Illinois Interoperability Field Operations Guide

June 2014 Edition
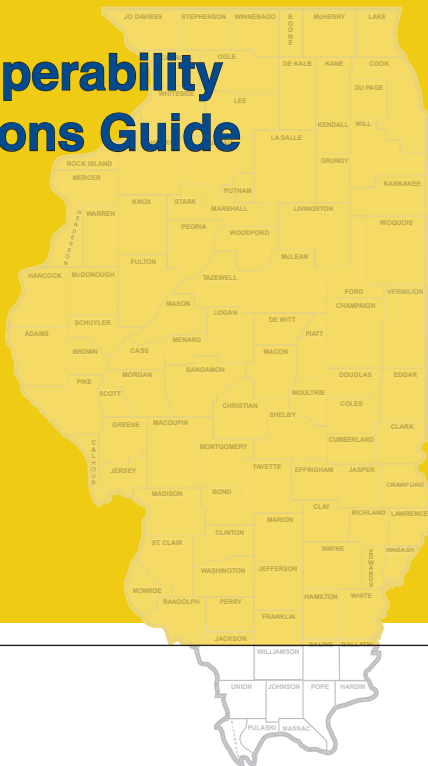
IEMA

Common Responsibilities of All Deployed Responders

- ❖ Be prepared to deploy – have GO kit(s) ready
- ❖ Receive assignment – DO NOT self-deploy
  - ▪ Reporting location, time and travel route
  - ▪ Description of type and severity of incident
  - ▪ Instructions for communication while enroute
  - ▪ Monitor incident status while enroute
- ❖ Start an ICS214 to document activities
- ❖ Upon arrival, check in at correct location
- ❖ Receive briefing from immediate supervisor
- ❖ Gather information on current incident status
  - ▪ Copy of IAP, face-to-face, ICS201
  - ▪ Document current situation if necessary
- ❖ Document significant activities on ICS214
- ❖ Maintain asset accountability
- ❖ Brief, assign and manage subordinates, if any
- ❖ Work safely – ensure safety
- ❖ Participate in planning process if appropriate
- ❖ Keep systems operational – verify!
- ❖ Brief replacement prior to shift change
- ❖ Demobilize as directed – when and how

The *Illinois Interoperability Field Operations Guide (I²FOG)* is a collection of technical reference material to aid Illinois Communications Unit personnel in establishing communications solutions during emergency incidents and planned events. The ability of responders to communicate in real time is critical to establishing command and control at the scene of an incident.

The *I²FOG* condenses information from the *Illinois Tactical Interoperable Communications Plan (TICP)* and is consistent with the goals identified in the *Illinois Statewide Communications Interoperability Plan (SCIP)* and the vision statement of the U.S. Department of Homeland Security (DHS), wherein emergency responders can communicate as needed, on demand, and as authorized at all levels of government.

This FOG contains nationwide and statewide interoperability channels that should be programmed into all public safety radios in the appropriate frequency band.

Thank you,

Statewide Interoperability Coordination Team
Illinois Emergency Management Agency

IEMA Dispatch Center (24/7) – **800-782-7860**

Send corrections or suggestions to SWIC Team at *ema.scip@illinois.gov*

Contents

Interoperable Communications in Illinois

GENERAL RULES OF USE

NIMS / ICS /COML
Use of ICS as a component of NIMS is the standard in Illinois. This includes the designation of a Communication Unit Leader (COML) when appropriate.

Tactical Call Signs / Common Terminology
The Incident Commander/designee shall establish tactical call signs used for the incident. It is the responsibility of all users to refer to facilities and staff by the proper tactical call signs.

Plain Language (No 10-codes)
All communications shall be in plain language. Radio codes, acronyms, and abbreviations should be avoided as they may cause confusion among agencies. The reason for a request for assistance or backup should be clearly stated.

Unit Identifier
The proper identifier for any asset is the agency name followed by identifier/resource type (i.e., ISP Car 2-15 or Elgin Fire Engine 3).

Calling Another Unit
A user should call another user using the – "called unit from calling unit" format (also known as the "**hey you –it's me" format**) using unit identifiers as shown above "ISP Car 2-15 <u>from</u> IEMA 3"
Followed by: "IEMA 3 from ISP Car 2-15, go ahead"

INTEROPERABLE SYSTEMS

Interoperable communications in Illinois has a long and rich history. This section documents the statewide systems and channels in addition to the National Interoperable Pool (NIP) channels available for use within the State.

STARCOM21 Platform Overview

The Illinois Terrorism Taskforce (ITTF) approved STARCOM21 as the interoperable communications platform for statewide command, control, and support communications at major incidents and events, supporting established local, regional, and statewide communications systems.

STARCOM21 is used by many state and local agencies for daily operability as well as for interoperability among disciplines and among jurisdictions. The ITTF distributed STARCOM21-capable radios to many local agencies to assist them in establishing interoperable communication when necessary.
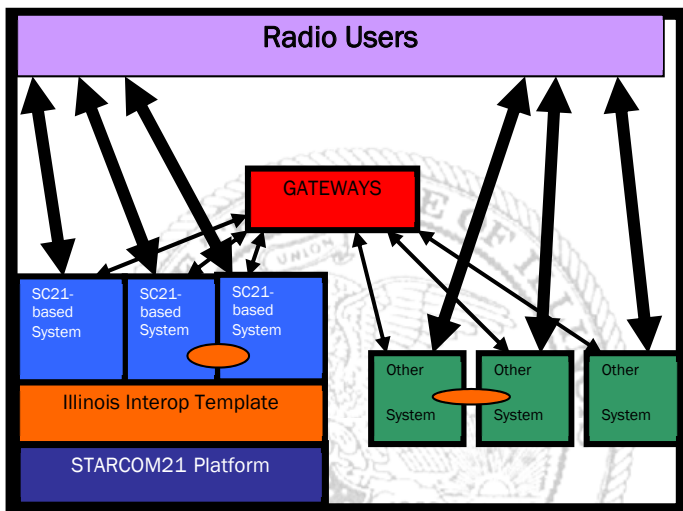
RED   indicates methods of hardware interoperability (patches) i.e. the "Gateways" box

ORANGE   Indicates shared channels/talkgroups i.e. the small ovals between two radio systems and the "Illinois Interop Template" box.

Statewide Agencies Using the STARCOM21 Platform

System Name	Agency	System Name	Agency
IAG	Attorney General	ILEAS	Law Enforcement Alarm System
ICC	Commerce Commission	IMERT	Medical Emergency Response Team
IDHS	Department of Human Services	IMT	Incident Management Team
IDNR	Department of Natural Resources	ING	National Guard
IDOC	Department of Corrections	IOEIG	Office of Executive Inspector General
IDOR	Department of Revenue	IPWMAN	Public Works Mutual Aid Network
IDOT	Department of Transportation	ISP	State Police
IDPH	Department of Public Health	ISSP	Secretary of State Police
IEMA	Emergency Management Agency	ISTHA	State Toll Highway Authority
IEPA	Environmental Protection Agency	JTTF	Joint Terrorism Task Force
IESMA	Emergency Services Management Assoc.	MABAS	Mutual Aid Box Alarm System
IGB	Gaming Board	OSFM	Office of the State Fire Marshal

STARCOM21 Statewide Interoperability Template

B Series Template

		Zone				
		BA	BB	BC	BD	BE
Mode (Channel)	1	IESMA	RGN 2A	8CALL90D	7CAL50D	7MOB59D
	2	ILEAS	RGN 2B	8TAC91D	7TAC51D	7MOB59DA
	3	MABAS	RGN 3A	8TAC92D	7TAC52D	7LAW61D
	4	PUB HLTH	RGN 3B	8TAC93D	7TAC53D	7LAW62D
	5	IPWMAN	RGN 4A	8TAC94D	7TAC54D	7FIRE63D
	6	INCIDNT1	RGN 4B	8CALL90	7TAC55D	7FIRE64D
	7	INCIDNT2	RGN 6A	8TAC91	7TAC56D	7MED65D
	8	INCIDNT3	RGN 6B	8TAC92	7GTAC57D	7MED66D
	9	INCIDNT4	RGN 7A	8TAC93	7CAL50	7MOB59
	10	INCIDNT5	RGN 7B	8TAC94	7TAC51	7MOB59A
	11	NORTH A	RGN 8A		7TAC52	7LAW61
	12	NORTH B	RGN 8B		7TAC53	7LAW62
	13	CENTER A	RGN 9A		7TAC54	7FIRE63
	14	CENTER B	RGN 9B		7TAC55	7FIRE64
	15	SOUTH A	RGN 11A		7TAC56	7MED65
	16	SOUTH B	RGN 11B		7GTAC57	7MED66

NOTE: 7MOB59A & 7MOB59DA are analog versions of 7MOB59 & 7MOB59D with 156.7Hz tone for use with mobile repeaters used by some ISP units.

		Zone			
		BF	BG	BH	BI
Mode (Channel)	1	7CAL70D	7MOB79D	7FTAC1D	7MTAC9D
	2	7TAC71D	7MOB79DA	7FTAC2D	7NTAC10D
	3	7TAC72D	7LAW81D	7FTAC3D	7NTAC11D
	4	7TAC73D	7LAW82D	7GTAC4D	7NTAC12D
	5	7TAC74D	7FIRE83D	7GTAC5D	7MTAC9
	6	7TAC75D	7FIRE84D	7LTAC6D	7NTAC10
	7	7TAC76D	7MED86D	7LTAC7D	7NTAC11
	8	7GTAC77D	7MED87D	7LTAC8D	7NTAC12
	9	7CAL70	7MOB79	7FTAC1	
	10	7TAC71	7MOB79A	7FTAC2	
	11	7TAC72	7LAW81	7FTAC3	
	12	7TAC73	7LAW82	7GTAC4	
	13	7TAC74	7FIRE83	7GTAC5	
	14	7TAC75	7FIRE84	7LTAC6	
	15	7TAC76	7MED86	7LTAC7	
	16	7GTAC77	7MED87	7LTAC8	

NOTE: 7MOB79A & 7MOB79DA are analog versions of 7MOB79 & 7MOB79D with 156.7Hz tone for use with mobile repeaters used by some ISP units.

STARCOM21 Interoperable Talkgroups and Rules of Use

The following is a summary list of the NEW STARCOM21 interoperable talkgroups in Zones BA-BB.

- IESMA talkgroup – used to notify and dispatch state and local emergency management agencies as well as non-governmental organizations. *Note:* This talkgroup is also the designated all-agency statewide hailing channel.

- ILEAS talkgroup – used to notify and dispatch state and local law enforcement agencies.

- MABAS talkgroup – used to notify and coordinate Fire, EMS, hazardous materials and technical rescue responses.

- Public Health talkgroup – used to notify and dispatch state and local public health agencies and hospitals

- IPWMAN talkgroup – used by the Illinois Public Works Mutual Aid Network .

- Incident 1 - 5 talkgroups – used for command/control and as directed by COMC/COML for state level events

- Zone talkgroups – used for interoperable communications within a given STARCOM21 Zone (NORTH A and B, CENTER A and B, SOUTH A and B) as directed by COMC/COML.

- Region talkgroups – May be used for interoperable communications by any users within an IEMA region without seeking permission or as directed by COMC/COML.

- The "B" talkgroup should be used first; the "A" talkgroup should be used only if a second talkgroup is necessary due to the nature of the incident or event.

Non-STARCOM21 Channels and Rules of Use

Examples of Statewide Non-STARCOM21 system to system interoperable channels:

- ISPERN   Law Enforcement
- POINT-to-POINT   Law Dispatch to Law Dispatch
- IREACH   Cross Discipline
- IFERN / IFERN2   Fire Mutual Aid
- RED, WHITE, BLUE,   Fire Incident / Tactical
  GOLD, BLACK, GRAY
- MERCI   Emergency Medical Service
- ESMARN   Emergency Management

Non-STARCOM21 Shared Systems administrators are encouraged to include the Nationwide Interoperable Pool (NIP) channels as defined by NPSTC for the band(s) that their system(s) operate within (VHF, UHF,700, and 800 MHz) to enhance the interoperability of their system(s).

Examples of NIP Channels are:

- VHF Low   LLAW, LFIRE,
- VHF High   VCALL, VTAC, VFIRE, VLAW, VMED;
- UHF   UCALL, UTAC;
- 700MHz   7CALL, 7TAC, 7FIRE, 7LAW, 7MED, 7MOB;
- 800MHz   8CALL, 8TAC.

Maps

ILLINOIS EMERGENCY MANAGEMENT AGENCY

There are eight IEMA regions in Illinois. Each IEMA Region operates from a regional office and is overseen by an IEMA Regional Coordinator.

