

State of Illinois

Illinois Emergency Management Agency

ILLINOIS INTEROPERABILITY FIELD OPERATIONS GUIDE





State of Illinois Interoperable Communications Field Operations Guide (FOG) Version 3.0 August 2024

INTRODUCTION

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 document is printed with DHS grant money.



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

Thank you,

Matthew Miller

Statewide Interoperability Coordinator (SWIC)

Illinois Emergency Management Agency & Office of
Homeland Security (IEMA & OHS)



LICENSING DISCLAIMER

Nothing in this document shall be construed to serve as authorization for any agency or individual to operate equipment on radio channels without the proper authorization or licensing by the Federal Communications Commission (FCC).



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IEMA & OHS Operations Center (24/7)

217-782-7860

Send corrections or suggestions to the SWIC at EMA.SWIC@illinois.gov. Use the QR Code below to access the IEMA-OHS Statewide Interoperability website.





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SECTION 1 Requests for Communications Assets

- An agency needing support of a communications asset will contact their local dispatch center.
- The local dispatch center will contact the State Emergency Operations Center (SEOC) and make the request. The SEOC will open a mission and start official documentation of the incident.
- The SEOC will contact the closest and most appropriate state or local asset that can support the request and determine the availability and estimated time of deployment. This will normally be routed through the local Emergency Management Agency (EMA).
- The SEOC will then report the response information back to the requesting dispatch center.



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- The SEOC will verify that the responding asset, the requesting jurisdiction dispatch center, and the on-scene commander all have a common mutual aid channel.
- The responding asset will check with the Incident Commander (IC) for staging of the asset or to determine a reporting location.
- The IC will designate a vehicle to meet the arriving communications asset and escort them to the designated location.
- The communications asset will establish communications with the SEOC once on scene.
- The IC will designate a COML who will prepare an Incident Radio Communications Plan (ICS Form 205). The ICS205 will be provided to the communications asset. The Communications Plan will also include phone numbers for incident personnel and other significant locations.



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- If necessary, the IC will designate law enforcement personnel to provide security at the site of the communications asset.
- The communications asset will rapidly prepare to activate interoperable communications necessary to support on-scene incident personnel.
- The communications asset will have a cache of 800 MHz, Very High Frequency (VHF), and Ultra High Frequency (UHF) portable radios to issue to incident personnel, if necessary.
- The communications asset should be prepared to remain on scene staffed by trained communications personnel until released by the IC or designee.



SECTION 2 Interoperable Communications

Sec. 2-1 STARCOM21 STATEWIDE TRUNKED RADIO SYSTEM

The STARCOM21 system serves as the technology platform for Illinois interoperable communications. Many agencies have their own assigned talkgroups on the STARCOM21 platform. These systems are used for day-to-day operations within each agency, interoperability between agencies, and statewide interoperability when necessary. For statewide interoperability, all STARCOM21 radios are programmed with the Statewide Interoperability Template (SWIT).

Sec. 2-2 CONVENTIONAL CHANNELS

The Illinois and national conventional interoperability channels can be used as required, but coordination with the state COMU will help prevent interference and multiple users attempting to use the same channel within a given area.

Conventional repeaters activated or deployed on the conventional interoperable pairs and using an antenna more than 20 feet above ground should coordinate its use with the state COMU for the same reasons.



SECTION 3 Statewide Interoperability Template (SWIT)

The Illinois Statewide Interoperability Executive Committee (SIEC) has approved a SWIT to support improved interoperable communication options throughout the State of Illinois. It is the suggestion of the SIEC that each agency include these channels in their radios.

The tables listed in this Section define each STARCOM21 talkgroup and conventional channel in the SWIT, followed by a visor card which provides guidance on STARCOM21 radio interoperability programming.

Sec. 3-1 GENERALLY

- The following color coding is used in the non-trunked portion of this document to assist with identification of conventional analog, P25 digital, and P25 digital secure (encrypted) channels:

Conventional
Analog

P25 Digital

P25 Digital
Secure

- The following color coding is used in the trunking portion of this document to assist with the identification of general use talkgroups and secure (encrypted) talkgroups.



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Trunked
General Use

Trunked Secure

Sec. 3-1(a) SWIT Programming Guides by Discipline and Type

The following link provides access to the SWIT programming guides for STARCOM radios according to public safety discipline or type of radio. Agencies programming STARCOM radios must use the programming guide appropriate to their discipline.

<https://iemaohs.illinois.gov/hs/interoperability/committee.html>.

Sec. 3-1(b) State Encryption Keys

State encryption keys shall not be added to any radio or other device, except as authorized by the SWIC or designee.



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Sec. 3-2 VHF HIGH BAND AND UHF CONVENTIONAL CHANNELS

IL-SIEC STATEWIDE INTEROPERABILITY TEMPLATE (SWIT)									
VCALL PROGRAMMING GUIDE									
CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	SLN/		
POS.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC	P25	ENC.	CKR
1	VCALL10	VCALL10	155.7525	156.7	155.7525	156.7	No	No	N/A
2	VTAC11	VTAC11	151.1375	156.7	151.1375	156.7	No	No	N/A
3	VTAC12	VTAC12	154.4525	156.7	154.4525	156.7	No	No	N/A
4	VTAC13	VTAC13	158.7375	156.7	158.7375	156.7	No	No	N/A
5	VTAC14	VTAC14	159.4725	156.7	159.4725	156.7	No	No	N/A
6	VTAC33 (VTAC14/11)	VTAC33	159.4725	156.7	151.1375	136.5	No	No	N/A
7	VTAC34 (VTAC13/12)	VTAC34	158.7375	156.7	154.4525	136.5	No	No	N/A



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8	VTAC35 (VTAC14/13)	VTAC35	159.4725	156.7	158.7375	136.5	No	No	N/A
9	VTAC36 (VTAC11/14)	VTAC36	151.1375	156.7	159.4725	136.5	No	No	N/A
10	VTAC37 (VTAC12/13)	VTAC37	154.4525	156.7	158.7375	136.5	No	No	N/A
11	VTAC38 (VTAC13/14)	VTAC38	158.7375	156.7	159.4725	136.5	No	No	N/A
12	STL CALL	STL CALL	171.4375	\$653	162.8750	\$653	Yes	Select	N/A
13	STL TAC	STL TAC	171.6875	\$653	163.8375	\$653	Yes	Select	N/A
14	IEMA & OHS VHF1	VHF 1	155.9250	CSQ	155.9250	CSQ	No	No	N/A
15	ESMARN	ESMARN	155.0250	123.0	155.0250	123.0	No	No	N/A
16	IREACH	IREACH	155.0550	D156	155.0550	D156	No	No	N/A



