



# 2015

## CONOPS Interoperability



Maine Emergency  
Management Agency &  
Maine Department of Public  
Safety  
State of Maine  
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# Purpose

- This Concept of Operations Plan (CONOPS) provides guidance to public safety agencies (traditional first responders) and non-traditional responders for developing and employing on-scene interoperability through an effective Incident Communications program.
- CONOPS will focus on incident communications requirements and the role of interoperability. A communications partnership must exist between all public safety agencies in the state. It must also include federal, state, tribal, military, and local agencies including utilities and other support agencies that would be engaged in supporting response and recovery efforts for a major event, emergency or disaster in Maine. It is essential that these partnerships are established, maintained, and exercised by all of the agencies within the State in order for interoperability to exist. There must be cooperation and support among all players to ensure capabilities enhance operations.

# Definitions

- **Interoperability:** “Interoperability is the ability for on demand and real time radio communications between public safety personnel and personnel from other agencies or organizations”. Simply put, interoperability is the ability of public safety officials (Law Enforcement, Fire & EMS) to communicate with each other using one or more statewide common talk-around channels. This also includes the capability to communicate with “non-traditional” public safety agencies and organizations that may be called to the scene. These agencies include but are not limited to: Public Works, Maine Department of Transportation, USCG, FBI, EPA, National Guard, FEMA, DHS, OEC, neighboring states, REMIS (Regional Emergency Medical Information System), Poison Control, Transportation, Utilities such as the Water Districts, gas companies, Central Maine Power, telecommunications companies such as Verizon and AT & T and other agencies or organizations that would be involved including the extended response efforts when a major emergency or disaster strikes.

# Interoperability

- <https://www.youtube.com/watch?v=0MUsVcYhERY>

# Definitions Cont.

- **Talk-around channels:** Simplex, single frequency channels permitting direct point to point communications between two or more radios without the aid of repeaters or remote transmitter/receiver systems.
- **Repeater channels:** Duplex, two frequency channels permitting repeated communications between two or more radios over a larger geographic area.
- **Types of interoperability.**
  - **Day to Day:** Involves communications and coordination for routine or local public safety operations. This could be single agency or multiple agency single jurisdiction response such as Police, Fire and EMS in the same community.
  - **Mutual Aid:** Involves multi-jurisdictional (out of town) and immediate response to events and incidents (major or catastrophic) and requires communications between numerous public safety agencies and personnel from throughout a region.
  - **Agency Incident:** Involves local, state, and federal agencies operating together for an extended period of time to address a public safety incident (major or catastrophic). This may also include non-traditional agencies engaged in response and recovery efforts such as the local public works and State Department of Transportation, the utilities, transportation and others that become critical partners to the public safety agencies during a major events and incidents.

# Definitions Cont.

- **Extended Incident:** During major events, emergencies and disasters, traditional public safety agencies are not equipped or staffed to handle all the requirements. When engaged in the response and recovery stages of these events, local, state, federal and other public sector assets quickly become an extension of public safety. They too need to be able to communicate with public safety officials at the scene of an incident or event.
- **Traditional Public Safety Agencies:** Include Law Enforcement (Local, County and State), Fire and Emergency Medical Services and various other functions of the Maine Department of Public Safety.
- **Non-traditional public safety agencies:** are those agencies that do not have a traditional public safety role day to day. These agencies are not necessarily considered part of the public safety community except during a major event, emergency or disaster, at which time they would work under the umbrella of public safety. These agencies include but are not limited to: Public Works, State Dept. of Transportation, USCG, FBI, EPA, FEMA, National Guard, REMIS (Regional Emergency Medical Information System), Poison Control, Transportation, Utilities such as the Water District, Gas Company, Central Maine Power, Telecommunications companies such as Verizon and AT & T and other agencies or organizations that might be involved included the extended response efforts when a major emergency or disaster strikes.
- **After-action review (AAR).** The After Action Review (AAR) is an interactive discussion conducted following the conclusion of a CONOPS activation to help MEMA and the signatories to CONOPS review the event and determine ways and means to improve future CONOPS performance. The MEMA Director will host the AAR with the incident commander and other appropriate participants.

# Assumptions

The State of Maine's Office of Information Technology, in coordination with the Maine Department of Public Safety (DPS) and the Maine Emergency Management Agency (MEMA), has arranged for the use of seven (7) statewide talk-around channels and forty (40) statewide repeated channels for on-scene interoperability between mobile and portable radio users, one of these channels will be assigned by the DPS dispatch or the Communication Unit Leader (COML) and the Incident Commander for a repeated CONOPS. All public safety agencies in the state will agree to support this Concept of Operation (CONOPS).