Region 2
1325 N Galena Ave
Dixon, IL 61021-1009
Phone: 815-288-1455
Fax: 815-288-5650

Region 3
1639 Champlain St.
Ottawa, IL 61350
Phone: 815-433-7161
Fax: 815-433-7165

Region 4
9511 W Harrison St.
Des Plaines, IL 60016-1563
Phone: 847-294-4717
Fax: 847-294-4715

Region 6
4800 Rodger Street
Springfield, IL 62703-4528
Phone: 217-782-0922
Fax: 217-558-4810

Region 7
2125 South First St Ste 309
Champaign, IL 61820
Phone: 217-278-3538
Fax: 217-352-1316

Region 8
10045 Bunkum Road
Fairview Heights, IL 62208-1703
Phone: 618-394-2233
Fax: 618-394-2239

Region 9
112 W Sixth St
Flora, IL 62839-1401
Phone: 618-662-4474
Fax: 618-662-4448

Region 11
2309 W Main St., Ste 110
Marion, IL 62959-1196
Phone: 618-997-5847
Fax: 618-997-2642

LOCATIONS OF ITECS AND UCP VEHICLES
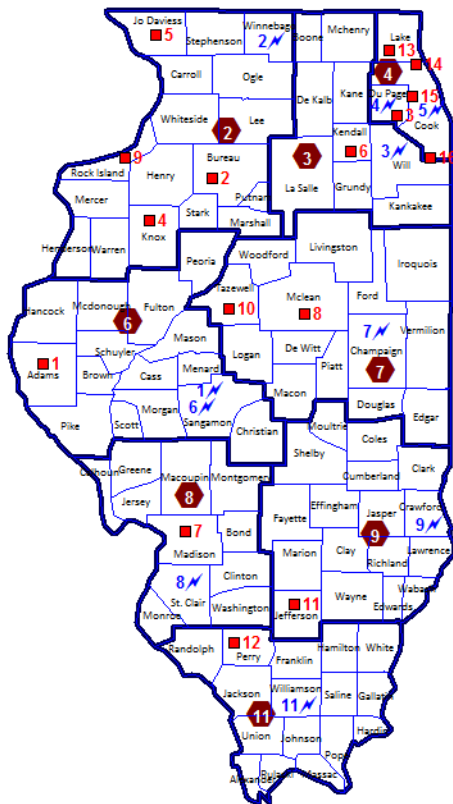
⚡		**ITECS Units**	
1	IEMA	6	Springfield
2	Winnebago Co	7	Champaign
3	Will Co	8	St Clair Co
4	DuPage Co	9	Crawford Co
5	Chicago	11	Marion

🟥		**UCP Vehicles**	
1	Adams Co	9	Rock Island Co
2	Bureau Co	10	Tazewell Co
3	DuPage Co	11	Jefferson Co
4	Galesburg	12	DuQuoin
5	Jo Daviess Co	13	Wauconda
6	Kendall Co	14	MABAS Div. 3
7	Madison Co	15	Oak Park
8	McLean Co	16	Tinley Park

⬣	**IEMA Regions**

ITECS REGIONAL BASE/REPEATER FREQUENCY ASSIGNMENTS

ITECS 2
UTAC41 UTAC43
8TAC91

ITECS 4
UTAC41 UTAC43
8TAC93

ITECS 5
UTAC41 UTAC43
8TAC94

ITECS 3
UTAC41 UTAC42
8TAC92

ITECS 7
UTAC41 UTAC43
8TAC92

ITECS 1
8TAC91

ITECS 6
UTAC41 UTAC43
8TAC91

ITECS 9
UTAC41 UTAC42
8TAC94

ITECS 8
UTAC41 UTAC42
8TAC93

ITECS 11
UTAC41 UTAC43
8TAC91
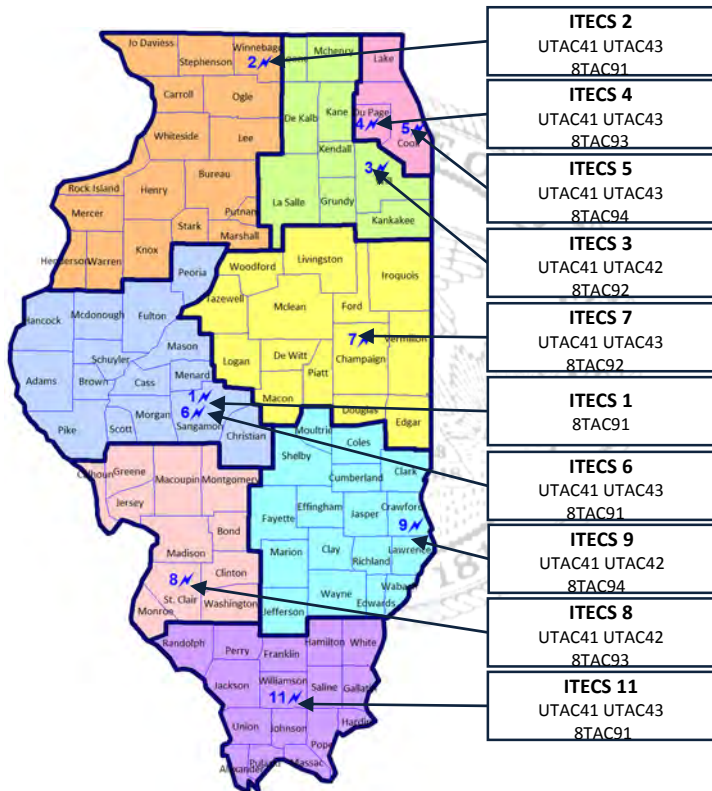
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ILLINOIS STATE POLICE DISTRICTS
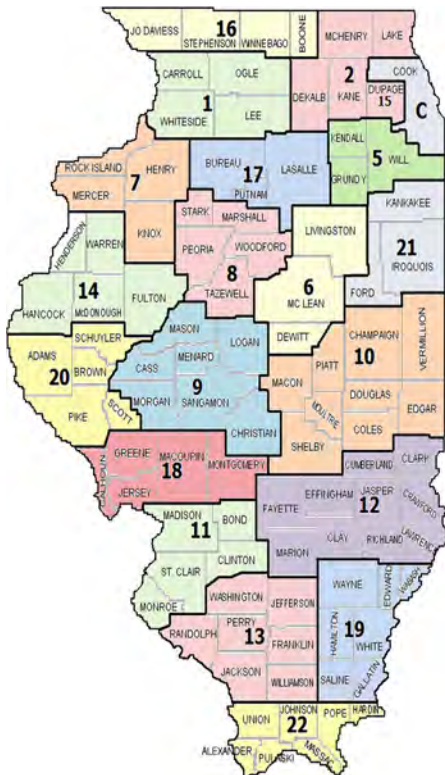
There are 21 State Police districts in Illinois, including the Illinois State Toll Highway Authority. Each ISP District operates from a district headquarters.

District 1
Sterling
Phone: 815-632-4010

District 2
Elgin.
Phone: 847-931-2405

District Chicago
Des Plaines
Phone: 847-294-4400

District 5
Joliet
Phone: 815-726-6377

District 6
Pontiac
Phone: 815-844-1525

District 7
Rock Island
Phone: 309-752-4915

District 8
Peoria
Phone: 309-383-2133

District 9
Springfield
Phone: 217-786-6677

District 10
Pesotum
Phone: 217-265-0050

District 11
Collinsville
Phone: 618-346-3990

District 12
Effingham
Phone: 217-347-2711

District 13
DuQuoin
Phone: 618-542-2171

District 14
Macomb
Phone: 309-833-4046

District 15 (Tollway)
Downers Grove
Phone: 630-241-6800

District 16
Pecatonica
Phone: 815-239-1152

District 17
LaSalle
Phone: 815-224-1171

District 18
Litchfield
Phone: 217-324-4900

District 19
Carmi
Phone: 618-382-4606

District 20
Pittsfield
Phone: 217-285-2034

District 21
Ashkum
Phone: 815-698-2332

District 22
Ullin
Phone: 618-845-3740

ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICTS
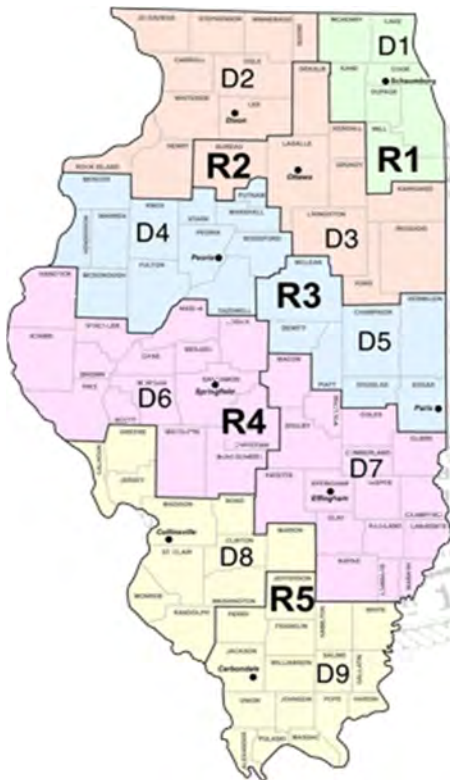
There are 9 Department of Transportation districts in Illinois. Each IDOT District operates from a district headquarters.

District 1
Schaumburg
Phone: 847-705-4000

District 2
Dixon
Phone: 815-284-2271

District 3
Ottawa
Phone: 815-434-6131

District 4
Peoria
Phone: 309-671-3333

District 5
Paris
Phone: 217-465-4181

District 6
Springfield
Phone: 217-782-7301

District 7
Effingham
Phone: 217-342-3951

District 8
Collinsville
Phone: 618-346-3100

District 9
Carbondale
Phone: 618-549-2171
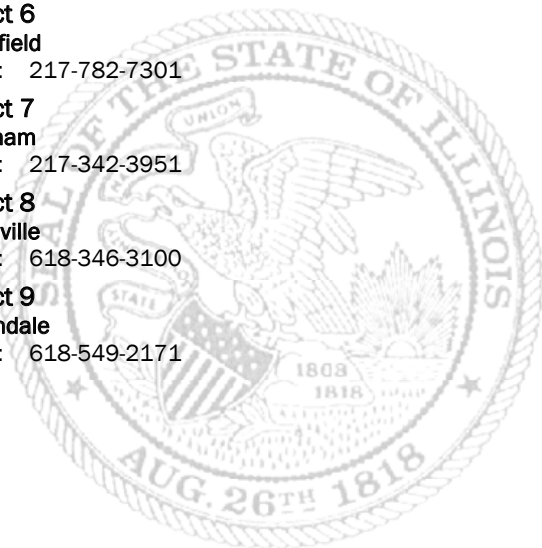
Communication Unit

ORGANIZATIONAL CHART
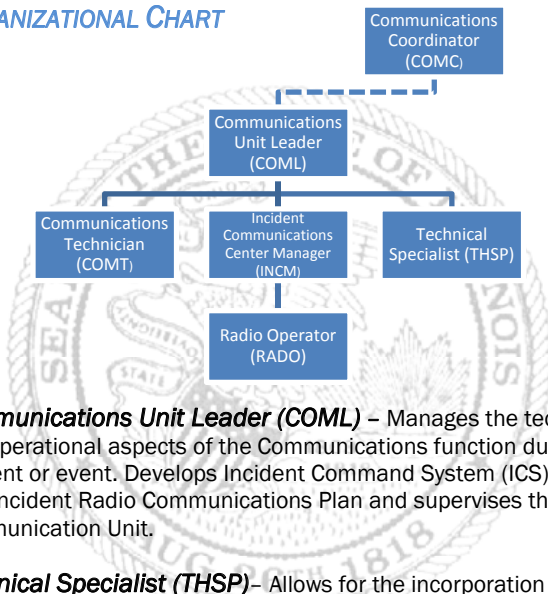
Communications Unit Leader (COML) – Manages the technical and operational aspects of the Communications function during an incident or event. Develops Incident Command System (ICS) Form 205 Incident Radio Communications Plan and supervises the Communication Unit.

Technical Specialist (THSP)– Allows for the incorporation of personnel who may not be formally certified in any specific NIMS/ICS position. THSPs may include Local Agency Radio Technicians (as opposed to the COMT), Telephone Specialists, Gateway Specialists, Data/IT Specialists, and/or Cache Radio Specialists.

Communications Technician (COMT) – Deploys advanced equipment and keeps it operational throughout the incident/event.

Incident Communications Center Manager (INCM) – Supervises the operational aspects of the Incident Communications Center (ICC). During an incident, the ICC is established to handle incident-related communications in order to separate that traffic from the day-to-day activities of the dispatch center. The ICC is typically located near the Incident Command Post (ICP) in a fixed site or mobile communications center.

Radio Operator (RADO) –Performs telecommunicator duties at the ICC and is responsible for documenting incoming radio and telephone messages. RADOs may also function as message runners when necessary. Incident Dispatchers, Tactical Dispatchers, or TERT team members are used as RADOs.

Communications Coordinator (COMC) –The COMC coordinates communications between and among dispatch centers and incident communication units within one or more affected areas. The COMC reviews incident communication plans to assure that communications channels/talkgroups are allocated and used effectively. Locally, the jurisdictional dispatch center supervisor or dispatcher will act as the COMC when necessary. Communications Coordinators may be located at the county, area, and state levels. *While not structurally in the Communication Unit, the COMC is the liaison among multiple COMLs, dispatch centers, and other agencies for allocating critical/scarce resources and deconflicting communications plans.*

COMMUNICATION UNIT LEADER POSITION CHECKLIST

Note that some tasks are one-time actions while others are ongoing or repeated during the incident. The term "Communication" may refer to radio systems, data/internet systems, or telephone systems.

1. Obtain briefing from appropriate ICS staff member (your supervisor)
2. Assess communications systems/frequencies in use – document if not already done
3. Organize and staff Communications Unit as appropriate:
    - Assign Incident Communications Center Manager (INCM), if necessary
    - Order and assign adequate staff (COMTs, RADOs, THSPs)
    - Brief incoming staff on current activities, duties, responsibilities and procedures
4. Establish safety procedures for personnel and ensure compliance
5. Participate in planning cycle meetings and briefings
6. Advise on communications capabilities/limitations
7. Coordinate all communication systems use with local, area or state Communications Coordinator (COMC) as appropriate
8. Develop/implement effective communications flow to/from the Incident Command Post (ICP)
9. Assess ICP telephone needs / request additional lines if necessary

10. Prepare and implement Incident Radio Communications Plan (ICS 205):
    - Obtain current organizational chart (ICS 203 or ICS 207)
    - Determine most hazardous tactical activity; ensure adequate communications
    - Make communications assignments for all other Operations Section elements
    - Determine Command and General Staff communications needs
    - Determine support (Logistics, Planning and Admin Sections) communications needs
    - Establish specific procedures for use of all communications equipment
11. Ensure communications data on ICS 204 and ICS 206 is correct
12. Document cellular phones and pagers in Incident Communications Plan (ICS 205T), if appropriate:
    - Determine specific organizational elements to be assigned telephones
    - Identify all facilities/locations needing telephone communications, identify/document phone numbers
    - Determine which phones/numbers should be used by what personnel and for what purpose. Assign specific telephone numbers for **incoming** calls, and report these numbers to staff and off-site parties
    - **Do NOT publicize OUTGOING phone lines**

13. Activate, serve as contact point, integrate and supervise auxiliary communications units (AuxComm)
14. Ensure use of Communications Logs (ICS 309) for radio and telephone traffic
15. Determine need and availability of additional nets and systems:
    - Obtain copy of local Tactical Interoperable Communications Plan (TICP)
    - Order resources as appropriate after approval by Section Chief
16. Ensure that communications equipment operation is monitored continuously
17. Document malfunctioning communications equipment, facilitate repair
18. Establish and maintain communications equipment accountability system
19. Provide technical information, as required, on:
    - Adequacy of communications system currently in use
    - Geographic limitation on communications equipment
    - Equipment capabilities
    - Amount and types of equipment available
    - Anticipated problems in the use of communications
20. Estimate Communications Unit needs for expected operations; order relief personnel
21. Provide briefing to relief on current activities and unusual situations
22. Document all activity on Unit Log (ICS 214)

INCIDENT COMMAND SYSTEM PLANNING FORMS

This section contains descriptions of common ICS forms that are used in communications planning or have communications information on them that is provided by the COML.