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IL-SIEC STATEWIDE INTEROPERABILITY TEMPLATE (SWIT)

VLAW PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25	ENC.	SLN/ CKR
Pos.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			
1	ISPERN ¹ (VLAW31)	ISPERN	155.4750	CSQ	155.4750	D156	No	No	N/A
2	IREACH	IREACH	155.0550	D156	155.0550	D156	No	No	N/A
3	ISP HF4	ISP HF4	155.4600	CSQ	155.4600	CSQ	No	No	N/A
4	ESMARN	ESMARN	155.0250	123.0	155.0250	123.0	No	No	N/A
5	VLAW31	VLAW31	155.4750	CSQ	155.4750	156.7	No	No	N/A
6	VLAW32	VLAW32	155.4825	CSQ	155.4825	156.7	No	No	N/A
7	VSAR16 ²	VSAR16	155.1600	127.3	155.1600	127.3	No	No	N/A
8	RESERVED								
9	RESERVED								
10	RESERVED								



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11 RESERVED

12 RESERVED

13 RESERVED

14 RESERVED

15 RESERVED

16 RESERVED

- ISPERN is governed by rules and regulations promulgated by the Illinois State Police and the State Police Radio Act.

- ISPERN, VLAW31 and VLAW32 are restricted to Law Enforcement use only.

- ESMARN and IREACH channels require local FCC radio authorizations at this time.



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IL-SIEC STATEWIDE INTEROPERABILITY TEMPLATE (SWIT)

VFIRE PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25	ENC.	SLN/ CKR
Pos.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			
1	IFERN ¹ (VFIRE22)	IFERN	154.2650	210.7	154.2650	210.7	No	No	N/A
2	IFERN ² (VFIRE26)	IFERN2	154.3025	67.0	154.3025	67.0	No	No	N/A
3	VFIRE21	VFIRE21	154.2800	CSQ	154.2800	156.7	No	No	N/A
4	VFIRE22	VFIRE22	154.2650	CSQ	154.2650	156.7	No	No	N/A
5	VFIRE23	VFIRE23	154.2950	CSQ	154.2950	156.7	No	No	N/A
6	VFIRE24	VFIRE24	154.2725	CSQ	154.2725	156.7	No	No	N/A
7	VFIRE25	VFIRE25	154.2875	CSQ	154.2875	156.7	No	No	N/A
8	VFIRE26	VFIRE26	154.3025	CSQ	154.3025	156.7	No	No	N/A
9	IREACH	IREACH	155.0550	D156	155.0550	D156	No	No	N/A

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10	ESMARN	ESMARN	155.0250	123.0	155.0250	123.0	No	No	N/A
11	GRAY FG ¹ (VFIRE25)	GRAY FG	154.2875	136.5	154.2875	136.5	No	No	N/A
12	BLACK FG ¹ (VFIRE24)	BLACK FG	154.2725	94.8	154.2725	94.8	No	No	N/A
13	GOLD FG	GOLD FG	153.8375	91.5	153.8375	91.5	No	No	N/A
14	BLUE FG ¹ (VFIRE23)	BLUE FG	154.2950	85.4	154.2950	85.4	No	No	N/A
15	WHITE FG ¹ (VFIRE21)	WHITE FG	154.2800	74.4	154.2800	74.4	No	No	N/A
16	RED FG	RED FG	153.8300	69.3	153.8300	69.3	No	No	N/A

• VFIRE restricted to fire department use only.

• IFERN, IFERN2 and FG (fireground) Channels restricted to MABAS member agencies. MABAS holds FCC authorization(s) for statewide use of MABAS, IREACH & ESMARN frequencies for member agencies.



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IL-SIEC STATEWIDE INTEROPERABILITY TEMPLATE (SWIT)

VMED PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25	ENC.	SLN/ CKR
Pos.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			
1	MERCI340 ¹ (VMED28)	MERCI340	155.3400	CSQ	155.3400	210.7	No	No	N/A
2	MERCI400	MERCI400	155.4000	CSQ	155.4000	210.7	No	No	N/A
3	VMED28	VMED28	155.3400	CSQ	155.3400	156.7	No	No	N/A
4	VMED29	VMED29	155.3475	CSQ	155.3475	156.7	No	No	N/A
5	VSAR16	VSAR16	155.1600	127.3	155.1600	127.3	No	No	N/A
6	RESERVED								
7	RESERVED								
8	RESERVED								
9	RESERVED								
10	RESERVED								



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11	RESERVED	
12	RESERVED	
13	RESERVED	
14	RESERVED	
15	RESERVED	
16	RESERVED	
• VMED restricted to licensed emergency medical services providers only. • MERCI340 and MERCI400 channels require local FCC radio authorizations at this time.		

¹ These channels use the same frequency as the Common and Mutual Aid Channels listed in the NIFOG, but with different CTCSS tones.

² Used in some regions as MERCI160, but with different CTCSS tones.



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IL-SIEC STATEWIDE INTEROPERABILITY TEMPLATE (SWIT)

VFED-IR PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25	ENC.	SLN/ CKR
Pos.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			
1	NC 1	NC 1	169.5375	CSQ	164.7125	167.9	No	No	N/A
2	IR 1	IR 1	170.0125	CSQ	165.2500	167.9	No	No	N/A
3	IR 2	IR 2	170.4125	CSQ	165.9625	167.9	No	No	N/A
4	IR 3	IR 3	170.6875	CSQ	166.5750	167.9	No	No	N/A
5	IR 4	IR 4	173.0375	CSQ	167.3250	167.9	No	No	N/A
6	IR 5	IR 5	169.5375	CSQ	169.5375	167.9	No	No	N/A
7	IR 6	IR 6	170.0125	CSQ	170.0125	167.9	No	No	N/A
8	IR 7	IR 7	170.4125	CSQ	170.4125	167.9	No	No	N/A
9	IR 8	IR 8	170.6875	CSQ	170.6875	167.9	No	No	N/A
10	IR 9	IR 9	173.0375	CSQ	173.0375	167.9	No	No	N/A
11	CG-COM-N	CGCOM-N170.8125	\$653		163.6500	\$653	Yes	Select	N/A



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12	CG-COM-C	CGCOM-C 171.6875	\$653	163.6500	\$653	Yes	Select N/A
13	CG-COM-S	CGCOM-S 171.4375	\$653	163.6500	\$653	Yes	Select N/A
14	CG-TAC-N	CGTAC-N 168.8875	\$653	163.7000	\$653	Yes	Select N/A
15	CG-TAC-C	CGTAC-C 172.2125	\$653	163.7000	\$653	Yes	Select N/A
16	CG-TAC-S	CGTAC-S 168.9125	\$653	163.7000	\$653	Yes	Select N/A

• G-COM and CG-TAC are part of the Federal 25 Cities interoperability plan for the Chicago metro area as managed by the Federal Bureau of Investigation. CG-COM and CG-TAC are comprised of a three-site multicast voted system. These channels are for interdisciplinary coordination between Federal agencies and state and local public safety agencies.

