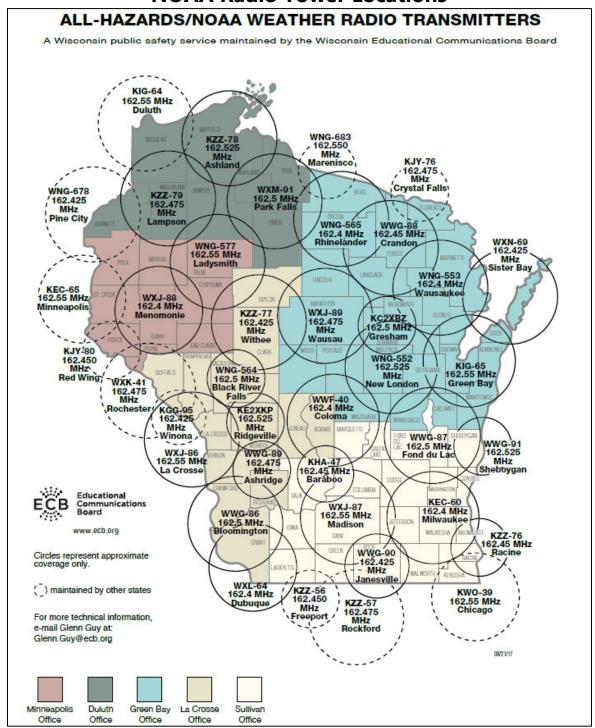


Wisconsin Emergency Response Plan NOAA Radio Tower Locations

E SF 2 Attachment 2

Attachment 2

NOAA Radio Tower Locations



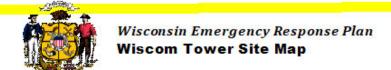
ESF 2 Attachment 3

1. Weather Radio Stations

Table 1-1 Weather Radio Stations lists the National Weather Service weather radio stations in Wisconsin.

Table 1-1: Weather Radio Stations

City	Call Signal	Frequency
Ashland	KZZ-78	162.525 MHz
Ash Ridge	WWG-89	162.475 MHz
Baraboo	KHA-47	162.450 MHz
Black River Falls	WNG-564	162.500 MHz
Bloomington	WWG-86	162.500 MHz
Coloma	WWF-40	162.400 MHz
Crandon	WWG-88	162.450 MHz
Delafield / Milwaukee	KEC-60	162.400 MHz
Dubuque / Kieler	WXL-64	162.400 MHz
Eau Claire / Menomonie	WXJ-88	162.400 MHz
Fond du Lac	WWG-87	162.500 MHz
Green Bay	KIG-65	162.550 MHz
Gresham	KC2-XBZ	162.500 MHz
Janesville	WWG-90	162.425 MHz
La Crosse	WXJ-86	162.550 MHz
Ladysmith	WNG-577	162.550 MHz
Madison	WXJ-87	162.550 MHz
New London	WNG-552	162.525 MHz
Park Falls	WXM-91	162.500 MHz
Racine	KZZ-76	162.450 MHz
Rhinelander	WNG-565	162.400 MHz
Ridgeville	KE2-XKP	162.525 MHz
Sheboygan	WWG-91	162.525 MHz
Sister Bay	WXN-69	162.425 MHz
Spooner	KZZ-79	162.475 MHz
Wausau	WXJ-89	162.475 MHz
Wausaukee	WNG-553	162.400 MHz
Withee	KZZ-77	162.425 MHz



E SF 2 Attachment 3

Attachment 3

WISCOM Tower Site Map

Source: Wisconsin Interoperable System for Communications (WISCOM) – Wisconsin Office of Emergency Communications (accessed 11/18/23).

WISCOM Tower Sites