The only form developed by the Communication Unit that is included in the Incident Action Plan (IAP) is the ICS 205, Incident Radio Communications Plan. The other forms are used to develop the ICS 205 and are kept within the Communications Unit for reference. ICS 204, Field Assignment Form(s) and ICS 206, Incident Medical Plan contain communication data and should be verified/validated by the COML before publication.

Illinois-specific ICS forms in Microsoft Excel format are available from the Illinois SWIC Team upon email request to ema.scip@illinois.gov

FEMA has All-Hazards ICS forms at
http://www.fema.gov/pdf/emergency/nims/ics_forms_2010.pdf

ICS 201 - Incident Briefing

Purpose: The Incident Briefing form provides the basic information regarding the incident situation and resources allocated to the incident.

Preparation: The briefing form is prepared by field command for presentation to the IMT along with a more detailed oral briefing.

ICS 203 - Organization Assignment List

Purpose: The Organization Assignment List provides ICS personnel with information on the units that are currently activated and the names of personnel staffing each position/unit. It is used to complete the ICS 207.

Preparation: The Resources Unit prepares and maintains this list under the direction of the Planning Section Chief.

ICS 204 - Field Assignment Form

Purpose: The Field Assignment form is used to inform Operations Section personnel of their incident assignments.

Preparation: The Field Assignment form is normally prepared under direction of the Planning Section Chief using guidance from the ICS 202, ICS 215, and the Operations Section Chief. Radio frequencies listed on the ICS 204 shall be coordinated and confirmed by the COML.

ICS 205 - Incident Radio Communications Plan

Purpose: The Incident Radio Communications Plan provides, in one location, information on the assignments for all communications equipment for each operational period. Information from the ICS 205 on frequency assignments can be placed on the appropriate Field Assignment Form (ICS 204) and the Incident Medical Plan (ICS 206).

Preparation: The Incident Radio Communications Plan is prepared by the Communications Unit Leader.

ICS 206 - Medical Plan

Purpose: The Medical Plan provides information on incident medical aid stations, transportation services, hospitals, and emergency medical procedures.

Preparation: The Medical Plan is prepared by the Medical Unit Leader and reviewed by the Safety Officer. Radio frequency and telephone numbers listed on the ICS 206 shall be coordinated and confirmed by the COML.

ICS 207 - Incident Organization Chart

Purpose: The Incident Organization Chart provides information on the response organization and personnel staffing.

Preparation: The list is prepared and maintained by the Resource Unit under the direction of the Planning Section Chief.

Note: An organization chart may be completed any time the number of personnel assigned to the incident increases or decreases or a change in assignment occurs.

ICS 213 - General Message

The General Message form is used by

- Incident dispatchers to record incoming messages which cannot be orally transmitted to the intended recipients.
- EOC and other incident personnel to transmit messages via radio or telephone to the addressee.
- Incident personnel to send any message or notification which requires hard-copy delivery to other incident personnel.

Preparation: The General Message form may be initiated by incident dispatchers and any other personnel on an incident. Two copies should be sent and one copy retained by the person who initiates the message.

ICS 214 - Unit Log

Purpose: The Unit Log is used to record details of unit activity including specialized team activity (e.g., Strike Team). These Unit Logs can provide a basic reference from which to extract information for inclusion in an after-action report.

Preparation: A Unit Log is initiated and maintained by Command and General Staff members, field command, and Unit Leaders. Completed logs are forwarded to supervisors, who provide copies to the Documentation Unit.

ICS 217A - Communications Resource Availability

Purpose: The Communications Resource Availability Worksheet (ICS 217A) is a template that users may fill out prior to an incident. An agency's interoperable channels and/or talkgroups can be entered on the form, thereby enabling a COML to have the technical information readily available to complete an Incident Radio Communications Plan (ICS 205).

Preparation: The Communications Resource Availability Worksheet is prepared by a COMC or COML in an administrative setting prior to an incident. The ICS 217A provides a standardized template for the presentation of channels or talkgroups that might be considered for use by appropriate personnel during an incident.

ICS 217A is duplicated and given to all appropriate Communications Unit personnel who are authorized to use the agency's resources during an incident. This may include COMLs, COMTs, THSPs, etc.

ICS 309 - Communications Log

Purpose: The Communications Log (ICS 309) is used to document radio traffic handled by the ICC. It includes the date and time of the radio traffic as well as the source and destination and a summary of the content of the radio traffic.

Preparation: The Communications Log is maintained by the RADO on an ongoing basis as radio traffic is handled.
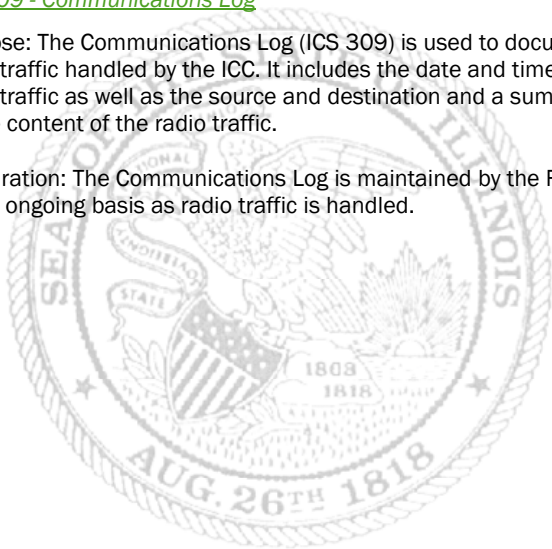
EMERGENCY SUPPORT FUNCTIONS (ESF)

ESF #	Function	ESF #	Function
1	Transportation	9	Search and Rescue
2	Communications	10	Oil and Hazardous Materials Response
3	Public Works and Engineering	11	Agriculture and Natural Resources
4	Firefighting	12	Energy
5	Emergency Management	13	Public Safety and Security
6	Mass Care, Housing and Human Services	14	Long Term Community Recovery
7	Resource Support	15	External Affairs
8	Public Health and Medical Services		

Incident Prioritization

PRIORITIZATION AND SHARED USE OF INTEROPERABILITY ASSETS

In response to events or incidents which cross over agency responsibilities, there will potentially be competing demands and priorities for the use of interoperable communications assets.

An Incident Commander, in cooperation with assisting agencies, will have the authority to request the use of interoperability assets. The Incident Commander, Logistic Section Chief, or Communication Unit Leader (COML), when designated, will direct further coordination and delegation of the interoperable communications assets assigned to the event or incident in question.

Agencies should judiciously activate needed interoperable assets both to respond effectively to the event and/or incident and to minimize any negative impact on surrounding agencies or jurisdictions. Specifically, interoperable communications should be attempted with the following order of deployment in mind (subject to the involved agencies' disciplines/responsibilities and the nature of the event/incident).

1. Leverage face-to-face communications wherever appropriate. For example, co-location of all command and general staff at the Incident Command Post (ICP) provides the best direct communications and reduces the demand on interoperability resources.

2. Employ local communications assets until those assets become taxed or inadequate based on the nature and/or scope of the incident.

3. Users of the STARCOM21 platform can utilize it to establish interoperable communications on common talkgroups.

4. If response agencies operate on disparate systems, use shared or mutual aid channels to establish interoperable communications.

5. If response agencies do not share systems or channels, use a gateway solution to establish interoperable communications.

6. Where interoperable communications cannot otherwise be established between response agencies, use swap or cache radios to establish communications for responders.

7. Use non-public safety common carrier communications systems. Keep in mind that push-to-talk common carrier systems can quickly become overloaded and non-functional during disasters or large-scale emergencies.

8. If no other method of interoperability can be established, relay communications through staff members (runners).

When the same resources are requested for two or more incidents, resource assignments should be based on the priority levels listed below (in decreasing priority; i.e. lower number indicates a higher priority).

1. Disasters, large scale incidents, or extreme emergencies requiring mutual aid or interagency communications

2. Incidents where imminent danger exists to life or property

3. Incidents requiring the response of multiple agencies

4. Pre-planned events requiring mutual aid or interagency communications

5. Incidents involving a single agency where supplemental communications are needed for agency use

6. Drills, tests, and exercises

In the event of multiple simultaneous incidents within the same priority level, the resources should be allocated with the following principles in mind.

1. Incidents with the greatest level of exigency (e.g., greater threat to life or property, more immediate need, etc.) have priority over less exigent incidents.

2. Agencies with single/limited interoperability options have priority use of those options over agencies with multiple interoperability options.

3. When possible, agencies already using an interoperability asset during an incident or event should not be redirected to another resource.

Statewide Interoperable Channels

NOTE: All transmit and receive frequencies are listed as they would be programmed into portable, mobile or control point radios. Programming of repeaters MUST reverse the "receive" and "transmit" frequencies and tones shown in the tables below.

Illinois VHF Low Band

FREQUENCY		TONE	ELIGIBILITY/PRIMARY USE	NAME
Statewide Shared Channels – VHF Low Band				
All channels are wideband				
RECEIVE	**TRANSMIT**	**RX/TX**		
42.5000	42.5000	103.5	Law Enforcement (Former ISP Car to Car)	LF-2
45.2800	45.2800	103.5	Emergency Management Local Command and Control	IEMA-2
45.3600	45.3600	103.5	Emergency Management NWS Weather Spotter Net	IEMA-3 (WX-NET)
45.4000	45.4000	103.5	Emergency Management Local Command and Control	IEMA-4
45.4400	45.4400	103.5	Emergency Management Local Command and Control	IEMA-1
45.5600	45.5600	103.5	Emergency Management Local Command and Control	LESERN

Illinois VHF High Band

Statewide Shared Channels – VHF High Band				
All channels are Narrowband				
FREQUENCY		**TONE**	**ELIGIBILITY/PRIMARY USE**	**NAME**
RECEIVE	**TRANSMIT**	**RX/TX**		
155.0550	155.0550	D156	Any Public Safety Eligible Inter-Agency	IREACH
		D156		
155.0250	155.0250	123.0	EMA Agencies Emergency Management	ESMARN
		123.0		
155.9250	155.9250	CSQ	EMA Agencies Emergency Management	IEMA VHF 1
		CSQ		
155.4750	155.4750	CSQ	Law Enforcement Agencies Flash Messages /Inter-Agency	ISPERN
		D156		
155.3700	155.3700	CSQ	Law Enforcement Agencies Station to Station	POINT-to-POINT
		CSQ		
155.4600	155.4600	CSQ	Law Enforcement Agencies	HF-4
		CSQ		
154.2650	154.2650	CSQ*	Fire Agencies Mutual Aid Dispatch	IFERN
		210.7		
154.3025	154.3025	CSQ*	Fire Agencies Mutual Aid Dispatch	IFERN2
		67.0		
153.8300	153.8300	CSQ*	Fire Agencies Fire Ground Ops	FGNDRED
		69.3		
154.2800	154.2800	CSQ*	Fire Agencies Fire Ground Ops	FGNDWHT
		74.4		

Statewide Shared Channels – VHF High Band				
All channels are Narrowband				
FREQUENCY		TONE RX/TX	ELIGIBILITY/PRIMARY USE	NAME
RECEIVE	TRANSMIT			
154.2950	154.2950	CSQ*	Fire Agencies Fire Ground Ops	FGNDBLU
		85.4		
153.8375	153.8375	91.5	Fire Agencies Fire Ground Ops	FGNDGLD
		91.5		
154.2725	154.2725	94.8	Fire Agencies Fire Ground Ops	FGNDBLK
		94.8		
154.2875	154.2875	136.5	Fire Agencies Fire Ground Ops	FGNDGRY
		136.5		
155.1600	155.1600	CSQ	EMS / Hospital to Hospital & Disaster Communications	MERCI160
		210.7		
155.2200	155.2200	CSQ	EMS – Coordination and Medical Control	MERCI220
		210.7		
155.2800	155.2800	CSQ	EMS / Hospital to Hospital & Disaster Communications	MERCI280
		210.7		
155.3400**	155.3400	CSQ	EMS – Coordination and Medical Control	MERCI340*
		210.7		
155.4000	155.4000	CSQ	EMS – Coordination and Medical Control (NE Illinois)	MERCI400
		210.7		

*In some regions of the state a PL code is used on both RX and TX. If you are not sure leave RX as CSQ

 **155.3400 has a PL of 210.7 for Statewide mutual aid use. In addition, each receiving hospital has unique CTCSS tone for communications

Illinois UHF Table

Statewide Shared Channels – UHF High Band				
All channels are Narrowband				
FREQUENCY		**TONE RX/TX**	**ELIGIBILITY/PRIMARY USE**	**NAME**
RECEIVE	**TRANSMIT**			
458.0250	458.0250	Varies	EMS – Coordination and Medical Control	AMB TACT 1*
		Varies		
458.0750	458.0750	Varies	EMS – Coordination and Medical Control	AMB TACT 2*
		Varies		
458.1250	458.1250	Varies	EMS – Coordination and Medical Control	AMB TACT 3*
		Varies		
458.1750	458.1750	Varies	EMS – Coordination and Medical Control	AMB TACT 4*
		Varies		

*Mobile operation only for EMS

Nationwide Interoperable Channels

NOTE: All transmit and receive frequencies are listed as they would be programmed into portable, mobile or control point radios.

Nationwide VHF Low Band

Nationwide VHF Low Band		All channels are Wideband		
FREQUENCY		TONE	ELIGIBILITY	NAME
RECEIVE	TRANSMIT	RX/TX	PRIMARY USE	
39.4600	39.4600	CSQ*	Law Enforcement	LLAW1D
	45.8600	156.7		LLAW1
39.4800	39.4800	CSQ*	Fire (Proposed)	LFIRE2D
	45.8800	156.7		LFIRE2
45.8600	45.8600	CSQ*	Law Enforcement	LLAW3D
	39.4600	156.7		LLAW3
45.8800	45.8800	CSQ*	Fire (Proposed)	LFIRE4D
	39.4800	156.7		LFIRE4

*CTCSS Tones – Default operation should be carrier squelch receive (CSQ), CTCSS Transmit. If the user can enable/disable without programming the radio, the indicated CTCSS tone also could be programmed for receive, and the user instructed how and when to enable/disable.