• Federal agencies occasionally utilize encryption on 25 cities.

• Operator Select encryption is shown in the table above as Sel.



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IL-SIEC STATEWIDE INTEROPERABILITY TEMPLATE (SWIT)

VFED-LE PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25	ENC.	SLN/ CKR
POS.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			
1	LE A	LE A	167.0875	CSQ	167.0875	167.9	No	No	N/A
2	LE 1	LE 1	167.0875	CSQ	162.0875	167.9	No	No	N/A
3	LE 2	LE 2	167.2500	\$68F	162.2625	\$68F	Yes	Select	
4	LE 3	LE 3	167.7500	\$68F	162.8375	\$68F	Yes	Select	
5	LE 4	LE 4	168.1125	\$68F	163.2875	\$68F	Yes	Select	
6	LE 5	LE 5	168.4625	\$68F	163.4250	\$68F	Yes	Select	
7	LE 6	LE 6	167.2500	\$68F	167.2500	\$68F	Yes	Select	
8	LE 7	LE 7	167.7500	\$68F	167.7500	\$68F	Yes	Select	
9	LE 8	LE 8	168.1125	\$68F	168.1125	\$68F	Yes	Select	
10	LE 9	LE 9	168.4625	\$68F	168.4625	\$68F	Yes	Select	
11	CG-COM-N	CGCOM-N170.8125	\$653		163.6500	\$653	Yes	Select	N/A

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12	CG-COM-C	CGCOM-C 171.6875	\$653	163.6500	\$653	Yes	Select N/A
13	CG-COM-S	CGCOM-S 171.4375	\$653	163.6500	\$653	Yes	Select N/A
14	CG-TAC-N	CGTAC-N 168.8875	\$653	163.7000	\$653	Yes	Select N/A
15	CG-TAC-C	CGTAC-C 172.2125	\$653	163.7000	\$653	Yes	Select N/A
16	CG-TAC-S	CGTAC-S 168.9125	\$653	163.7000	\$653	Yes	Select N/A

- Federal LE channels restricted to Law Enforcement use only.
- CG-COM and CG-TAC are part of the Federal 25 Cities interoperability plan for the Chicago metro area as managed by the Federal Bureau of Investigation. CG-COM and CG-TAC are comprised of a three-site multicast voted system. These channels are for interdisciplinary coordination between Federal agencies and state and local public safety agencies.
- Federal agencies occasionally utilize encryption on 25 cities.
- Some Federal LE channels may utilize AES256 encryption. Users authorized by a federal agency may utilize the appropriate encryption key(s).
- Operator Select encryption is shown in the table above as Sel.



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IL-SIEC STATEWIDE INTEROPERABILITY TEMPLATE (SWIT)

UCALL PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25 ENC.		SLN/
POS.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			CKR
1	UCALL40D	UCALL40D	453.2125	156.7	453.2125	156.7	No	No	N/A
2	UTAC41D	UTAC41D	453.4625	156.7	453.4625	156.7	No	No	N/A
3	UTAC42D	UTAC42D	453.7125	156.7	453.7125	156.7	No	No	N/A
4	UTAC43D	UTAC43D	453.8625	156.7	453.8625	156.7	No	No	N/A
5	UCALL40	UCALL40	453.2125	156.7	458.2125	156.7	No	No	N/A
6	UCALL41	UCALL41	453.4625	156.7	458.4625	156.7	No	No	N/A
7	UCALL42	UCALL42	453.7125	156.7	458.7125	156.7	No	No	N/A
8	UCALL43	UCALL43	453.8625	156.7	458.8625	156.7	No	No	N/A
9	RESERVED								
10	RESERVED								

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11	RESERVED	
12	RESERVED	
13	RESERVED	
14	RESERVED	
15	RESERVED	
16	RESERVED	



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IL-SIEC STATEWIDE INTEROPERABILITY TEMPLATE (SWIT)

UFED-IR PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25	ENC.	SLN/ CKR
POS.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			
1	NC 2	NC 2	410.2375	CSQ	419.2375	167.9	No	No	N/A
2	IR 10	IR 10	410.4375	CSQ	419.4375	167.9	No	No	N/A
3	IR 11	IR 11	410.6375	CSQ	419.6375	167.9	No	No	N/A
4	IR 12	IR 12	410.8375	CSQ	419.8375	167.9	No	No	N/A
5	IR 13	IR 13	413.1875	CSQ	413.1875	167.9	No	No	N/A
6	IR 14	IR 14	413.2125	CSQ	413.2125	167.9	No	No	N/A
7	IR 15	IR 15	410.2375	CSQ	410.2375	167.9	No	No	N/A
8	IR 16	IR 16	410.4375	CSQ	410.4375	167.9	No	No	N/A
9	IR 17	IR 17	410.6375	CSQ	410.6375	167.9	No	No	N/A
10	IR 18	IR 18	410.8375	CSQ	410.8375	167.9	No	No	N/A
11	RESERVED								



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12	RESERVED	
13	RESERVED	
14	RESERVED	
15	RESERVED	
16	RESERVED	



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IL-SIEC STATEWIDE INTEROPERABILITY TEMPLATE (SWIT)