All Police, Fire, EMS and nontraditional public safety agencies VHF portable and mobile radios may be programmed with the common interoperability channels identified in this CONOPS, thereby establishing a standard throughout the state.

Federal, State and local non-traditional public safety agencies will be provided with the channel/frequency assignments (ICS Form 205 or equivalent) for use when responding to events and incidents within the state.

Incident Commanders will familiarize themselves with this Communications Operations Plan and ensure that proper use of these channels is accomplished to ensure that interoperability exists. The 46 CONOPS channels are licensed by the State of Maine or statewide agencies (Me Fire Chief's Assoc., Maine EMS, etc.) for mobile and portable radio use statewide. They will be utilized for on-scene interoperable communications at the direction of the Incident Commander and the Communication Unit Leader (COML) when a CONOPS operation has been authorized.

# Assumptions Cont.

- The Incident Commander or designated representative through the Communications Unit Leader (COML) will assign channels as needed, based upon the nature of the event or incident.
- All public safety agencies should establish Memorandums of Understanding (MOUs) with their neighboring communities for the purpose of confirming the implementation of this CONOPS.
- Interoperability with agencies operating on frequencies outside the common VHF High Band spectrum will be resolved using available technologies. MEMA will help provide technical guidance to determine the best practical technical solutions, help with implementation of technological solutions and will provide assistance with grant applications and obtaining funds from other sources when applicable and available. Non-traditional public safety agencies will have communications capabilities with first responders through the Incident Commander.
- The selection and use of CONOPS channels will be determined by the Incident Commander, or, on a developing incident, the COML
- When multiple units are engaged in a common incident, talk-around channels should be implemented. When multiple units and/or multiple agencies are engaged in an incident over a large geographic area where non repeated channels will not work, repeater channels should be implemented, such as CONOPS R (Channel assign by Dispatch or COML and the Incident Commander – this must be a repeated channel).



# Interoperability Operations - RegionNets

The purpose of RegionNets is not to change how local agencies use the RegionNets frequencies on a day to day basis. The RegionNets agreement is to allow usage of these frequencies during incidents that require State Agencies.

MEMA has provided listings of frequencies/ channels and guidance for their use throughout the state, or also known as RegionNets. See list of MSCommNet RegionNets below page 13 and 14. Partnerships already developed between public safety agencies will assist in implementing this interoperability program. Mutual aid agreements should also include the CONOPS implementation as part of the agreement.

Once all agencies' radios have been equipped with the common talk-around channels and personnel are trained, the RegionNets are ready for full implementation. MEMA/OIT/DPS will provide training guidance and coordinate an awareness campaign for both traditional and non-traditional responders.

The RegionNet plan authorizes the installation of the RegionNet frequencies in mobile and portable radios of traditional and non-traditional first responder organizations. The installation of the RegionNet frequencies in base stations is beyond the authority of this plan.

This program will be successful only if we have 100 percent participation in the program.

# Interoperability Operations - RegionNets

When agencies such as county and municipal first responders want to make contact with the Department of Public Safety Emergency Communications Centers (SP RCC's); whether for assistance or to be connected (patched) to a unit within the system, these units should utilize the RegionNets frequencies in their area to contact the RCC. Agencies should be familiar with their closest RegionNet tower for channel selection, and should be programmed into their radio. Once the RegionNet (Tower) is identified the Unit should identify themselves by their jurisdiction and unit number, such as "Anytown Police Unit 4 to (Augusta, Bangor, Gray or Houlton) RCC". The RegionNet locations with adjacent RCC's are listed on the Pocket Guide.

Once acknowledged by the RCC, the calling unit should make their request and the RCC Dispatch will make the necessary connections, such as "Anytown Police Unit 4 to Augusta RCC". Augusta RCC to "Anytown Police Unit 4" go ahead with your traffic. "Anytown Police Unit 4" I need a State Police Unit to I 95 mile marker 112 northbound for crash that I just witnessed. Augusta RCC to "Anytown Police Unit 4" I will dispatch a unit thanks. Once units have concluded their communication, the units should request that the patch be cleared or their request be terminated. "Anytown Police Unit 4" Augusta clear thanks.

# Training

The overriding goal of this initiative is to provide the best possible capability to incident commanders for management of their resources while ensuring that all agencies can communicate with one another on several state wide common talk-around channels which in turn will provide interoperability between all agencies while freeing up dispatch channels for what they are intended for.