Nationwide VHF High Band

Nationwide VHF High Band		All channels are Narrowband		
FREQUENCY		TONE RX/TX	ELIGIBILITY PRIMARY USE	NAME
RECEIVE	TRANSMIT			
155.7525	155.7525	CSQ*	Any Public Safety Inter-Agency Calling	VCALL10
		156.7		
151.1375	151.1375	CSQ*	Any Public Safety Incident Coordination	VTAC11
		156.7		
154.4525	154.4525	CSQ*	Any Public Safety Incident Coordination	VTAC12
		156.7		
158.7375	158.7375	CSQ*	Any Public Safety Incident Coordination	VTAC13
		156.7		
159.4725	159.4725	CSQ*	Any Public Safety Incident Coordination	VTAC14
		156.7		
154.2800	154.2800	CSQ*	Fire Mutual Aid	VFIRE21
		156.7		
154.2650	154.2650	CSQ*	Fire Mutual Aid	VFIRE22
		156.7		
154.2950	154.2950	CSQ*	Fire Mutual Aid	VFIRE23
		156.7		
154.2725	154.2725	CSQ*	Fire Mutual Aid	VFIRE24
		156.7		
154.2875	154.2875	CSQ*	Fire Mutual Aid	VFIRE25
		156.7		
154.3025	154.3025	CSQ*	Fire Mutual Aid	VFIRE26
		156.7		
155.3400	155.3400	CSQ*	EMS Mutual Aid	VMED28
		156.7		

Nationwide VHF High Band		All channels are Narrowband		
FREQUENCY		**TONE**	**ELIGIBILITY**	**NAME**
RECEIVE	**TRANSMIT**	**RX/TX**	**PRIMARY USE**	
155.3475	155.3475	CSQ*	EMS Mutual Aid	VMED29
		156.7		
155.4750	155.4750	CSQ*	Law Enforcement	VLAW31
		156.7	Inter-Agency	
155.4825	155.4825	CSQ*	Law Enforcement	VLAW32
		156.7	Inter-Agency	
159.4725	151.1375	CSQ*	Any Public Safety	VTAC33 [1]
		136.5	Tactical Repeater	
158.7375	154.4525	CSQ*	Any Public Safety	VTAC34 [1]
		136.5	Tactical Repeater	
159.4725	158.7375	CSQ*	Any Public Safety	VTAC35 [1,2]
		136.5	Tactical Repeater	
151.1375	159.4725	CSQ*	Any Public Safety	VTAC36 [1,3]
		136.5	Tactical Repeater	
154.4525	158.7375	CSQ*	Any Public Safety	VTAC37 [1,3]
		136.5	Tactical Repeater	
158.7375	159.4725	CSQ*	Any Public Safety	VTAC38 [1,2,3]
		136.5	Tactical Repeater	

Nationwide VHF High Band		All channels are Narrowband		
FREQUENCY		TONE RX/TX	ELIGIBILITY PRIMARY USE	NAME
RECEIVE	TRANSMIT			

[1] To preserve simplex channel availability, designate a primary and secondary repeater pair. For example: If one transportable repeater is used, it should be on VTAC36 (VTAC11/VTAC14 paired). If a second is needed, it should be on VTAC37 (VTAC12/VTAC13 paired) with the understanding that there would remain no available simplex VTAC channels. VTAC13 and/or VTAC14 could be used for "talk-around" in either or both cases, at the risk of being interfered with by repeater users who can't hear the talk-around transmissions. Repeater use should have no priority over simplex use of the involved channel(s). It is strongly recommended that tactical repeaters be activated only when called for by a COML as documented on ICS 205 for an incident.

[2] VTAC35/38 (VTAC13/VTAC14 paired) should be used as a repeater pair only in Puerto Rico and the US Virgin Islands where VTAC11 and VTAC12 are unavailable

[3] VTAC36-38 are preferred; VTAC 33-35 only use when necessary

*CTCSS Tones – Default operation should be carrier squelch receive (CSQ), CTCSS Transmit. If the user can enable/disable without programming the radio, the indicated CTCSS tone also could be programmed for receive, and the user instructed how and when to enable/disable.

Nationwide UHF

Nationwide UHF			All channels are Narrowband	
FREQUENCY		**TONE**	**ELIGIBILITY**	**NAME**
RECEIVE	**TRANSMIT**	**RX/TX**	**PRIMARY USE**	
453.2125	453.2125	CSQ*	Any Public Safety Inter-Agency Calling	UCALL40D
	458.2125	156.7		UCALL40
453.4625	453.4625	CSQ*	Any Public Safety Incident Coordination	UTAC41D
	458.4625	156.7		UTAC41
453.7125	453.7125	CSQ*	Any Public Safety Incident Coordination	UTAC42D
	458.7125	156.7		UTAC42
453.8625	453.8625	CSQ*	Any Public Safety Incident Coordination	UTAC43D
	458.8625	156.7		UTAC43
*CTCSS Tones – Default operation should be carrier squelch receive (CSQ), CTCSS Transmit. If the user can enable/disable without programming the radio, the indicated CTCSS tone also could be programmed for receive, and the user instructed how and when to enable/disable.				

Nationwide UHF MED Channels

Nationwide UHF			All channels are Narrowband	
FREQUENCY		TONE	ELIGIBILITY	NAME
RECEIVE	TRANSMIT	RX/TX	PRIMARY USE	
463.0000	463.0000	Varies	EMS – Medical Control	MED 1D
	468.0000	Varies		MED 1
463.0250	463.0250	Varies	EMS – Medical Control	MED 2D
	468.0250	Varies		MED 2
463.0500	463.0500	Varies	EMS – Medical Control	MED 3D
	468.0500	Varies		MED 3
463.0750	463.0750	Varies	EMS – Medical Control	MED 4D
	468.0750	Varies		MED 4
463.1000	463.1000	Varies	EMS – Medical Control	MED 5D
	468.1000	Varies		MED 5
463.1250	463.1250	Varies	EMS – Medical Control	MED 6D
	468.1250	Varies		MED 6
463.1500	463.1500	Varies	EMS – Medical Control	MED 7D
	468.1500	Varies		MED 7
463.1750	463.1750	210.7	EMS – Medical Control **Statewide Interop**	MED 8D
	468.1750	210.7		MED 8
462.9500	462.9500	Varies	EMS – Medical Control/ MED Dispatch	MED 9D
	467.9500	Varies		MED 9
462.9750	462.9750	Varies	EMS – Medical Control/ MED Dispatch	MED 10D
	467.9750	Varies		MED 10

Nationwide UHF			All channels are Narrowband	
FREQUENCY		TONE	ELIGIBILITY	NAME
RECEIVE	TRANSMIT	RX/TX	PRIMARY USE	
463.0125	463.0125	Varies	EMS – Medical Control	MED 12D
	468.0125	Varies		MED 12
463.0375	463.0375	Varies	EMS – Medical Control	MED 22D
	468.0375	Varies		MED 22
463.0625	463.0625	Varies	EMS – Medical Control	MED 32D
	468.0625	Varies		MED 32
463.0875	463.0875	Varies	EMS – Medical Control	MED 42D
	468.0875	Varies		MED 42
463.1125	463.1125	Varies	EMS – Medical Control	MED 52D
	468.1125	Varies		MED 52
463.1375	463.1375	Varies	EMS – Medical Control	MED 62D
	468.1375	Varies		MED 62
463.1625	463.1625	Varies	EMS – Medical Control	MED 72D
	468.1625	Varies		MED 72
463.1875	463.1875	Varies	EMS – Medical Control	MED 82D
	468.1875	Varies		MED 82
462.9625	462.9625	Varies	EMS – Medical Control/ MED Dispatch	MED 92D
	467.9625	Varies		MED 92
462.9875	462.9875	Varies	EMS – Medical Control/ MED Dispatch	MED102D
	467.9875	Varies		MED 102

Nationwide 700 MHz (Zones BD-BG)

Nationwide Channels - 700 MHz P25 Digital, Narrowband				
FREQUENCY		**NAC**	**ELIGIBILITY**	**NAME**
RECEIVE	**TRANSMIT**	**RX/TX**	**PRIMARY USE**	
769.24375	769.24375	F7E	Any Public Safety Calling Channel	7CALL50D
	799.24375	293		7CALL50
769.14375	769.14375	F7E	Any Public Safety *Secondary Trunked**￼*	7TAC51D
	799.14375	293		7TAC51
769.64375	769.64375	F7E	Any Public Safety *Secondary Trunked**￼*	7TAC52D
	799.64375	293		7TAC52
770.14375	770.14375	F7E	Any Public Safety *Secondary Trunked**￼*	7TAC53D
	800.14375	293		7TAC53
770.64375	770.64375	F7E	Any Public Safety *Secondary Trunked**￼*	7TAC54D
	800.64375	293		7TAC54
769.74375	769.74375	F7E	Any Public Safety	7TAC55D
	799.74375	293		7TAC55
770.24375	770.24375	F7E	Any Public Safety	7TAC56D
	800.24375	293		7TAC56
770.99375	770.99375	F7E	Other Public Service	7GTAC57D
	800.99375	293		7GTAC57
770.89375	770.89375	F7E	Mobile Repeater	7MOB59D
	800.89375	293		7MOB59
770.39375	770.39375	F7E	Law Enforcement	7LAW61D
	800.39375	293		7LAW61
770.49375	770.49375	F7E	Law Enforcement	7LAW62D
	800.49375	293		7LAW62

Nationwide Channels - 700 MHz
P25 Digital, Narrowband

FREQUENCY		NAC	ELIGIBILITY	NAME
RECEIVE	TRANSMIT	RX/TX	PRIMARY USE	
769.89375	769.89375	F7E	Fire	7FIRE63D
	799.89375	293		7FIRE63
769.99375	769.99375	F7E	Fire	7FIRE64D
	799.99375	293		7FIRE64
769.39375	769.39375	F7E	EMS	7MED65D
	799.39375	293		7MED65
769.49375	769.49375	F7E	EMS	7MED66D
	799.49375	293		7MED66
770.74375	770.74375	F7E	Mobile data	7DATA69D
	800.74375	293		7DATA69
773.25625	773.25625	F7E	Any Public Safety Calling Channel	7CALL70D
	803.25625	293		7CALL70
773.10625	773.10625	F7E	Any Public Safety *Secondary Trunked**	7TAC71D
	803.10625	293		7TAC71
773.60625	773.60625	F7E	Any Public Safety *Secondary Trunked**	7TAC72D
	803.60625	293		7TAC72
774.10625	774.10625	F7E	Any Public Safety *Secondary Trunked**	7TAC73D
	804.10625	293		7TAC73
774.60625	774.60625	F7E	Any Public Safety *Secondary Trunked**	7TAC74D
	804.60625	293		7TAC74
773.75625	773.75625	F7E	Any Public Safety	7TAC75D
	803.75625	293		7TAC75
774.25625	774.25625	F7E	Any Public Safety	7TAC76D
	804.25625	293		7TAC76

Nationwide Channels - 700 MHz P25 Digital, Narrowband				
FREQUENCY		**NAC**	**ELIGIBILITY**	**NAME**
RECEIVE	**TRANSMIT**	**RX/TX**	**PRIMARY USE**	
774.85625	774.85625	F7E	Other Public	7GTAC77D
	804.85625	293		7GTAC77
774.50625	774.50625	F7E	Mobile Repeater	7MOB79D
	804.50625	293		7MOB79
774.00625	774.00625	F7E	Law Enforcement	7LAW81D
	804.00625	293		7LAW81
774.35625	774.35625	F7E	Law Enforcement	7LAW82D
	804.35625	293		7LAW82
773.50625	773.50625	F7E	Fire	7FIRE83D
	803.50625	293		7FIRE83
773.85625	773.85625	F7E	Fire	7FIRE84D
	803.85625	293		7FIRE84
773.00625	773.00625	F7E	EMS	7MED86D
	803.00625	293		7MED86
773.35625	773.35625	F7E	EMS	7MED87D
	803.35625	293		7MED87
774.75625	774.75625	F7E	Mobile Data	7DATA89D
	804.75625	293		7DATA89

** Secondary Trunked – These two sets of 4 channels can be used to create a localized 4 channel trunked system on an ad hoc basis for emergency response only.

Nationwide 700 MHz Low Power (Zones BH–BI)

The following channels are set aside for low power analog local use. FCC RPC Regions 13 and 54 have given these channels specific names that are structured in a similar fashion to the nationwide digital channels.

Nationwide Channels - 700 MHz Low Power				
All channels are Low Power, Analog, Narrowband				
FREQUENCY		**TONE**	**ELIGIBILITY/PRIMARY USE**	**NAME**
RECEIVE	**TRANSMIT**	**RX/TX**		
769.00625	769.00625	CSQ*	Fire Service Low Power Analog	7FTAC1D
	799.00625	156.7		7FTAC1
774.93125	774.93125	CSQ*	Fire Service Low Power Analog	7FTAC2D
	804.93125	156.7		7FTAC2
769.04375	769.04375	CSQ*	Fire Service Low Power Analog	7FTAC3D
	799.04375	156.7		7FTAC3
769.03125	769.03125	CSQ*	General Public Service Low Power Analog	7GTAC4D
	799.03125	156.7		7GTAC4
774.95625	774.95625	CSQ*	General Public Service Low Power Analog	7GTAC5D
	804.95625	156.7		7GTAC5
769.01875	769.01875	CSQ*	Law Enforcement Low Power Analog	7LTAC6D
	799.01875	156.7		7LTAC6
774.94375	774.94375	CSQ*	Law Enforcement Low Power Analog	7LTAC7D
	804.94375	156.7		7LTAC7
774.98125	774.98125	CSQ*	Law Enforcement Low Power Analog	7LTAC8D
	804.98125	156.7		7LTAC8

Nationwide Channels - 700 MHz Low Power
All channels are Low Power, Analog, Narrowband

FREQUENCY		TONE RX/TX	ELIGIBILITY/PRIMARY USE	NAME
RECEIVE	TRANSMIT			
774.96875	774.96875	CSQ*	EMS Low Power Analog	7MTAC9D
	804.96875	156.7		7MTAC9
769.05625	769.05625	CSQ*	General Public Service Low Power Analog	7NTAC10D
	799.05625	156.7		7NTAC10
769.06875	769.06875	CSQ*	General Public Service Low Power Analog	7NTAC11D
	799.06875	156.7		7NTAC11
774.99375	774.99375	CSQ*	General Public Service Low Power Analog	7NTAC12D
	804.99375	156.7		7NTAC12

*CTCSS Tones – Default operation should be carrier squelch receive (CSQ), CTCSS Transmit. If the user can enable/disable without programming the radio, the indicated CTCSS tone also could be programmed for receive, and the user instructed how and when to enable/disable.