VFED-LE PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25	ENC.	SLN/ CKR
POS.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			
1	LE B	LE B	414.0375	CSQ	414.0375	167.9	No	No	N/A
2	LE 10	LE 10	409.9875	CSQ	418.9875	167.9	No	No	N/A
3	LE 11	LE 11	410.1875	\$68F	419.1875	\$68F	Yes	Select	
4	LE 12	LE 12	410.6125	\$68F	419.6125	\$68F	Yes	Select	
5	LE 13	LE 13	414.0625	\$68F	414.0625	\$68F	Yes	Select	
6	LE 14	LE 14	414.3125	\$68F	414.3125	\$68F	Yes	Select	
7	LE 15	LE 15	414.3375	\$68F	414.3375	\$68F	Yes	Select	
8	LE 16	LE 16	409.9875	\$68F	409.9875	\$68F	Yes	Select	
9	LE 17	LE 17	410.1875	\$68F	410.1875	\$68F	Yes	Select	
10	LE 18	LE 18	410.6125	\$68F	410.6125	\$68F	Yes	Select	



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11	RESERVED	
12	RESERVED	
13	RESERVED	
14	RESERVED	
15	RESERVED	
16	RESERVED	

- Federal LE channels restricted to Law Enforcement use only.
- LE11 through LE18 are P25 digital.
- Some Federal LE channels may utilize AES256 encryption. Users authorized by a federal agency may utilize the appropriate encryption key(s).
- Operator Select encryption is shown in the table above as Sel.



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Sec. 3-3 700/800 MHz INTEROPERABILITY SPECIAL INFORMATION

Notes: The following information details the Primary Use for the 700/800 channels based on the embedded code within the channel name. For example: 8CALL90 is a "Calling Channel."

CALL	Calling Channel
TAC	General Public Safety - Tactical/Coordination
LAW	Law Enforcement
FIRE	Fire Department
EMS	Emergency Medical Services
GTAC	Other Public Service
MOB	Mobile Repeater
DATA	Mobile Data
AG	Air-Ground
FTAC	Fire Tactical (analog)
LTAC	Law Tactical (analog)
MTAC	EMS/Medical Tactical (analog)
US	National Itinerant - Convoy Operations (analog or digital)

- AES-256 encryption is authorized on many 700 MHz interoperability frequencies. Zone SWIT-SECURE BY has been established to provide



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700 MHz interoperable secure conventional communications in Illinois.

- Encrypted Zones SECURE BY (Conventional) and SECURE A (Trunked) are listed separately for each public safety discipline.
- Encryption for other 700 MHz frequencies/zones in Illinois is discouraged.

Sec. 3-4 700/800 MHz CONVENTIONAL CHANNELS

IL-SIEC Statewide 700/800 MHz. Interoperability Template

SWIT-BC Programming Guide

CH.	FRONT POS. DISPLAY	TOP DISPLAY	RX FREQ.	RX TONE NAC	TX FREQ.	TX TONE NAC	P25	ENC.	SLN/ CKR
1	8CALL90D	8CALL90D	851.0125	156.7	851.0125	156.7	No	No	N/A
2	8TAC91D	8TAC91D	851.5125	156.7	851.5125	156.7	No	No	N/A
3	8TAC92D	8TAC92D	852.0125	156.7	852.0125	156.7	No	No	N/A
4	8TAC93D	8TAC93D	852.5125	156.7	852.5125	156.7	No	No	N/A
5	8TAC94D	8TAC94D	853.0125	156.7	853.0125	156.7	No	No	N/A



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6	8CALL90	8CALL90	851.0125	156.7	806.0125	156.7	No	No	N/A
7	8TAC91	8TAC91	851.5125	156.7	806.5125	156.7	No	No	N/A
8	8TAC92	8TAC92	852.0125	156.7	807.0125	156.7	No	No	N/A
9	8TAC93	8TAC93	852.5125	156.7	807.5125	156.7	No	No	N/A
10	8TAC94	8TAC94	853.0125	156.7	808.0125	156.7	No	No	N/A
11	RESERVED								
12	RESERVED								
13	RESERVED								
14	RESERVED								
15	RESERVED								
16	RESERVED								
•Zone SWIT-BC is equivalent to ITTF-BC.									



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

SWIT-BD PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25	ENC.	SLN/ CKR
POS.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			
1	7CALL50D	7CALL50D	769.24375	\$F7E	769.24375	\$293	Yes	No	N/A
2	7TAC51D	7TAC51D	769.14375	\$F7E	769.14375	\$293	Yes	No	N/A
3	7TAC52D	7TAC52D	769.64375	\$F7E	769.64375	\$293	Yes	No	N/A
4	7TAC53D	7TAC53D	770.14375	\$F7E	770.14375	\$293	Yes	No	N/A
5	7TAC54D	7TAC54D	770.64375	\$F7E	770.64375	\$293	Yes	No	N/A
6	7TAC55D	7TAC55D	769.74375	\$F7E	769.74375	\$293	Yes	No	N/A
7	7TAC56D	7TAC56D	770.24375	\$F7E	770.24375	\$293	Yes	No	N/A
8	7GTAC57D	7GTAC57	770.99375	\$F7E	800.99375	\$293	Yes	No	N/A
9	7CALL50	7CALL50	769.24375	\$F7E	799.24375	\$293	Yes	No	N/A
10	7TAC51	7TAC51	769.14375	\$F7E	799.14375	\$293	Yes	No	N/A
11	7TAC52	7TAC52	769.64375	\$F7E	799.64375	\$293	Yes	No	N/A

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12	7TAC53	7TAC53	770.14375	\$F7E	800.14375	\$293	Yes	No	N/A
13	7TAC54	7TAC54	770.64375	\$F7E	800.64375	\$293	Yes	No	N/A
14	7TAC55	7TAC55	769.74375	\$F7E	799.74375	\$293	Yes	No	N/A
15	7TAC56	7TAC56	770.24375	\$F7E	800.24375	\$293	Yes	No	N/A
16	7GTAC57	7GTAC57	770.99375	\$F7E	800.99375	\$293	Yes	No	N/A
• 7CALL50 and 7CALL50D is the recommended PRIMARY calling channel for the 700 MHz band. • Zone SWIT-BD is equivalent to ITTF-BD.									