## **Training Requirements**

Training all public safety personnel is critical to the success of this CONOPS. Dispatchers, first responders, incident commanders and field supervisors must be trained in this concept, and implement it on a daily basis during responses and training exercises. Regular use of talk-around channels will make this second nature to first responders.

## **Training Support**

Agency chiefs, incident commanders, field supervisors and communications managers must ensure that this concept is part of regular training and is included in all exercises as well as implemented in normal day to day operations. MEMA will help coordinate and identify sources of fund to support training requirements if training is outside the agency's normal training requirements.

# CONOPS Frequencies

The table below lists the seven simplex and forty duplex frequencies to be used during a CONOPS scenario. The seven simplex channels are not new frequencies but the forty duplex channels are new frequencies. The leadership of the primary responder agencies associated with each frequency has signed a collaborative agreement to allow for CONOPS activation/temporary reallocation of these frequencies during a CONOPS event. The authority for activating CONOPS is the Director of MEMA. Upon request by an incident commander for use of CONOPS frequencies, a request is made to the MEMA director. The MEMA director is the sole and final authority for approving a CONOPS request.

## Day-to-Day and Repeated Frequencies (Permanent Assignment)

SWSP	154.7100	State Wide State Police
NWCC	155.4750	Nation Wide Car to Car
EMS/LASAR	155.1600	Emergency Medical Services/ Land/Air Search /Rescue
SPCC	154.9350	State Police Car to Car
SF	154.3100	State Fire
SWCC	154.6950	State Wide Car to Car
Maine Hailing	155.7525	VCALL 10
Maine TAC (RPTD)	TBA	(40 tower sites)

Agencies that do not currently have these frequencies programmed into their mobile and portable radios may now include these for use in a CONOPS contingency situation. These frequencies may then be used during a CONOPS incident when the incident commander has gained authority from the MEMA director.

# CONOPS Frequencies Cont.

- **Guidance Criteria for MEMA Director to Authorize Use of CONOPS Frequencies**
- Should an event occur that meets or exceeds 3 of the following 5 criteria the incident commander may request a “CONOPS” authorization to support their operations.
- An event/incident involving response from four (4) or more agencies
- An event/incident involving the potential duration of at least six (6) or more hours
- An event/incident involving response from at least three (3) levels of government
- An event/incident where normal use of common simplex (local talk-around) channels will not support the incident commanders needs
- An event/incident involving a large geographic area whereby simplex frequencies are ineffective utilizing CONOPS 7, and CONOPS 8 (Repeated)

# CONOPS Frequencies Cont.

- **Step 1:** The incident commander calls MEMA at 1-800-452-8735 or 207-624-4400 to make the request to the MEMA Director, or their designee (the lines are available 24/7/365). Be prepared to identify yourself, summarize the situation, request specific frequencies, identify the incident inbound calling freq., and give contact information. The MEMA contact will immediately engage the MEMA Director for decision-making.
- **Step 2:** The MEMA Director will consider the request and approve or disapprove in accordance with the criteria listed in this CONOPS document. (The decision criteria are guidelines and therefore flexible. In the After-Action review, the guidelines may be modified by the signatories to this agreement. The purpose is to remain open, assimilate lessons learned, and to be better prepared for future events.)
- **Step 3:** When the MEMA Director authorizes CONOPS, MEMA will request that State of Maine Public Safety Dispatch immediately issue a teletype requesting a general broadcast alert for the region where the incident is occurring. Additionally, it shall be included in the information to be broadcast, which channel has been designated as the in-bound frequency for all units responding to the incident. Once on scene, in-bound units will be redirected to the appropriate frequency by the incident commander, or their designee. MEMA will also notify the incident commander when this has occurred. The teletype will also indicate the name, position title, organization, and contact information for the incident commander to whom the authority has been granted; the purpose of the CONOPS authorization; and the location of the incident.
- **Step 4:** All communications centers within the incident region shall immediately broadcast that a CONOPS incident is in effect, and shall indicate the inbound calling frequency and which channels the Incident Commander has requested so that responders know what channels are now dedicated to the incident commander in charge of that incident.