Nationwide 800 MHz Post-Rebanding (Zone BC)

Also used for CURRENT Template Zone AG-For Reference Only

Nationwide Channels – 800 MHz Post-Rebanding, Wideband (20 KHz NPSPC)				
FREQUENCY		TONE	ELIGIBILITY	NAME
RECEIVE	TRANSMIT	RX/TX	PRIMARY USE	
851.0125	851.0125	CSQ*	Any Public Safety Calling Channel	8CALL90D
	806.0125	156.7		8CALL90
851.5125	851.5125	CSQ*	Any Public Safety	8TAC91D
	806.5125	156.7		8TAC91
852.0125	852.0125	CSQ*	Any Public Safety	8TAC92D
	807.0125	156.7		8TAC92
852.5125	852.5125	CSQ*	Any Public Safety	8TAC93
	807.5125	156.7		8TAC93D
853.0125	853.0125	CSQ*	Any Public Safety	8TAC94D
	808.0125	156.7		8TAC94
*CTCSS Tones – Default operation should be carrier squelch receive (CSQ), CTCSS Transmit. If the user can enable/disable without programming the radio, the indicated CTCSS tone also could be programmed for receive, and the user instructed how and when to enable/disable.				

ARES/RACES

AMATEUR RADIO EMERGENCY SERVICES (ARES)

A program of the American Radio Relay League (ARRL). ARES consists of amateur radio operators who volunteer to provide emergency communications when needed. ARES groups are structured at the county level and often closely aligned with emergency management functions.

RADIO AMATEUR CIVIL EMERGENCY SERVICE (RACES)

RACES is a volunteer organization of licensed amateur radio operators registered with the local (county) emergency management organization to provide auxiliary emergency communications on behalf of local, state or federal government.

Although the FCC is responsible for the creation and regulation of RACES operations, management is the responsibility of the Federal Emergency Management Administration (FEMA).

Each local RACES group is administered by a local government agency responsible for disaster services. RACES may be activated by the director of an emergency management office, or authorized representative, for a particular area. The activation is in accordance with an approved civil defense communications plan.

Illinois, through IEMA, in early 2010 formalized a State of Illinois RACES plan. As part of that plan, counties are encouraged to develop local RACES programs in accordance with the state plan.

STATEWIDE ARES/RACES FREQUENCIES

Band	RX Freq	RX Tone	TX Freq	TX Tone	Notes
80m	3.9050		3.9050		SSB Phone Net (Primary)
40m	7.2300		7.2300		SSB Phone Net (Secondary)
2m	145.6100		145.6100		ILDA
2m	146.5200		146.5200		IL2A Nationwide Calling
2m	147.5250		147.5250		IL2B
2m	147.5350		147.5350		IL2C
70cm	446.0000		446.0000		ILUHFA Nationwide Calling
70cm	446.4000		446.4000		ILUHFB
70cm	446.7000		446.7000		ILUHFC

Note: Operating on Amateur Radio frequencies requires an authorized and licensed amateur radio operator. Refer to the Amateur Radio Band Plan and Repeater Directory published by the ARRL for more detailed information.

Interoperability Assets

INTEROPERABILITY REPEATERS

Some jurisdictions have deployed radio repeaters that provide interoperable communications allowing efficient coordination of first responders during an incident or planned event. These repeaters may be in fixed positions using permanent towers; or they may be transportable, allowing for deployment at or near the incident scene.

Proper operation of repeater stations is necessary for the efficient use of the interoperability channels, especially in minimizing and eliminating potential interference.

Best Practice Summary

- Only the minimum number of calling channel repeaters should be in "Repeater ON" mode across the region.
- Repeaters on the tactical frequencies should always be in "Repeater OFF" mode, unless they are actually in use.
- Agencies should periodically check their repeaters to make sure they are in "Repeater OFF" mode to prevent interference to other agencies.
- Having multiple repeaters active on the same frequency in the same area causes the mobile and portable radio users to hear interference from multiple repeaters.
- Dispatch centers using direct repeater control normally cannot hear other active repeaters on their consoles unless they also have a monitor radio on that channel. They will hear the input

channel from any mobile, portable, or control stations from any agency within range of their repeaters.

Calling Channels

Many agencies monitor the calling channels for their area on their own repeaters.

Tactical Channels

Tactical Channels are used for incident communications.
- All tactical repeaters will be set to "Repeater Off", or equivalent, unless needed for an incident or event in that area.
- If possible, configure tactical repeaters to default to "Repeater OFF" in the event of a power cycle or other disruption.
- In general, the tactical channel repeater that is closest to the incident and provides the minimum effective coverage area for the incident should be used. This allows greater reuse of frequencies for multiple incidents across the region.

UHF Fixed Base Interoperability Repeaters

UHF Fixed Base Interoperability Repeaters			
Agency 24 Hrs. Phone	**Location**	**Channels**	**Simul. Channels**
Chicago OEMC 312-746-9241	Chicago Patches to VHF & UHF	UCALL40, UTAC41, UTAC42, UTAC43	1
Chicago OEMC 312-746-9241	Chicago Patches to VHF & UHF	UCALL40, UTAC41, UTAC42, UTAC43	1
Illinois Tollway 630-241-6800	Western Springs I-294/55th St.	UCALL40, UTAC41, UTAC42, UTAC43	1
Illinois Tollway 630-241-6800	Markham I-294/I-80	UCALL40, UTAC41, UTAC42, UTAC43	1
Illinois Tollway 630-241-6800	Libertyville I-94/IL137	UCALL40, UTAC41, UTAC42, UTAC43	1
Illinois Tollway 630-241-6800	Addison I-355/Army Trail Rd.	UCALL40, UTAC41, UTAC42, UTAC43	1

800 MHz Fixed Base Interoperability Repeaters

800 MHz Fixed Base Interoperability Repeaters			
Agency 24 Hrs Phone	**Location**	**Channels**	**Simul. Channels**
NW Central Disp. 847-398-1130	Arlington Heights 1975 East Davis St.	8CALL90, 8TAC91, 92, 93, 94	5
Illinois Tollway 630-241-6800	Aurora I-88/IL25	8CALL90, 8TAC91, 92, 93, 94	2
Illinois Tollway 630-241-6800	Belvidere I-90/US20	8CALL90, 8TAC91, 92, 93, 94	2
ISP Dist Pontiac 815-844-1525	Bloomington ISU Waterson Dorm	8TAC90, 8TAC92	2
ISP Dist Ashkum 815-698-2332	Bradley 500 Kinzie Ave.	8TAC90, 8TAC92	2
Chicago OEMC 312-746-9241	Chicago Patches to VHF & UHF	8CALL90, 8TAC91, 92, 93, 94	1
Chicago OEMC 312-746-9241	Chicago Patches to VHF & UHF	8CALL90, 8TAC91, 92, 93, 94	1
Cook County SO 847-294-4733	Chicago 26th/California	8CALL90, 8TAC91, 92, 93, 94	4
ISP Dist Chicago 847-294-4703	Chicago Willis Tower	8CALL90, 8TAC91, 92, 93, 94	5
Illinois Tollway 630-241-6800	Deerfield I-294/ I-94	8CALL90, 8TAC91, 92, 93, 94	2
Elgin PD 847-289-2700	Elgin 120 S State St,	8TAC90, 8TAC91	2

800 MHz Fixed Base Interoperability Repeaters			
Agency 24 Hrs Phone	**Location**	**Channels**	**Simul. Channels**
Illinois Tollway 630-241-6800	Elgin I-90/IL25	8CALL90, 8TAC91, 92, 93, 94	2
Illinois Tollway 630-241-6800	Gurnee I-94/IL132	8CALL90, 8TAC91, 92, 93, 94	2
Cook County SO 847-294-4733	Hoffman Estates IL58/Barrington Rd.	8CALL90, 8TAC91, 92, 93, 94	2
Illinois Tollway 630-241-6800	Lemont I-355/127th St.	8CALL90, 8TAC91, 92, 93, 94	2
Lake County SO 847-549-5200	Libertyville 1303 N. Milwaukee	8CALL90, 8TAC91, 92, 93, 94	1
Illinois Tollway 630-241-6800	Lisle I-355/I-88	8CALL90, 8TAC91, 92, 93, 94	2
Will County SO 815-727-8575	Lemont I-355/127th St.	8CALL90, 8TAC91, 92, 94	4
Illinois Tollway 630-241-6800	Markham I-294/I-80	8CALL90, 8TAC91, 92, 93, 94	2
ISP Dist Effingham 217-347-2711	Mason 4320 N 950th St.	8TAC90, 8TAC92	2
Cook County SO 847-294-4733	Melrose Park IL64/25th Ave.	8CALL90, 8TAC91, 92, 93, 94	2
Grundy Co. SO 815-942-0336	Morris IL47/IL113	8CALL, 8TAC91, 92, 93, 94	5
Grundy Co SO 815-942-0336	Morris IL47/IL113	8TAC91, 8TAC93	2
Cook County SO 847-294-4733	Palos Park Ashland/Sauk Trail	8CALL90, 8TAC91, 92, 93, 94	2

800 MHz Fixed Base Interoperability Repeaters			
Agency 24 Hrs Phone	**Location**	**Channels**	**Simul. Channels**
TAZCOM 309-346-4141	Pekin 1130 Cook	8CALL90, 8TAC91, 92, 93, 94	5
ISP Dist Pesotum 217-265-0120	Pesotum I-57/US45	8TAC90, 8TAC92	2
Illinois Tollway 630-241-6800	Rochelle I-88/I-39	8CALL90, 8TAC91, 92, 93, 94	2
ISP Dist Sprngfld 217-786-7107	Springfield (academy) 3700 Lake Shore Dr.	8CALL90, 8TAC91, 8TAC92	3
St Louis Police 314-231-1212	St Louis 1200 Clark	8CALL90, 8TAC91, 92, 93, 94	5
Cook County SO 847-294-4733	Steger McCarthy/Wolf Rd.	8CALL90, 8TAC91, 92, 93, 94	2
Illinois Tollway 630-241-6800	Western Springs I-294/55th St.	8CALL90, 8TAC91, 92, 93, 94	2

Transportable Interoperability Repeaters

Transportable Interoperability Repeaters			
Agency 24 Hrs Phone	**Location**	**Bands/Repeaters**	**Simul. Channels**
Champaign 800-782-7860	Champaign ITECS 7	UTAC41, UTAC43 (2) 8TAC92 (1)	1 for each repeater
Chicago OEMC 800-782-7860	Chicago ITECS 5	UTAC41, UTAC43 (2) 8TAC94 (1)	1 for each repeater
Crawford Co. 800-782-7860	Crawford Co. ITECS 9	UTAC41, UTAC42 (2) 8TAC94 (1)	1 for each repeater
DuPage Co. 800-782-7860	DuPage Co. ITECS 4	UTAC41, UTAC43 (1) 8TAC93 (1)	1 for each repeater
IEMA 800-782-7860	Springfield ITECS 1	8TAC91 (1)	1
IEMA 800-782-7860	Springfield IEMA SOW	8TAC94 (1)	1
ISP 217-414-3687	Springfield ISP Center SOW	8TAC92 (1)	1
ISP 815-535-7766	Sterling ISP North SOW	8TAC91 (1)	1
ISP 217-524-3544	Du Quoin ISP South SOW	8TAC93 (1)	1
Springfield 800-782-7860	Springfield ITECS 6	UTAC41, UTAC43 (2) 8TAC91 (1)	1 for each repeater
St Clair Co. 800-782-7860	St. Clair Co. ITECS 8	UTAC41, UTAC42 (2) 8TAC93 (1)	1 for each repeater
Will Co. 800-782-7860	Will Co. ITECS 3	UTAC41, UTAC42 (2) 8TAC92 (1)	1 for each repeater

Transportable Interoperability Repeaters			
Agency 24 Hrs Phone	**Location**	**Bands/Repeaters**	**Simul. Channels**
City of Marion 800-782-7860	Williamson Co. ITECS 11	UTAC41, UTAC43 (2) 8TAC91 (1)	1 for each repeater
Winnebago Co. 800-782-7860	Winnebago Co. ITECS 2	UTAC41, UTAC43 (2) 8TAC91 (1)	1 for each repeater

Portable Interoperability Repeaters

Portable Interoperability Repeaters			
Agency 24 Hrs Phone	**Location**	**Bands/Repeaters**	**Simul. Channels**
MABAS 847-419-0911	Wheeling 233 W Hintz	VHF High (3) VTAC36	1 for each repeater
MABAS 847-419-0911	Wheeling 233 W Hintz	UHF Range One (1) USAR Channels	1
MABAS 847-419-0911	Wheeling 233 W Hintz	UHF Range Two (3) UCALL40, UTAC41, 42, 43	1 for each repeater
MABAS 847-419-0911	Wheeling 233 W Hintz	UHF T Band (3) No Chnls programmed	1 for each repeater
MABAS 847-419-0911	Wheeling 233 W Hintz	700 MHz (3) 7CALL50, 7TAC51, 52, 53	1 for each repeater
MABAS 847-419-0911	Wheeling 233 W Hintz	800 MHz (3) 8TAC91, 92, 94	1 for each repeater
All repeaters can be reprogrammed by MABAS Staff if necessary			

25 Cities Interoperable Systems

The US Department of Justice has established a series of interoperability VHF High band digital P25 repeaters in 25 metropolitan areas throughout the United States. The following table lists those repeaters in the Illinois area.

DOJ 25 Cities Interoperability Repeaters Narrowband VHF High Digital P25				
FREQUENCY		**TX / RX NAC**	**Location**	**NAME**
BASE OUT	**BASE IN**			
170.8125	163.6500	$653	Palatine	CG-COM-N
171.6875	163.6500	$653	Chicago	CG-COM-C
171.4375	163.6500	$653	Joliet	CG-COM-S
168.8875	163.7000	$653	Palatine	CG-TAC-N
172.2125	163.7000	$653	Chicago	CG-TAC-C
168.9125	163.7000	$653	Joliet	CG-TAC-S
171.4375	162.8750	$653	St. Louis	STL-CALL
171.6875	163.8375	$653	St. Louis	STL-TAC

These P25 repeaters support local, state and federal voice communications interoperability their respective areas. Agencies interested in using these frequencies who are not currently participating in the 25 Cities effort should contact the POC listed below prior to programming any equipment.

Michael Triem - 312.829.7700 - Michael.Triem@ic.fbi.gov (Chicago)
Mark Engel - 312.829.7717 - Mark.Engel@ic.fbi.gov (Chicago)
Ricky Holt – 314-589-2702 – Ricky.holt@ic.fbi.gov (St. Louis)

GATEWAYS

Gateway / Cross-Band Device Operation

Gateways interconnect channels of different systems (whether on different bands, channels, or modes), allowing first responders to use their existing radios and channels to communicate with users outside their agency or radio system. Use of designated interoperability channels is preferred over the use of any agency's primary operational channels or talkgroups.