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

SWIT-BE PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25 ENC.		SLN/
POS.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			CKR
1	7MOB59D	7MOB59D	770.89375	\$F7E	770.89375	\$293	Yes	No	N/A
2	7DATA69D	7DATA69D	770.74375	\$F7E	770.74375	\$293	Yes	No	N/A
3	7LAW61D	7LAW61D	770.39375	\$F7E	770.39375	\$293	Yes	No	N/A
4	7LAW62D	7LAW62D	770.49375	\$F7E	770.49375	\$293	Yes	No	N/A
5	7FIRE63D	7FIRE63D	769.89375	\$F7E	769.89375	\$293	Yes	No	N/A
6	7FIRE64D	7FIRE64D	769.99375	\$F7E	769.99375	\$293	Yes	No	N/A
7	7MED65D	7MED65D	769.39375	\$F7E	769.39375	\$293	Yes	No	N/A
8	7MED66D	7MED66D	769.49375	\$F7E	769.49375	\$293	Yes	No	N/A
9	7MOB59	7MOB59	770.89375	\$F7E	800.89375	\$293	Yes	No	N/A
10	7DATA69	7DATA69	770.74375	\$F7E	800.74375	\$293	Yes	No	N/A
11	7LAW61	7LAW61	770.39375	\$F7E	800.39375	\$293	Yes	No	N/A

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12	7LAW62	7LAW62	770.49375	\$F7E	800.49375	\$293	Yes	No	N/A
13	7FIRE63	7FIRE63	769.89375	\$F7E	799.89375	\$293	Yes	No	N/A
14	7FIRE64	7FIRE64	769.99375	\$F7E	799.99375	\$293	Yes	No	N/A
15	7MED65	7MED65	769.39375	\$F7E	799.39375	\$293	Yes	No	N/A
16	7MED66	7MED66	769.49375	\$F7E	799.49375	\$293	Yes	No	N/A
•Voice communications are permitted on 7DATA69 and 7DATA69D on a secondary basis. (FCC Rule 90.531(b)(1)(i)) •Zone SWIT-BE is equivalent to ITTF-BE except for 7DATA69D & 7DATA69 that have been added in Channels 2 & 10 respectively.									



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

SWIT-BF PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25 ENC.		SLN/
POS.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			CKR
1	7CALL70D	7CALL70D	773.25625	\$F7E	773.25625	\$293	Yes	No	N/A
2	7TAC71D	7TAC71D	773.10625	\$F7E	773.10625	\$293	Yes	No	N/A
3	7TAC72D	7TAC72D	773.60625	\$F7E	773.60625	\$293	Yes	No	N/A
4	7TAC73D	7TAC73D	774.10625	\$F7E	774.10625	\$293	Yes	No	N/A
5	7TAC74D	7TAC74D	774.60625	\$F7E	774.60625	\$293	Yes	No	N/A
6	7TAC75D	7TAC75D	773.75625	\$F7E	773.75625	\$293	Yes	No	N/A
7	7TAC76D	7TAC76D	774.25625	\$F7E	774.25625	\$293	Yes	No	N/A
8	7GTAC77D	7GTAC77D	774.85625	\$F7E	774.85625	\$293	Yes	No	N/A
9	7CALL70	7CALL70	773.25625	\$F7E	803.25625	\$293	Yes	No	N/A
10	7TAC71	7TAC71	773.10625	\$F7E	803.10625	\$293	Yes	No	N/A
11	7TAC72	7TAC72	773.60625	\$F7E	803.60625	\$293	Yes	No	N/A

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12	7TAC73	7TAC73	774.10625	\$F7E	804.10625	\$293	Yes	No	N/A
13	7TAC74	7TAC74	774.60625	\$F7E	804.60625	\$293	Yes	No	N/A
14	7TAC75	7TAC75	773.75625	\$F7E	803.75625	\$293	Yes	No	N/A
15	7TAC76	7TAC76	774.25625	\$F7E	804.25625	\$293	Yes	No	N/A
16	7GTAC77	7GTAC77	774.85625	\$F7E	804.85625	\$293	Yes	No	N/A
• 7CALL70 and 7CALL70D are the recommended SECONDARY calling channels for the 700 MHz band. • Zone SWIT-BF is equivalent to ITTF-BF									



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

SWIT-BG PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25 ENC.		SLN/
POS.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			CKR
1	7MOB79D	7MOB79D	774.50625	\$F7E	774.50625	\$293	Yes	No	N/A
2	7DATA89D	7DATA89D	774.75625	\$F7E	774.75625	\$293	Yes	No	N/A
3	7LAW81D	7LAW81D	774.00625	\$F7E	774.00625	\$293	Yes	No	N/A
4	7LAW82D	7LAW82D	774.35625	\$F7E	774.35625	\$293	Yes	No	N/A
5	7FIRE83D	7FIRE83D	773.50625	\$F7E	773.50625	\$293	Yes	No	N/A
6	7FIRE84D	7FIRE84D	773.85625	\$F7E	773.85625	\$293	Yes	No	N/A
7	7MED86D	7MED86D	773.00625	\$F7E	773.00625	\$293	Yes	No	N/A
8	7MED87D	7MED87D	773.35625	\$F7E	773.35625	\$293	Yes	No	N/A
9	7MOB79	7MOB79	774.50625	\$F7E	804.50625	\$293	Yes	No	N/A
10	7DATA89	7DATA89	774.75625	\$F7E	804.75625	\$293	Yes	No	N/A
11	7LAW81	7LAW81	774.00625	\$F7E	804.00625	\$293	Yes	No	N/A

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12	7LAW82	7LAW82	774.35625	\$F7E	804.35625	\$293	Yes	No	N/A
13	7FIRE83	7FIRE83	773.50625	\$F7E	803.50625	\$293	Yes	No	N/A
14	7FIRE84	7FIRE84	773.85625	\$F7E	803.85625	\$293	Yes	No	N/A
15	7MED86	7MED86	773.00625	\$F7E	803.00625	\$293	Yes	No	N/A
16	7MED87	7MED87	773.35625	\$F7E	803.35625	\$293	Yes	No	N/A
•Voice communications are permitted on 7DATA89 and 7DATA89D on a secondary basis. (FCC Rule 90.531(b)(1)(i)) •Zone SWIT-BG is equivalent to ITTF-BG except for 7DATA89D & 7DATA89 that have been added in Channels 2 & 10 respectively.									