# CONOPS Frequencies Cont.

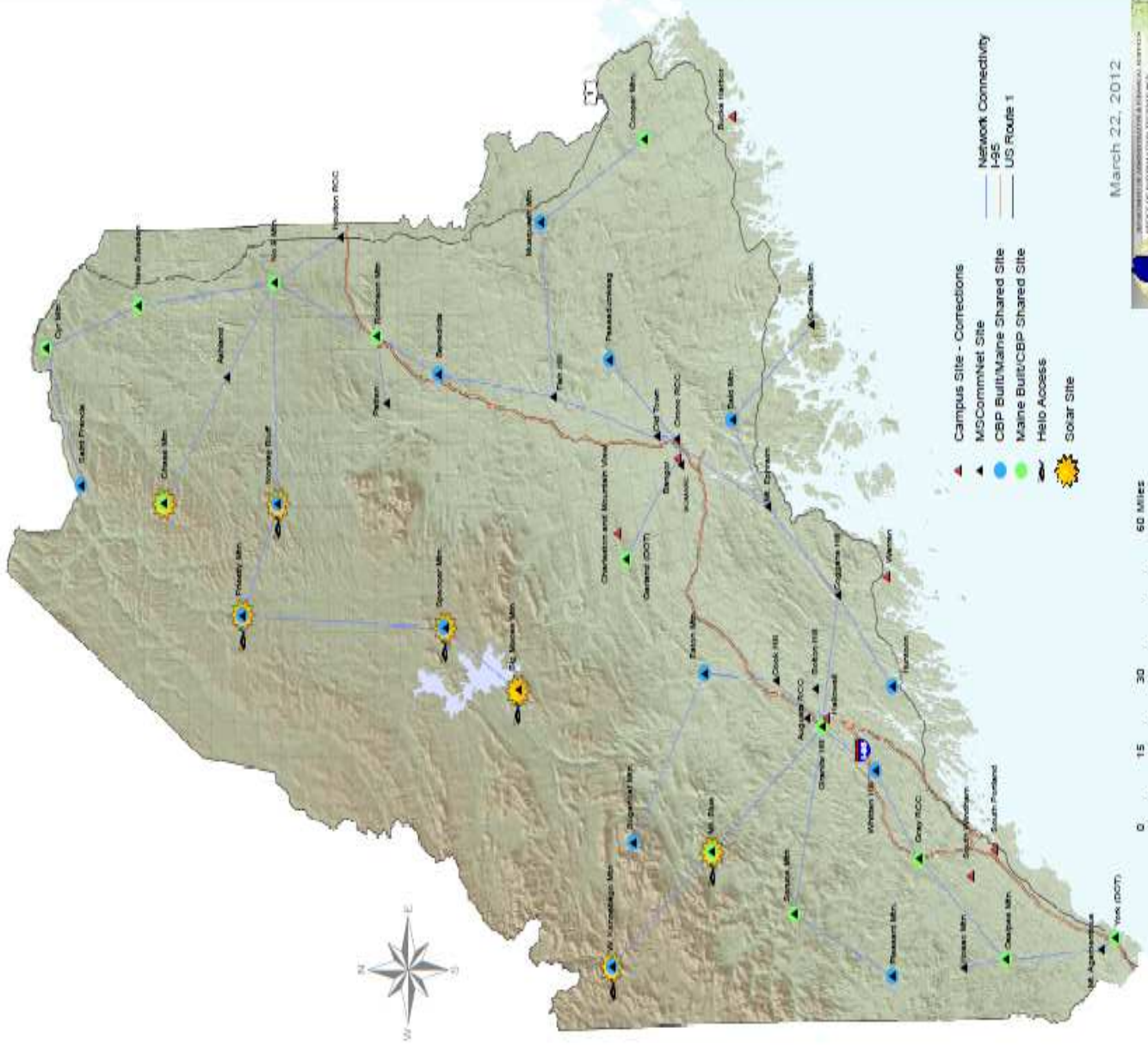
- **Step 5:** As the incident escalates, or deescalates the incident commander may again call MEMA to adjust the request. If the CONOPS authorization is no longer required, the incident commander will contact MEMA to request a stand-down of the CONOPS, which in turn will be broadcast by MEMA to all pertinent stations.
- **Step 6:** Upon completion of an authorized CONOPS event, the MEMA Director will ensure that an after-action review (AAR) is conducted within a reasonable time. The purpose will be to review the CONOPS process and procedures and to modify the plan as necessary to ensure improved performance for future events.
- **Step 7:** CONOPS 7 should be used as a hailing frequency for a large incident where multiple agencies will be looking for channel assignment. The hailing frequency should be pre- identified such as VCALL 10 (155.7525) with a CSQ of 156.7. The reasoning behind VCALL 10 is that all federal responders have this frequency programmed into their respective radios, and is nationally known as a hailing frequency it is imperative that Maine State Police Dispatch assign hailing units to the Staging area and then direct them to the operational channel such as CONOPS 1, 2, 3, 4, 5, 6, and 8 as identified by the on scene COML (Communication unit Leader). Guidelines for CONOPS 7 will be the same as CONOPS 1-6.
- **Step 8:** CONOPS 8 should be used as a last resort CONOPS frequency because it will be a repeated frequency. An example of utilizing this frequency will be in the case of an event or disaster in remote areas where simplex channels will not provide coverage. Guidelines for CONOPS 8 will be the same as CONOPS 1-7.