A Communications Unit Leader (COML) or Incident Commander (IC) must be aware that multiple gateway activations in support of an incident can result in interference. Interference issues are best resolved by the technical support personnel assigned to the gateways.

Whenever possible, patches of one talkgroup to another talkgroup on the same system or platform should be accomplished at the console level to minimize channel loading.

Fixed Gateways

Fixed Gateways			
AGENCY 24 HR PHONE	**NAME LOCATION**	**# NETS/ PORTS**	**GATEWAY**
IDOT 217-782-2937	IDOT Central Springfield	1 / UNK	Motorola MCC 7500
IDOT 847-705-4602	Dist. 1 Schaumburg	1 / UNK	Motorola Gold Elite
IDOT 217-782-2937	Dist. 2 Dixon	1 / UNK	Motorola CentraCom II
IDOT 217-782-2937	Dist. 3 Ottawa	1 / UNK	Motorola CentraCom II
IDOT 309-671-4487	Dist. 4 Peoria	1 / UNK	Motorola MCC 7500
IDOT 217-782-2937	Dist. 5 Paris	1 / UNK	Motorola CentraCom II
IDOT 217-782-2937	Dist. 6 Springfield	1 / UNK	Motorola CentraCom II
IDOT 217-782-2937	Dist. 7 Effingham	1 / UNK	Motorola CentraCom II
IDOT 618-346-3237	Dist. 8 Collinsville	1 / UNK	Motorola MCC 7500
IDOT 217-782-2937	Dist. 9 Carbondale	1 / UNK	Motorola CentraCom II
IEMA 800-782-7860	IEMA Dispatch Springfield	3 / 120	Motorola Gold Elite
ISP 815-632-4010	D01 Sterling	2 / 40	Motorola Gold Elite

Fixed Gateways			
AGENCY 24 HR PHONE	**NAME LOCATION**	**# NETS/ PORTS**	**GATEWAY**
ISP 847-931-2405	D02 Elgin	2 / 38	Motorola Gold Elite
ISP 847-294-4400	DCHG Des Plaines	2 / 50	Motorola Gold Elite
ISP 815-726-6377	D05 Joliet	2 / 41	Motorola Gold Elite
ISP 815-844-1525	D06 Pontiac	2 / 37	Motorola Gold Elite
ISP 309-752-4915	D07 Rock Island	2 / 40	Motorola Gold Elite
ISP 309-383-2133	D08 Peoria	2 / 32	Motorola Gold Elite
ISP 217-786-6677	D09 Springfield	2 / 49	Motorola MCC7500
ISP 217-265-0050	D10 Pesotum	2 / 37	Motorola Gold Elite
ISP 618-346-3990	D11 Collinsville	2 / 35	Motorola Gold Elite
ISP 217-347-2711	D12 Effingham	2 / 47	Motorola MCC7500
ISP 618-542-2171	D13 DuQuoin	2 / 40	Motorola MCC7500
ISP 309-833-4046	D14 Macomb	2 / 44	Motorola MCC7500
ISP 815-239-1152	D16 Pecatonica	2 / 34	Motorola Gold Elite

Fixed Gateways			
AGENCY 24 HR PHONE	**NAME LOCATION**	**# NETS/ PORTS**	**GATEWAY**
ISP 815-224-1171	D17 LaSalle	2 / 36	Motorola Gold Elite
ISP 217-324-4900	D18 Litchfield	2 / 42	Motorola Gold Elite
ISP 618-382-4606	D19 Carmi	2 / 51	Motorola MCC7500
ISP 217-285-2034	D20 Pittsfield	2 / 41	Motorola MCC7500
ISP 815-698-2332	D21 Ashkum	2 / 30	Motorola Gold Elite
ISP 618-845-3740	D22 Ullin	2 / 47	Motorola MCC7500
ISTHA 630-241-6800 x3420	D15 / Tollway Ops Downers Grove	2 / UNK	Motorola Gold Elite
NOTE: ISPERN Patch on each ISP Console leaves only one remaining patch option.			

Transportable Gateways

Transportable Gateways			
AGENCY 24 HR PHONE	**NAME LOCATION**	**# NETS/ PORTS**	**GATEWAY**
ISSP 217-685-0180	ISSP ICRI Springfield	2/5	C/AT-ICRI
IEMA 800-782-7860	IEMA ICRI Springfield	2/5	C/AT-ICRI
IEMA 800-782-7860	ITECS 1 Springfield	7 / 12	Raytheon ACU-1000
Winnebago County 800-782-7860	ITECS 2 Winnebago Co	7 / 12	Raytheon ACU-1000
Will County 800-782-7860	ITECS 3 Will Co.	7 / 12	Raytheon ACU-1000
DuPage County 800-782-7860	ITECS 4 DuPage Co.	7 / 12	Raytheon ACU-1000
Chicago OEMC 800-782-7860	ITECS 5 Chicago	7 / 12	Raytheon ACU-1000
Springfield 800-782-7860	ITECS 6 Springfield	7 / 12	Raytheon ACU-1000
Champaign 800-782-7860	ITECS 7 Champaign	7 / 12	Raytheon ACU-1000
St Clair County 800-782-7860	ITECS 8 St. Clair Co.	7 / 12	Raytheon ACU-1000
Crawford County 800-782-7860	ITECS 9 Crawford Co.	7 / 12	Raytheon ACU-1000
City of Marion 800-782-7860	ITECS 11 Williamson Co.	7 / 12	Raytheon ACU-1000

RADIO CACHES

Cache radios refer to maintaining a cache of standby radios that can be deployed to support incidents (spare radio(s) used as operational replacement for day-to-day use are NOT cache radios). Cache radios allow all responders to use common, compatible equipment during an incident.

Radio Cache Equipment Summary				
AGENCY 24 HR PHONE	**NAME LOCATION**	**MAKE MODEL**	**BAND**	**QTY**
IEMA 800-782-7860	VHF HT1250 Springfield	Motorola HT1250	VHF	65
IEMA 800-782-7860	VHF XTS3000 Springfield	Motorola XTS3000	VHF	10
IEMA 800-782-7860	STARCOM21 Springfield	Motorola XTS5000	7/800 STARCOM21	212
IEMA 815-288-1455	REG 2 STARCOM21 Dixon	Motorola XTS5000	7/800 STARCOM21	6
IEMA 815-433-7161	REG 3 STARCOM21 Ottawa	Motorola XTS5000	7/800 STARCOM21	6
IEMA 847-294-4717	REG 4 STARCOM21 Des Plaines	Motorola XTS5000	7/800 STARCOM21	6
IEMA 217-782-0922	REG 6 STARCOM21 Springfield	Motorola XTS5000	7/800 STARCOM21	6
IEMA 217-352-2461	REG 7 STARCOM21 Champaign	Motorola XTS5000	7/800 STARCOM21	6
IEMA 618-394-2233	REG 8 STARCOM21 Fairview Heights	Motorola XTS5000	7/800 STARCOM21	6

Radio Cache Equipment Summary				
AGENCY 24 HR PHONE	**NAME LOCATION**	**MAKE MODEL**	**BAND**	**QTY**
IEMA 618-662-4474	REG 9 STARCOM21 Flora	Motorola XTS5000	7/800 STARCOM21	6
IEMA 618-997-5847	REG 11 STARCOM21 Marion	Motorola XTS5000	7/800 STARCOM21	6
ISP Radio Lab Law Enfc. Only 217-414-3687	ISP Radio Lab Springfield	Motorola XTS5000	7/800 STARCOM21	50
ISP Dist 1 Law Enfc. Only 815-535-7766	Dist 1 STARCOM21 Sterling	Motorola XTS5000	7/800 STARCOM21	25
ISP Dist 13 Law Enfc. Only 618-542-2171	Dist 13 STARCOM21 DuQuoin	Motorola XTS5000	7/800 STARCOM21	25
ISSP 217-785-0309	ISSP VHF Springfield	Motorola HT1250	VHF	68
Winnebago SO 800-782-7860	ITECS 2 Rockford	EF Johnson 5100	VHF UHF 7/800	24 24 11
Will Co. EMA 800-782-7860	ITECS 3 Joliet	EF Johnson 5100	VHF UHF 7/800	24 24 11
DuPage OHSEM 800-782-7860	ITECS 4 Wheaton	EF Johnson 5100	VHF UHF 7/800	24 24 11
Chicago OEMC 800-782-7860	ITECS 5 Chicago	EF Johnson 5100	VHF UHF 7/800	24 24 11

Radio Cache Equipment Summary				
AGENCY 24 HR PHONE	**NAME LOCATION**	**MAKE MODEL**	**BAND**	**QTY**
Springfield PD 800-782-7860	ITECS 6 Springfield	EF Johnson 5100	VHF UHF 7/800	24 24 11
Champaign FD 800-782-7860	ITECS 7 Champaign	EF Johnson 5100	VHF UHF 7/800	24 24 11
St Clair Co EMA 800-782-7860	ITECS 8 Belleville	EF Johnson 5100	VHF UHF 7/800	24 24 11
Crawford Co 800-782-7860	ITECS 9 Robinson	EF Johnson 5100	VHF UHF 7/800	24 24 11
City of Marion 800-782-7860	ITECS 11 Marion	EF Johnson 5100	VHF UHF 7/800	24 24 11
Wauconda FD 800-782-7860	IPWMAN SC21 North Wauconda	Motorola APX7000	VHF/700/800 Dual Band	18
Champaign FD 800-782-7860	IPWMAN SC21 Center Champaign	Motorola APX7000	VHF/700/800 Dual Band	18
City of Marion 800-782-7860	IPWMAN SC21 South Marion	Motorola APX7000	VHF/700/800 Dual Band	18
MABAS 847-419-0911	Cache 2 Round Lake Fire Dept.	Motorola APX7000	VHF/700/800 Dual Band	12
MABAS 847-419-0911	Cache 3 Wauconda	Motorola APX7000	VHF/700/800 Dual Band	12
MABAS 847-419-0911	Cache 4 Wauconda	Motorola APX7000	VHF/700/800 Dual Band	12

Radio Cache Equipment Summary				
AGENCY 24 HR PHONE	**NAME LOCATION**	**MAKE MODEL**	**BAND**	**QTY**
MABAS 847-419-0911	Cache 5 Wheeling	Motorola APX7000	VHF/700/800 Dual Band	12
MABAS 847-419-0911	Cache 6 Wheeling	Motorola APX7000	VHF/700/800 Dual Band	12
MABAS 847-419-0911	Cache 7 Wheeling	Motorola APX7000	VHF/700/800 Dual Band	12
MABAS 847-419-0911	Cache 8 Wheeling	Motorola APX7000	VHF/700/800 Dual Band	12
OSFM 800-782-7860	OSFM VHF Springfield	Kenwood TK290	VHF	12
OSFM 800-782-7860	OSFM SC21 Springfield	Motorola XTS5000	7/800 STARCOM21	12
Illinois Tollway 630-241-6800	Tollway 800 Downers Grove	Motorola HT1000	800 MHz Conventional	75
MABAS Div. 3 847-419-0911	UCP 14 Glenview	Motorola APX7000	VHF/700/800 Dual Band	6
Oak Park PD 847-724-5700	UCP 15 Oak Park	Motorola APX7000	VHF/700/800 Dual Band	6
Tinley Park 847-724-5700	UCP 16 Tinley Park	Motorola APX7000	VHF/700/800 Dual Band	6

MOBILE COMMUNICATIONS CENTERS

A Mobile Communications Center (MCC) refers to any vehicular asset that can be deployed to provide or supplement communications capabilities in an incident area.

Illinois Mobile Communications Centers					
AGENCY 24HR PHONE	**UNIT ID LOCATION**	**SPECIAL EQUIPMENT**	**FEMA TYPE**	**GATEWAY**	**CACHE**
IDOT DIST 2 217-782-2937	DIST. 2 MEOC Dixon	VHF Low, VHF High, UHF, SC21, Marine, Air. 22' Mast, 2 RADO Pos.	IV	Yes	No
IDOT DIST 3 217-782-2937	DIST. 3 MEOC Ottawa	VHF Low, VHF High, UHF, SC21, Marine, Air. 22' Mast, 2 RADO Pos.	IV	Yes	No
IDOT DIST 4 217-782-2937	DIST. 4 MEOC Peoria	VHF Low, VHF High, UHF, SC21, Marine, Air. 22' Mast, 2 RADO Pos.	IV	Yes	No
IDOT DIST 5 217-782-2937	DIST. 5 MEOC Paris	VHF Low, VHF High, UHF, SC21, Marine, Air. 22' Mast, 2 RADO Pos.	IV	Yes	No
IDOT DIST 6 217-782-2937	DIST. 6 MEOC Springfield	VHF Low, VHF High, UHF, SC21, Marine, Air. 22' Mast, 2 RADO Pos.	IV	Yes	No
IDOT DIST 7 217-782-2937	DIST. 7 MEOC Effingham	VHF Low, VHF High, UHF, SC21, Marine, Air. 22' Mast, 2 RADO Pos.	IV	Yes	No
IDOT DIST 3 217-782-2937	DIST. 3 MICC Ottawa	VHF Low, VHF High, SC21, Marine. 22' Mast, 2 RADO Pos., Seats 4	IV	No	No
IEMA 800-782-7860	Field Command 1	6 line PBX, VHF Low, VHF High, UHF, and SC21. 50' Mast, 1 RADO pos., seats 15, satellite uplink 1500K downlink 1500K	II	No	No

Illinois Mobile Communications Centers

AGENCY 24HR PHONE	UNIT ID LOCATION	SPECIAL EQUIPMENT	FEMA TYPE	GATEWAY	CACHE
IEMA 800-782-7860	Field Command 2	6 line PBX, VHF Low, VHF High, UHF, and SC21. 50' Mast, 1 RADO pos., seats 15, satellite uplink 1500K downlink 1500K	II	No	No
IEMA 800-782-7860	IEMA SOW Springfield	80' Mast, SC21 Site on wheels 800 MHz repeater (8TAC94)	N/A	No	No
IEMA 800-782-7860	IEMA UAC Springfield	LDV Semitrailer 32 line PBX, VHF Low, VHF High, UHF, SC21. 45' Mast, 2 RADO Pos., seats 20, satellite uplink 1000K downlink 3000K	I	No	No
IEMA 800-782-7860	VOIP Trailer Springfield	20 line VoIP , seats 4, satellite uplink 1000K downlink 3000K	N/A	No	No
IEMA 800-782-7860	MOC Alexander Co	Cellular Data VHF, STARCOM21 Radios	III	No	No
IEMA 800-782-7860	MOC Gallatin Co	Cellular Data VHF, STARCOM21 Radios	III	No	No
IEMA 800-782-7860	MOC Hardin Co	Cellular Data VHF, STARCOM21 Radios	III	No	No
IEMA 800-782-7860	MOC Johnson Co	Cellular Data VHF, STARCOM21 Radios	III	No	No
IEMA 800-782-7860	MOC Perry Co	Cellular Data VHF, STARCOM21 Radios	III	No	No
IEMA 800-782-7860	MOC Pope Co	Cellular Data VHF, STARCOM21 Radios	III	No	No