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

SWIT-BH PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25	ENC.	SLN/ CKR
POS.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			
1	7FTAC1D	7FTAC1D	769.00625	156.7	769.00625	156.7	No	No	N/A
2	7FTAC2D	7FTAC2D	774.93125	156.7	774.93125	156.7	No	No	N/A
3	7FTAC3D	7FTAC3D	769.04375	156.7	769.04375	156.7	No	No	N/A
4	7GTAC4D	7GTAC4D	769.03125	156.7	769.03125	156.7	No	No	N/A
5	7GTAC5D	7GTAC5D	774.95625	156.7	774.95625	156.7	No	No	N/A
6	7LTAC6D	7LTAC6D	769.01875	156.7	769.01875	156.7	No	No	N/A
7	7LTAC7D	7LTAC7D	774.94375	156.7	774.94375	156.7	No	No	N/A
8	7LTAC8D	7LTAC8D	774.98125	156.7	774.98125	156.7	No	No	N/A
9	7FTAC1	7FTAC1	769.00625	156.7	799.00625	156.7	No	No	N/A
10	7FTAC2	7FTAC2	774.93125	156.7	804.93125	156.7	No	No	N/A
11	7FTAC3	7FTAC3	769.04375	156.7	799.04375	156.7	No	No	N/A

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12	7GTAC4	7GTAC4	769.03125	156.7	799.03125	156.7	No	No	N/A
13	7GTAC5	7GTAC5	774.95625	156.7	804.95625	156.7	No	No	N/A
14	7LTAC6	7LTAC6	769.01875	156.7	799.01875	156.7	No	No	N/A
15	7LTAC7	7LTAC7	774.94375	156.7	804.94375	156.7	No	No	N/A
16	7LTAC8	7LTAC8	774.98125	156.7	804.98125	156.7	No	No	N/A
• Zone BH channels are conventional analog and limited to two (2) watts ERP. • These channels are not nationwide interoperability channels and require FCC authorization and coordination with Regional Planning Committee Regions 13 & 54. The State of Illinois holds FCC Authorization WQZX653 that includes the frequencies listed herein and is granting the use of these frequencies to public safety and governmental users in compliance with this SWIT. • Zone SWIT-BH is equivalent to ITTF-BH.									



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

SWIT-BI PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25 ENC.		SLN/
POS.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			CKR
1	7MTAC9D	7MTAC9D	774.96875	156.7	774.96875	156.7	No	No	N/A
2	A7-US-01D	A7US01D	769.05625	156.7	769.05625	156.7	No	No	N/A
3	A7-US-02D	A7US02D	769.06875	156.7	769.06875	156.7	No	No	N/A
4	A7-US-03D	A7US03D	774.99375	156.7	774.99375	156.7	No	No	N/A
5	7MTAC9	7MTAC9	774.96875	156.7	804.96875	156.7	No	No	N/A
6	A7-US-01	A7US01	769.05625	156.7	799.05625	156.7	No	No	N/A
7	A7-US-02	A7US02	769.06875	156.7	799.06875	156.7	No	No	N/A
8	A7-US-03	A7US03	774.99375	156.7	804.99375	156.7	No	No	N/A
9	7-US-01D	7US01D	769.05625	\$F7E	769.05625	\$293	Yes	No	N/A
10	7-US-02D	7US02D	769.06875	\$F7E	769.06875	\$293	Yes	No	N/A
11	7-US-03D	7US03D	774.99375	\$F7E	774.99375	\$293	Yes	No	N/A

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12	7-US-01	7US01	769.05625	\$F7E	799.05625	\$293	Yes	No	N/A
13	7-US-02	7US02	769.06875	\$F7E	799.06875	\$293	Yes	No	N/A
14	7-US-03	7US03	774.99375	\$F7E	804.99375	\$293	Yes	No	N/A
15	RESERVED								
16	RESERVED								
• The 7-US- frequencies are 700 MHz Low Power Itinerant Channels licensed for itinerant mobile use (convoy operations). • These channels are not nationwide interoperability channels. The State of Illinois (SIEC) is responsible for the administration of these Transmitt power for 7-US- channels, in either analog or digital mode, is limited to 2 watts ERP. • It is recommended that radios are programmed for "mixed-mode" (analog & digital) receive for the 7-US- itinerant channels. Zone SWIT-BI Channels 1-8 are analog and are equivalent to ITTF-BI Channels 1-8. • Zone SWIT-BI Channels 9-14 are digital equivalents to their matching analog Channels.									



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

SWIT-BJ PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25 ENC.		SLN/
POS.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			CKR
1	7AG58D	7AG58D	769.13125	\$F7E	769.13125	\$293	Yes	No	N/A
2	7AG60D	7AG60D	769.63125	\$F7E	769.63125	\$293	Yes	No	N/A
3	7AG67D	7AG67D	770.13125	\$F7E	770.13125	\$293	Yes	No	N/A
4	7AG68D	7AG68D	770.63125	\$F7E	770.63125	\$293	Yes	No	N/A
5	7AG78D	7AG78D	773.11875	\$F7E	773.11875	\$293	Yes	No	N/A
6	7AG80D	7AG80D	773.61875	\$F7E	773.61875	\$293	Yes	No	N/A
7	7AG85D	7AG85D	774.11875	\$F7E	774.11875	\$293	Yes	No	N/A
8	7AG88D	7AG88D	774.61875	\$F7E	774.61875	\$293	Yes	No	N/A
9	7AG58	7AG58	769.13125	\$F7E	799.13125	\$293	Yes	No	N/A
10	7AG60	7AG60	769.63125	\$F7E	799.63125	\$293	Yes	No	N/A
11	7AG67	7AG67	770.13125	\$F7E	800.13125	\$293	Yes	No	N/A

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12	7AG68	7AG68	770.63125	\$F7E	800.63125	\$293	Yes	No	N/A
13	7AG78	7AG78	773.11875	\$F7E	803.11875	\$293	Yes	No	N/A
14	7AG80	7AG80	773.61875	\$F7E	803.61875	\$293	Yes	No	N/A
15	7AG85	7AG85	774.11875	\$F7E	804.11875	\$293	Yes	No	N/A
16	7AG88	7AG88	774.61875	\$F7E	804.61875	\$293	Yes	No	N/A
• These channels are reserved for air-ground communications to be used by low-altitude aircraft and ground-based units. • Airborne use of these channels is limited to aircraft flying at or below 1500 feet (457 meters) above ground level. Aircraft are limited to 2 watts effective radiated power on the air-ground channels while airborne. • Aircraft may transmit on either the mobile or base transmit side of the channel pair. • 7AG88D is recommended for landing zone use. Use of 7AG88 (repeated) is not recommended during landing zone operations. These channels are not nationwide interoperability channels.									