# Summary

- This CONOPS provides incident commanders, first responders and dispatchers with a much more effective and efficient way to communicate with one another during upscale public safety operations. No longer do interoperability issues block the effective deployment and employment of first responders. Incident related communications, primarily handled on talk-around and repeated channels, leave dispatch channels available to handle the ongoing activities in the communities. Command and control of first responders at the scene becomes much more effective and reliable. The ability to dedicate channels to specific functions at an incident will be possible once CONOPS is implemented.
- This is a living document, and intended to be amended as necessary after each CONOPS after-action review and/or when changing technologies allow for new opportunities to solve the interoperability problems.



# Maine State Communications Network (MSCommNet)



March 22, 2012





Section 8: RegionNet Frequencies Bangor/Houlton COMMUNICATIONS RESOURCE WORKSHEET						Frequency Band VHF (Page 2 of 2)		Description MSCommNet Region Net - July/2015		
Channel Configuration	Channel Name/Trunked Radio System Talkgroup	Users	Mobile RX Freq	N or W	RX Tone / NAC	Mobile TX Freq	N or W	Tx Tone / NAC	Mode	Remarks
Duplex	Bald Mtn		157.5000	N	162.2	159.2700	N	162.2	A	Patch to Zone Dispatch: Bangor
Duplex	Big Moose M		155.4300	N	162.2	151.1900	N	162.2	A	Bangor RCC zone
Duplex	Big Spencer		161.1300	N	162.2	158.4975	N	162.2	A	Bangor RCC zone
Duplex	BOMARC		154.6575	N	162.2	159.3300	N	162.2	A	Bangor RCC zone
Duplex	Cadillac Mtn		160.8900	N	162.2	165.1375	N	162.2	A	Patch to Zone Dispatch: Bangor
Duplex	Cooper		160.8600	N	162.2	159.4650	N	162.2	A	Patch to Zone Dispatch: Bangor
Duplex	Fish Hill		154.7025	N	162.2	159.3375	N	162.2	A	Bangor RCC zone
Duplex	Garland		151.2200	N	162.2	157.7625	N	162.2	A	Patch to Zone Dispatch: Bangor
Duplex	Musquash M		155.4000	N	162.2	161.3400	N	162.2	A	Patch to Zone Dispatch: Bangor
Duplex	Norway Bluff		151.7300	N	162.2	159.7350	N	162.2	A	Bangor RCC zone
Duplex	Passadumke		172.5250	N	162.2	160.0575	N	162.2	A	Bangor RCC zone
Duplex	Priestly Mtn		152.5025	N	162.2	154.9275	N	162.2	A	Bangor RCC zone
Duplex	Ashland		154.3250	N	162.2	159.1350	N	162.2	A	Houlton RCC zone
Duplex	Benedicta		151.6700	N	162.2	155.7150	N	162.2	A	Patch to Zone Dispatch: Houlton
Duplex	Chase Mtn		154.6725	N	162.2	153.8000	N	162.2	A	Houlton RCC zone
Duplex	Cyr Mtn		159.4425	N	162.2	156.0525	N	162.2	A	Houlton RCC zone
Duplex	Houlton		160.8000	N	162.2	151.2500	N	162.2	A	Houlton RCC zone
Duplex	New Sweden		153.9425	N	162.2	156.1650	N	162.2	A	Patch to Zone Dispatch: Houlton
Duplex	No 9 Mtn		151.2650	N	162.2	154.7325	N	162.2	A	Patch to Zone Dispatch: Houlton
Duplex	Patten		158.8125	N	162.2	153.8975	N	162.2	A	Houlton RCC zone
Duplex	Robinson Mt		155.9400	N	162.2	161.2800	N	162.2	A	Houlton RCC zone
Duplex	Saint Francis		154.7925	N	162.2	156.1350	N	162.2	A	Patch to Zone Dispatch: Houlton

# MEMA

- *Steven H. Mallory*
- *Communication Manager – COML Instructor*
- *Statewide Interoperability Coordinator (SWIC)*
- *Maine Emergency Management Agency*
- Office: 207.624.4476
- Cell: 207.557.3671
- Email: [Steven.Mallory@maine.gov](mailto:Steven.Mallory@maine.gov)
- MEMA – [maine.gov/mema](http://maine.gov/mema)