Illinois Mobile Communications Centers

AGENCY 24HR PHONE	UNIT ID LOCATION	SPECIAL EQUIPMENT	FEMA TYPE	GATEWAY	CACHE
IEMA 800-782-7860	MOC Pulaski Co	Cellular Data VHF, STARCOM21 Radios	III	No	No
IEMA 800-782-7860	MOC Saline Co	Cellular Data VHF, STARCOM21 Radios	III	No	No
IEMA 800-782-7860	MOC Union Co	Cellular Data VHF, STARCOM21 Radios	III	No	No
IEMA 800-782-7860	MOC Williamson Co	Cellular Data VHF, STARCOM21 Radios	III	No	No
IESMA 217-732-4311	EMAT Trailer McLean Co	1 VHF Low, 1-VHF, 1-UHF, 1-SC21, Radios, 40' Mast, 2 RADO Pos, Cellular Data and Voice	VI	No	No
ILEAS 847-590-3500	C & C Trailer Urbana	VHF and STARCOM21 Radio	N/A	No	No
ISP 815-535-7766	North SOW Sterling	80' Mast, SC21 Site on wheels 800 MHz repeater (8TAC91)	N/A	No	No
ISP 217-414-3687	Central SOW Springfield	80' Mast, SC21 Site on wheels 800 MHz repeater (8TAC92)	N/A	No	No
ISP 618-542-2171	South SOW DuQuoin	80' Mast, SC21 Site on wheels 800 MHz repeater (8TAC93)	N/A	No	No
IEMA 800-782-7860	ITECS 1 Springfield	Satellite, Data, VOIP, 800 MHz rptr (8TAC91)VHF Low, VHF High, UHF, SC21, 50' Mast, 2 RADO Pos	IV	Yes	Yes
Winnebago SO 800-782-7860	ITECS 2 Rockford	2-VHF, 2-UHF, 1-800 Base/Repeater HF, VHF Low, VHF High, UHF, SC21, 50' Mast, 2 RADO Pos	IV	Yes	Yes

Illinois Mobile Communications Centers

AGENCY 24HR PHONE	UNIT ID LOCATION	SPECIAL EQUIPMENT	FEMA TYPE	GATEWAY	CACHE
Will County EMA 800-782-7860	ITECS 3 Joliet	Satellite, Data, VOIP, 2-VHF, 2-UHF, 1-800 Base/Rptr HF, VHF Low, VHF High, UHF, SC21, 50' Mast, 2 RADO	IV	Yes	Yes
DuPage OHSEM 800-782-7860	ITECS 4 Wheaton	Satellite, Data, VOIP, 2-VHF, 2-UHF, 1-800 Base/Rptr HF, VHF Low, VHF High, UHF, SC21, 50' Mast, 2 RADO	IV	Yes	Yes
Chicago OEMC 800-782-7860	ITECS 5 Chicago	Satellite, Data, VOIP, 2-VHF, 2-UHF, 1-800 Base/Rptr HF, VHF Low, VHF High, UHF, SC21, 50' Mast, 2 RADO	IV	Yes	Yes
Springfield PD 800-782-7860	ITECS 6 Springfield	Satellite, Data, VOIP, 2-VHF, 2-UHF, 1-800 Base/Rptr HF, VHF Low, VHF High, UHF, SC21, 50' Mast, 2 RADO	IV	Yes	Yes
Champaign FD 800-782-7860	ITECS 7 Champaign	Satellite, Data, VOIP, 2-VHF, 2-UHF, 1-800 Base/Rptr HF, VHF Low, VHF High, UHF, SC21, 50' Mast, 2 RADO	IV	Yes	Yes
St Clair Co EMA 800-782-7860	ITECS 8 Belleville	Satellite, Data, VOIP, 2-VHF, 2-UHF, 1-800 Base/Rptr HF, VHF Low, VHF High, UHF, SC21, 50' Mast, 2 RADO	IV	Yes	Yes
Crawford EMA 800-782-7860	ITECS 9 Robinson	Satellite, Data, VOIP, 2-VHF, 2-UHF, 1-800 Base/Rptr HF, VHF Low, VHF High, UHF, SC21, 50' Mast, 2 RADO	IV	Yes	Yes
City of Marion 800-782-7860	ITECS 11 Marion	Satellite, Data, VOIP, 2-VHF, 2-UHF, 1-800 Base/Rptr HF, VHF Low, VHF High, UHF, SC21, 50' Mast, 2 RADO	IV	Yes	Yes
Adams Co EMA 800-782-7860	UCP 1 Quincy	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	No

Illinois Mobile Communications Centers

| AGENCY 24HR PHONE	UNIT ID LOCATION	SPECIAL EQUIPMENT	FEMA TYPE	GATEWAY	CACHE
Bureau Co SO 800-782-7860	UCP 2 Princeton	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	No
DuPage Co SO 800-782-7860	UCP 3 Wheaton	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	No
Galesburg PD 800-782-7860	UCP 4 Galesburg	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	No
Jo Daviess Co SO 800-782-7860	UCP 5 Galena	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	No
Kendall Co SO 800-782-7860	UCP 6 Yorkville	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	No
Madison Co EMA 800-782-7860	UCP 7 Edwardsville	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	No
McLean Co EMA 800-782-7860	UCP 8 Bloomington	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	No
Rock Island SO 800-782-7860	UCP 9 Rock Island	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	No
Tazewell Co EMA 800-782-7860	UCP 10 Tremont	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	No

Illinois Mobile Communications Centers						
AGENCY 24HR PHONE	**UNIT ID LOCATION**	**SPECIAL EQUIPMENT**	**FEMA TYPE**	**GATEWAY**	**CACHE**	
Jefferson Co SO 800-782-7860	UCP 11 Mt. Vernon	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	No	
DuQuoin ESDA 800-782-7860	UCP 12 DuQuoin	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	No	
Wauconda FD 800-782-7860	UCP 13 Wauconda	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	Yes	
MABAS Div. 3 847-724-5700	UCP 14 Glenview	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	Yes	
Oak Park PD 847-724-5700	UCP 15 Oak Park	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	Yes	
Tinley Park EMA 847-724-5700	UCP 16 Tinley Park	VHF Low, VHF High, UHF, SC21, 25' Mast, 4 RADO Pos, seats 12, satellite 1 MB up 3MB Down, PBX Network	II	No	Yes	

GENERATORS

The following Host Agencies have transportable generator units for deployment to an incident (See Table after map for details):
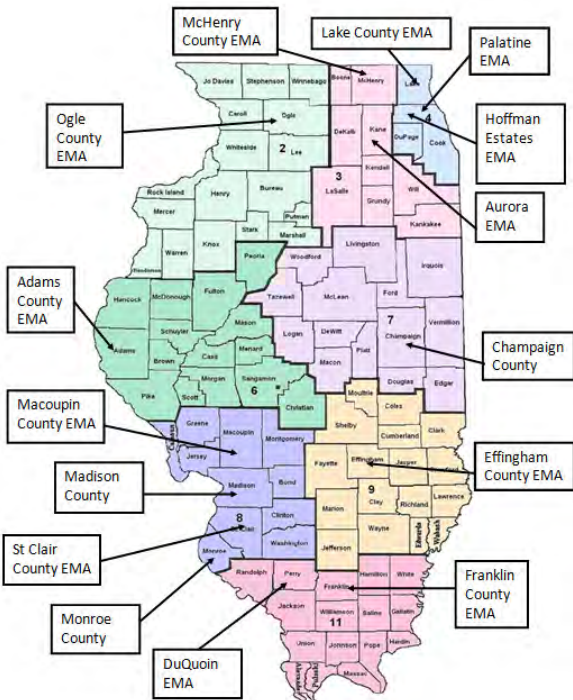
Generator Summary				
DISPATCH	**AGENCY LOCATION**	**QTY**	**MAKE MODEL**	**kVA**
EM-COM 217-732-4311	Adams Co EMA 101 North 54th Quincy	1 4 1	CK Power CKT 303 DM CKT 603 DM Kohler/Felling 100REOZT	30 60 100
EM-COM 217-732-4311	Aurora EMA 1100 Mitchell Road Aurora	1 5	CK Power CKT 303 DM CKT 603 DM	30 60
EM-COM 217-732-4311	Champaign Co. EMA 1701 East Main Urbana	1 4 1	CK Power CKT 303 DM CKT 603 DM Kohler/Felling 100REOZT	30 60 100
EM-COM 217-732-4311	DuQuoin EMA U.S. Highway 51 S DuQuoin	1 5	CK Power CKT 303 DM CKT 603 DM	30 60
EM-COM 217-732-4311	Effingham Co EMA 311 Miracle Ave. Effingham	5	CK Power CKT 603 DM	60
EM-COM 217-732-4311	Franklin Co EMA 13613 Oddfellow Ln Benton	1 5	CK Power CKT 303 DM CKT 603 DM	30 60

Generator Summary				
DISPATCH	**AGENCY LOCATION**	**QTY**	**MAKE MODEL**	**kVA**
EM-COM 217-732-4311	Hoffman Estes EMA 1900 Hassel Road Hoffman Estates	1 5	CK Power CKT 303 DM CKT 603 DM	30 60
EM-COM 217-732-4311	Lake County EMA 650 W. Winchester Libertyville	1 4 1	CK Power CKT 303 DM CKT 603 DM Kohler/Felling 100REOZT	30 60 100
EM-COM 217-732-4311	Macoupin Co EMA 19252 N. Route 4 Carlinville	1 4 1	CK Power CKT 303 DM CKT 603 DM Kohler/Felling 100REOZT	30 60 100
Madison County 618-692-4433	Madison County Wood River	2 1 4 1	Baldor TS45 TS45 w/ Light Tower Blue Star JD60-01 Cummins	45 45 60 100
EM-COM 217-732-4311	McHenry Co EMA 2200 N. Seminary Woodstock	5	CK Power CKT 603 DM	60

Generator Summary				
DISPATCH	**AGENCY LOCATION**	**QTY**	**MAKE MODEL**	**kVA**
Monroe County 618-939-8318	Monroe County Waterloo	4 1	Blue Star JD60-01 Baldor TS60	60 60
EM-COM 217-732-4311	Ogle Co EMA 103 Jefferson Street Oregon	1 4 1	CK Power CKT 303 DM CKT 603 DM Kohler/Felling 100REOZT	30 60 100
EM-COM 217-732-4311	Palatine EMA 1199 W. Northwest Palatine	1 5	CK Power CKT 303 DM CKT 603 DM	30 60
Belleville 911 618-277-3500	St Clair County EMA Mascoutah	5	Baldor TS60	60
Contact Local MABAS Division -or- RED Center 847-724-5700	in each MABAS Division statewide	70+	Light Tower with four 1500 watt MH lights and 20 kVA Generator	20

Interoperability Points of Contact

TICP/FOG

Primary POC	
Name:	Illinois Emergency Management Agency
POC Name:	Walt Lewis
Title:	IEMA Statewide Communications Manager
Address:	4800 Rodger Street, Springfield, Illinois 62703
Phone:	217-5587-6422 (office) 217-782-7860 (24/7)
	217-622-8925 (cell)
E-Mail:	Walt.Lewis@illinois.gov

Alternate POC	
Name:	Illinois Terrorism Taskforce
POC Name:	Joe Galvin
Title:	Statewide Interoperability Coordinator (SWIC)
Address:	4800 Rodger Street, Springfield, Illinois 62703
Phone:	847-214-5252 (office) 217-782-7860 (24/7)
Email:	Joe.Galvin@illinois.gov or ema.scip@illinois.gov

IEMA DISPATCH

IEMA Dispatch Center (24/7) – **800-782-7860**

STATEWIDE COMMUNICATION CENTERS

Agency	Division	Location	Phone
IEMA	HQ	Springfield	800-782-7860
IDOC	Ops	Springfield	217-558-2200
Tollway	All	Downers Grove	630-241-6800
ISP	Dist 1	Sterling	815-632-4010
ISP	Dist 2	Elgin	847-931-2405
ISP	Chicago	Des Plaines	847-294-4400
ISP	Dist 5	Lockport	815-726-6377
ISP	Dist 6	Pontiac	815-844-1525
ISP	Dist 7	East Moline	309-752-4915
ISP	Dist 8	Metamora	309-383-2133
ISP	Dist 9	Springfield	217-786-6677
ISP	Dist 10	Pesotum	217-265-0050
ISP	Dist 11	Collinsville	618-346-3990
ISP	Dist 12	Effingham	618-542-2171
ISP	Dist 13	DuQuoin	618-542-2171
ISP	Dist 14	Macomb	217-786-6677
ISP	Dist 15	Downers Grove	630-241-6800
ISP	Dist 16	Pecatonica	815-239-1152
ISP	Dist 17	LaSalle	815-224-2361
ISP	Dist 18	Litchfield	217-324-4900
ISP	Dist 19	Carmi	618-542-2171
ISP	Dist 20	Pittsfield	217-786-6677

Agency	Division	Location	Phone
ISP	Dist 21	Ashkum	815-698-2332
ISP	Dist 22	Ullin	618-542-2171
IDOT	Dist 1	Schaumburg	847-705-4000
IDOT	Dist 2	Dixon	815-284-2271
IDOT	Dist 3	Ottawa	815-434-6131
IDOT	Dist 4	Peoria	309-671-3333
IDOT	Dist 5	Paris	217-465-4181
IDOT	Dist 6	Springfield	217-782-7301
IDOT	Dist 7	Effingham	217-342-3951
IDOT	Dist 8	Collinsville	618-346-3100
IDOT	Dist 9	Carbondale	815-549-2171
IDNR	Region 1	Sterling	815-625-2968
IDNR	Region 2	Bartlett	847-608-3100
IDNR	Region 3	Clinton	217-935-6860
IDNR	Region 4	Alton	618-462-1181
IDNR	Region 5	Benton	618-435-8138
ISSP	Dist I	Villa Park	630-693-0551
ISSP	Dist II	Rockford	815-987-7560
ISSP	Zone IV	Mt. Vernon	309-694-7961
ISSP	Zone IV-A	Belleville	618-236-8755