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

SWIT-BY PROGRAMMING GUIDE

CH.	FRONT	TOP	RX	RX TONE	TX	TX TONE	P25 ENC.		SLN/
POS.	DISPLAY	DISPLAY	FREQ.	NAC	FREQ.	NAC			CKR
1	7MOB59DE	7MOB59DE	770.89375	\$F7E	770.89375	\$293	Yes	Yes	1401
2	7MOB79DE	7MOB79DE	774.50625	\$F7E	774.50625	\$293	Yes	Yes	1401
3	7LAW81DE	7LAW81DE	774.00625	\$F7E	774.00625	\$293	Yes	Yes	1402
4	7LAW82DE	7LAW82DE	774.35625	\$F7E	774.35625	\$293	Yes	Yes	1402
5	7FIRE83DE	7FIRE83DE	773.50625	\$F7E	773.50625	\$293	Yes	Yes	1403
6	7FIRE84DE	7FIRE84DE	773.85625	\$F7E	773.85625	\$293	Yes	Yes	1403
7	7MED86DE	7MED86DE	773.00625	\$F7E	773.00625	\$293	Yes	Yes	1403
8	7MED87DE	7MED87DE	773.35625	\$F7E	773.35625	\$293	Yes	Yes	1403
9	7MOB59E	7MOB59E	770.89375	\$F7E	800.89375	\$293	Yes	Yes	1401
10	7MOB79E	7MOB79E	774.50625	\$F7E	804.50625	\$293	Yes	Yes	1401
11	7LAW81E	7LAW81E	774.00625	\$F7E	804.00625	\$293	Yes	Yes	1402

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12	7LAW82E	7LAW82E	774.35625	\$F7E	804.35625	\$293	Yes	Yes	1402
13	7FIRE83E	7FIRE83E	773.50625	\$F7E	803.50625	\$293	Yes	Yes	1403
14	7FIRE84E	7FIRE84E	773.85625	\$F7E	803.85625	\$293	Yes	Yes	1403
15	7MED86E	7MED86E	773.00625	\$F7E	803.00625	\$293	Yes	Yes	1403
16	7MED87E	7MED87E	773.35625	\$F7E	803.35625	\$293	Yes	Yes	1403

- Use of SWIT-SECURE BY frequencies must be approved through the SWIC/IEMA & OHS Operations Center. Requests should be made via the IL-CALL SC21 Talkgroup, 217-782-7860 and/or ema.dispatcher@illinois.gov.
- The intent of this zone is to operate in encrypted mode. Current FCC rules require that radios must be programmed with a button or feature that disables encryption on each channel in this zone without physically changing zones.



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Sec. 3-5 STARCOM21 INTEROPERABILITY TALKGROUPS

IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE									
STARCOM21 CALLING ZONE									
CH.	FRONT POS. DISPLAY	TOP DISPLAY	LEGACY NAME	LEGACY ZONE	TG HEX ID	TG DEC. ID	STATE- WIDE	SLN/ CKR	AES
1	IL-CALL	CALL	IESMA	BA	\$7678	30328	Yes	N/A	No
2	ILEAS	ILEAS	ILEAS	BA	\$7679	30329	Yes	N/A	No
3	MABAS	MABAS	MABAS	BA	\$767A	30330	Yes	N/A	No
4	IDPH	IDPH	IDPH	BA	\$767B	30331	Yes	N/A	No
5	IPWMAN	IPWMAN	IPWMAN	BA	\$7683	30339	Yes	N/A	No
6	EMA	EMA	NORTH A	BA	\$765C	30300	Yes	N/A	No
7	IL-RGN 2	RGN 2	RGN 2B	BB	\$7660	30304	Yes	N/A	No
8	IL-RGN 3	RGN 3	RGN 3B	BB	\$7662	30306	Yes	N/A	No
9	IL-RGN 4	RGN 4	RGN 4B	BB	\$7670	30320	Yes	N/A	No

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10	IL-RGN 6	RGN 6	RGN 6B	BB	\$7672	30322	Yes	N/A	No
11	IL-RGN 7	RGN 7	RGN 7B	BB	\$7674	30324	Yes	N/A	No
12	IL-RGN 8	RGN 8	RGN 8B	BB	\$7676	30326	Yes	N/A	No
13	IL-RGN 9	RGN 9	RGN 9B	BB	\$7680	30336	Yes	N/A	No
14	IL-RGN11	RGN 11	RGN 11B	BB	\$7682	30338	Yes	N/A	No
15	IL-102A	102A	SOUTH A	BA	\$765E	30302	Yes	N/A	No
16	IL-102B	102B	SOUTH B	BA	\$7688	30344	Yes	N/A	No
• All STARCOM21 radios used by field personnel must be programmed with the Calling, Incident A, Incident B and Reserve zones. All new radios purchased must be equipped with AES-256 multi-key encryption. All AES-256 multi-key equipped field radios must be programmed with the SECURE A and SECURE B and SWIT-BY zones.									



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

STARCOM21 INCIDENT A ZONE

CH.	FRONT POS. DISPLAY	TOP DISPLAY	LEGACY NAME	LEGACY ZONE	TG HEX ID	TG DEC. ID	STATE- WIDE	SLN/ CKR	AES
1	IL-INC A1	INC A1	INCIDENT1	BA	767C	30332	Yes	N/A	No
2	IL-INC A2	INC A2	INCIDENT2	BA	767D	30333	Yes	N/A	No
3	IL-INC A3	INC A3	INCIDENT3	BA	767E	30334	Yes	N/A	No
4	IL-INC A4	INC A4	INCIDENT4	BA	7684	30340	Yes	N/A	No
5	IL-INC A5	INC A5	INCIDENT5	BA	7685	30341	Yes	N/A	No
6	IL-INC A6	INC A6	RGN 2A	BB	765F	30303	Yes	N/A	No
7	IL-INC A7	INC A7	RGN 3A	BB	7661	30305	Yes	N/A	No
8	IL-INC A8	INC A8	RGN 4A	BB	7663	30307	Yes	N/A	No
9	IL-INC A9	INC A9	RGN 6A	BB	7671	30321	Yes	N/A	No
10	IL-INC A10	INC A10	RGN 7A	BB	7673	30323	Yes	N/A	No
11	IL-INC A11	INC A11	RGN 8A	BB	7675	30325	Yes	N/A	No

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12	IL-INC A12	INC A12	RGN 9A	BB	767F	30335	Yes	N/A	No
13	IL-INC A13	INC A13	RGN 11A	BB	7681	30337	Yes	N/A	No
14	IL-INC A14	INC A14	NORTH B	BA	7686	30342	Yes	N/A	No
15	IL-INC A15	INC A15	CENTER A	BA	765D	30301	Yes	N/A	No
16	IL-INC A16	INC A16	CENTER B	BA	7687	30343	Yes	N/A	No
• Use of INCIDENT A talkgroups must be approved through the SWIC/IEMA & OHS Operations Center. Requests should be made via the IL-CALL SC21 Talkgroup, 217-782-7860 and/or ema.dispatcher@illinois.gov .									