COMMUNICATION POINTS OF CONTACT

AGENCY	NAME	PHONE EMAIL
FEMA Region V	Ken Howdeshell DEC	312-408-4463 kenneth.howdeshell@dhs.gov
IDNR	Lieutenant Jay Danner	217-720-7155 Jay.Danner@Illinois.gov
IDOC	Frank Hughes	217-558-2200 X6310 FRANK.HUGHES@doc.illinois.gov
IDOT	Stephen Jackson	217-558-3056 Stephen.Jackson@illinois.gov
IDPH	Billy Carter	312-497-6802 Billy.carter@illinois.gov
IEMA	Walt Lewis	217-557-6422 Walt.Lewis@illinois.gov
IEMA / ITTF	Joe Galvin SWIC	312-833-1823 Joe.galvin@illinois.gov
IEMA	Jerry Miller Technical Services	217-557-2736 Jerry.A.Miller@illinois.gov
IESMA	Jim Pitchford	217-854-3352 ema@macoupincountyil.gov
ILEAS	Russ Gentry	217-328-3800 rlgentry@ileas.org
Illinois TERT	Brian Tegtmeyer	630-330-3292 btegtmeyer@ducomm.org
ING	Major Don West	217-761-1719 donald.d.west@us.army.mil
ISP	Lambert Fleck	217-782-2712 Lambert_Fleck@isp.state.il.us

AGENCY	NAME	PHONE EMAIL
ISTHA (Tollway)	Tom Cameron	630-241-6800 x 3411 tcameron@getipass.com
MABAS	Chief Paul Maplethorpe	847-546-6001 maplethorpe@mabas-il.org
MABAS	Chief David E. Dato	847-526-2821 Ddato@waucondafire.org
RED Center	James Clausen	847-498-5860 jclausen@redcenter.org
Region 13 / APCO	Chris Kindlespire	815-405-0998 ckspire@grundy911.org
Region 54 / APCO	Billy Carter	312-497-6802 Billy.carter@illinois.gov
Secretary of State Police	Greg Patterson	217-243-1241 gpatterson@ilsos.net

General Reference Information

STANDARD PHONETIC ALPHABET

The phonetic alphabet (shown below) is a standard international procedure for transmission of difficult to pronounce words or place names. The excess use of the phonetic alphabet wastes time on radio networks. Clarification of words can very often be made using plain English spelling without the need to resort to phonetic spelling.

A	Alfa	H	Hotel	O	Oscar	V	Victor
B	Bravo	I	India	P	Papa	W	Whiskey
C	Charlie	J	Juliet	Q	Quebec	X	X-ray
D	Delta	K	Kilo	R	Romeo	Y	Yankee
E	Echo	L	Lima	S	Sierra	Z	Zulu
F	Foxtrot	M	Mike	T	Tango		
G	Golf	N	November	U	Uniform		

PRIVACY TONES/CODES

CTCSS (PL) Tones

CTCSS (Continuous Tone Coded Squelch System) TONES & CODES			
Freq. (Hz)	**Motorola PL ™**	**Freq. (Hz)**	**Motorola PL™**
67.0	XZ	136.5	4Z
69.3 or 69.4	WZ	141.3	4A
71.9	XA	146.2	4B
74.4	WA	151.4	5Z
77.0	XB	156.7	5A
79.7	WB	162.2	5B
82.5	YZ	167.9	6Z
85.4	YA	173.8	6A
88.5	YB	179.9	6B
91.5	ZZ	186.2	7Z
94.8	ZA	192.8	7A
97.4	ZB	203.5	M1
100.0	1Z	206.5	8Z
103.5	1A	210.7	M2
107.2	1B	218.1	M3
110.9	2Z	225.7	M4
114.8	2A	229.1	9Z

CTCSS (Continuous Tone Coded Squelch System) TONES & CODES			
Freq. (Hz)	**Motorola PL ™**	**Freq. (Hz)**	**Motorola PL™**
118.8	2B	233.6	M5
123.0	3Z	241.8	M6
127.3	3A	250.3	M7
131.8	3B	254.1	0Z

DCSS – Digital Coded Squelch System

DCSS (Digital Coded Squelch System) CODES							
NORMAL	INVERTED	NORMAL	INVERTED	NORMAL	INVERTED	NORMAL	INVERTED
023	047	155	731	325	526	516	432
025	244	156	265	331	465	523	246
026	464	162	503	332	455	526	325
031	627	165	251	343	532	532	343
036	172	172	036	346	612	546	132
043	445	174	074	351	243	565	703
047	023	205	263	364	131	606	631
051	032	212	356	365	125	612	346
053	452	223	134	371	734	624	632
054	413	225	122	411	226	627	031
065	271	226	411	412	143	631	606

DCSS (Digital Coded Squelch System) CODES

NORMAL	INVERTED	NORMAL	INVERTED	NORMAL	INVERTED	NORMAL	INVERTED
071	306	243	351	413	054	632	624
072	245	244	025	423	315	654	743
073	506	245	072	431	723	662	466
074	174	246	523	432	516	664	311
114	712	251	165	445	043	703	565
115	152	252	462	446	255	712	114
116	754	255	446	452	053	723	431
122	225	261	732	454	266	731	155
125	365	263	205	455	332	732	261
131	364	265	156	462	252	734	371
132	546	266	454	464	026	743	654
134	223	271	065	465	331	754	116
143	412	274	145	466	662		
145	274	306	071	503	162		
152	115	311	664	506	073		
032	051	315	423				

NAC – Network Access Codes

| NAC – NETWORK ACCESS CODES	
$293	Default NAC
$F7E	Receiver will unsquelch with any incoming NAC
$F7F	a repeater with this NAC will allow incoming signals to be repeated with the NAC intact
TGID – TALKGROUP ID	
$0001	Default
$0000	No one, talkgroup with no users - used for individual call
$FFFF	Talkgroup which includes everyone
UNIT ID	
$000000	No one – never associated with a radio unit
$000001-$98767F	For general use
$989680-$FFFFFE	For talkgroup use or other special purposes
$FFFFFF	Designates everyone – used when implementing a group call with a TGID3

Notes
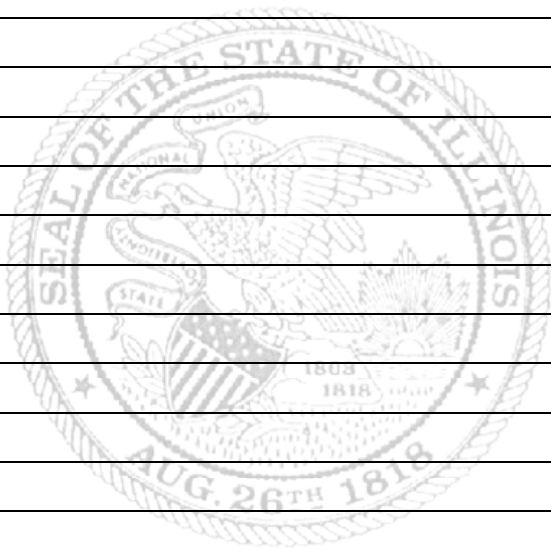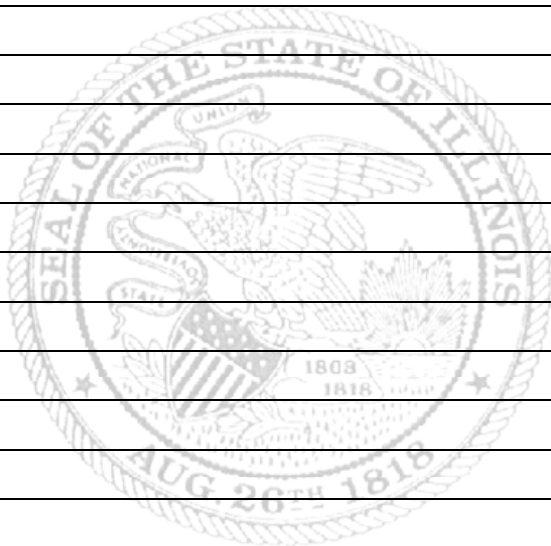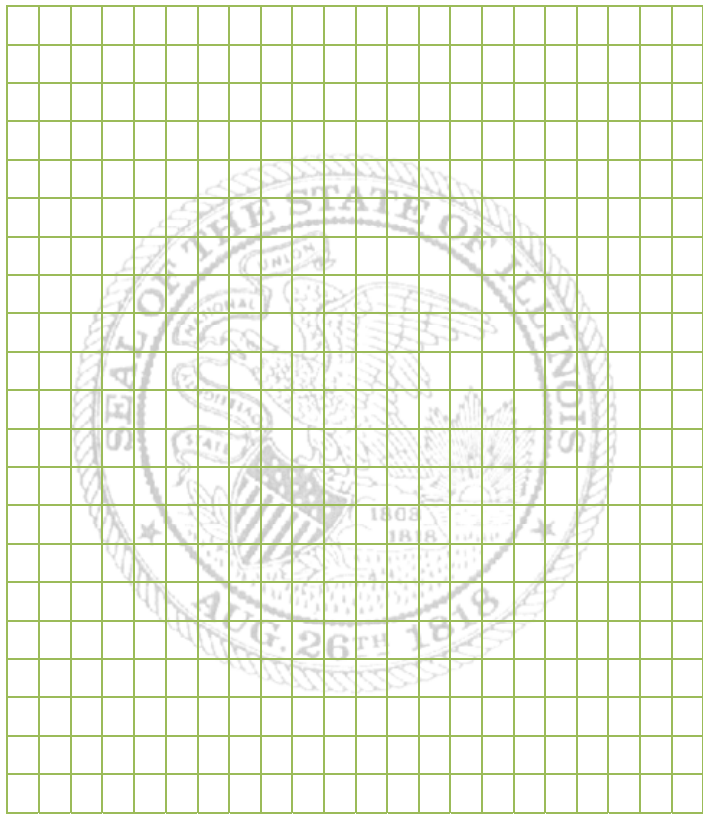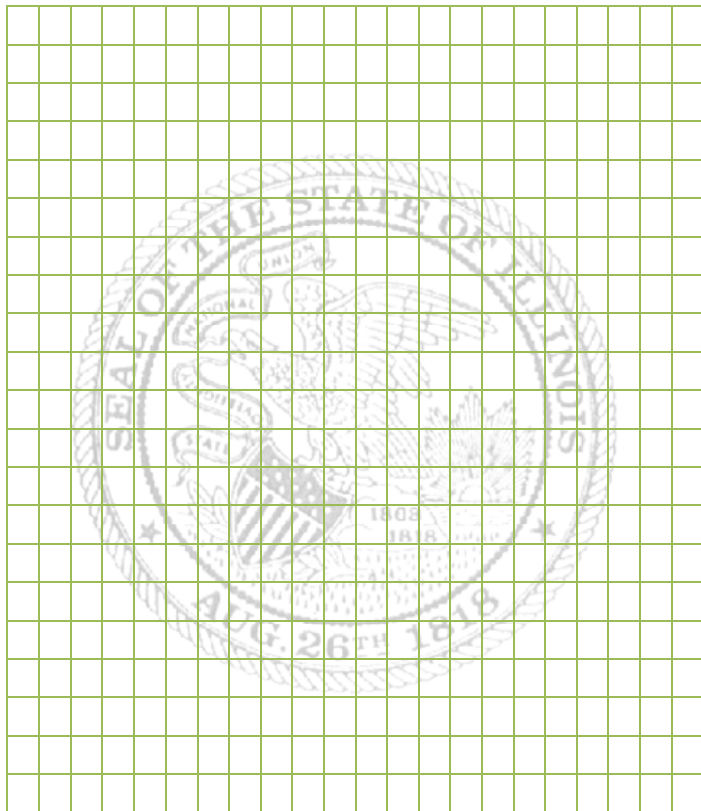
General Rules of Use for Communications Equipment or Channels

❖ Shall only be used for official business or emergency communications.
❖ Shall be consistent with Federal Communications Commission (FCC) or National Telecommunications and Information Administration (NTIA) Rules.
❖ Use during a Type 3, 2, or 1 incident shall be authorized by the COML of the incident.
❖ Verify that the interoperability channel is clear before transmitting to avoid interfering with the communications of another user.
❖ Rules and Guidelines of interoperable channels (i.e., ISPERN, IREACH, IFERN, etc.) will be followed when using those channels
❖ Only users actively participating in the incident or authorized by a COML or COMC should monitor or transmit on a given talkgroup.
❖ Scanning across multiple channels is to be avoided when using interoperable communications.
❖ ALL voice radio communications are to be brief and concise.
❖ No obscene, indecent, or profane language shall be used on any channel.
❖ No use of nicknames, slang, or Citizens Band (CB) type handles shall be used on any interoperable channels.
❖ The appropriate authority shall immediately deal with unauthorized use of channels or equipment.
❖ Specific rules of use for specialized equipment must be known and followed when that equipment is put in use.
❖ Encryption shall not be used at any time on any state or national interoperability channel
❖ Ground to Air Communications - shall be coordinated with the COMC/COML. Airborne use of interoperable channels shall receive prior authorization from COMC/COML.

Interoperable Communications "Watch Out" Situations

- ❖ Inadequate or no communication with crew members or supervisor.
- ❖ Users unfamiliar with radio system(s) or assigned radio functionality.
- ❖ Organizations in the system do not use the same vocabulary.
- ❖ Multiple conversations on the same talkgroup or channel.
- ❖ Unable to communicate critical information due to radio congestion.
- ❖ High level of background noise (i.e. wind, generators, power tools).
- ❖ Working in the deep interior of a building, parking garage, or underground.
- ❖ A single Communications Unit Leader has not been designated.
- ❖ Instructions and assignments for Comm Unit are not clear.
- ❖ Inadequate number of tactical channels available or assigned.
- ❖ Incident is using radio frequencies in more than one radio band.
- ❖ Multiple agencies performing radio programming at the incident.
- ❖ Different radio bands being used via console or gateway patches. Gateways must be monitored for problems such as "stuck keys", intermodulation, etc.
- ❖ Multiple mobile gateways available at the incident.
- ❖ Mobile gateway devices being used in a strategic (wide-area) rather than tactical (local) environment.
- ❖ Dispatch to dispatch channel patching.