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

STARCOM21 INCIDENT B ZONE

CH.	FRONT POS. DISPLAY	TOP DISPLAY	LEGACY NAME	LEGACY ZONE	TG HEX ID	TG DEC. ID	STATE- WIDE	SLN/ CKR	AES
1	IL-INC B1	INC B1	(NEW)	N/A	90F4	37108	Yes	N/A	No
2	IL-INC B2	INC B2	(NEW)	N/A	90F5	37109	Yes	N/A	No
3	IL-INC B3	INC B3	(NEW)	N/A	90F6	37110	Yes	N/A	No
4	IL-INC B4	INC B4	(NEW)	N/A	90F7	37111	Yes	N/A	No
5	IL-INC B5	INC B5	(NEW)	N/A	90F8	37112	Yes	N/A	No
6	IL-INC B6	INC B6	(NEW)	N/A	90F9	37113	Yes	N/A	No
7	IL-INC B7	INC B7	(NEW)	N/A	90FA	37114	Yes	N/A	No
8	IL-INC B8	INC B8	(NEW)	N/A	90FB	37115	Yes	N/A	No
9	IL-INC B9	INC B9	(NEW)	N/A	90FC	37116	Yes	N/A	No
10	IL-INC B10	INC B10	(NEW)	N/A	90FD	37117	Yes	N/A	No
11	IL-INC B11	INC B11	(NEW)	N/A	90FE	37118	Yes	N/A	No

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12	IL-INC B12	INC B12	(NEW)	N/A	90FF	37119	Yes	N/A	No
13	IL-INC B13	INC B13	(NEW)	N/A	9100	37120	Yes	N/A	No
14	IL-INC B14	INC B14	(NEW)	N/A	9101	37121	Yes	N/A	No
15	IL-INC B15	INC B15	(NEW)	N/A	9102	37122	Yes	N/A	No
16	IL-INC B16	INC B16	(NEW)	N/A	9103	37123	Yes	N/A	No
• Use of INCIDENT B talkgroups must be approved through the SWIC/IEMA & OHS Operations Center. Requests should be made via the IL-CALL SC21 Talkgroup, 217-782-7860 and/or ema.dispatcher@illinois.gov .									



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

STARCOM21 RESERVE A ZONE

CH.	FRONT POS. DISPLAY	TOP DISPLAY	LEGACY NAME	LEGACY ZONE	TG HEX ID	TG DEC. ID	STATE- WIDE	SLN/ CKR	AES
1	IL-RSV 1	RSV 1	(NEW)	N/A	9104	37124	Yes	N/A	No
2	IL-RSV 2	RSV 2	(NEW)	N/A	9105	37125	Yes	N/A	No
3	IL-RSV 3	RSV 3	(NEW)	N/A	9106	37126	Yes	N/A	No
4	IL-RSV 4	RSV 4	(NEW)	N/A	9107	37127	Yes	N/A	No
5	IL-RSV 5	RSV 5	(NEW)	N/A	9108	37128	Yes	N/A	No
6	IL-RSV 6	RSV 6	(NEW)	N/A	9109	37129	Yes	N/A	No
7	IL-RSV 7	RSV 7	(NEW)	N/A	910A	37130	Yes	N/A	No
8	IL-RSV 8	RSV 8	(NEW)	N/A	910B	37131	Yes	N/A	No
9	IL-RSV 9	RSV 9	(NEW)	N/A	910C	37132	Yes	N/A	No
10	IL-RSV 10	RSV 10	(NEW)	N/A	910D	37133	Yes	N/A	No
11	IL-RSV 11	RSV 11	(NEW)	N/A	910E	37134	Yes	N/A	No

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12	IL-RSV 12	RSV 12	(NEW)	N/A	910F	37135	Yes	N/A	No
13	IL-RSV 13	RSV 13	(NEW)	N/A	9110	37136	Yes	N/A	No
14	IL-RSV 14	RSV 14	(NEW)	N/A	9111	37137	Yes	N/A	No
15	IL-RSV 15	RSV 15	(NEW)	N/A	9112	37138	Yes	N/A	No
16	IL-RSV 16	RSV 16	(NEW)	N/A	9113	37139	Yes	N/A	No
• Use of RESERVE A talkgroups must be approved through the SWIC/IEMA & OHS Operations Center. Requests should be made via the IL-CALL SC21 Talkgroup, 217-782-7860 and/or ema.dispatcher@illinois.gov. • RESERVE A talkgroups should be pre-programmed in STARCOM21 capable radios. These talkgroups will not be active unless needed as determined by the SWIC									



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

STARCOM21 SECURE A ZONE

CH.	FRONT POS. DISPLAY	TOP DISPLAY	LEGACY NAME	LEGACY ZONE	TG HEX ID	TG DEC. ID	STATE- WIDE	SLN/ CKR	AES
1	IL-SEC A1	SEC A1	SECURE1	BZ	1749	5961	Yes	1401	Yes
2	IL-SEC A2	SEC A2	SECURE2	BZ	174A	5962	Yes	1401	Yes
3	IL-SEC A3	SEC A3	SECURE3	BZ	174B	5963	Yes	1401	Yes
4	IL-SEC A4	SEC A4	SECURE4	BZ	174C	5964	Yes	1401	Yes
5	IL-SEC A5	SEC A5	SECURE5	BZ	174D	5965	Yes	1401	Yes
6	IL-SEC A6	SEC A6	SECURE6	BZ	174E	5966	Yes	1401	Yes
7	IL-SECLAW7	SECLAW7	SECLAW1	BZ	1751	5969	Yes	1402	Yes
8	IL-SECLAW8	SECLAW8	SECLAW2	BZ	1752	5970	Yes	1402	Yes
9	IL-SECLAW9	SECLAW9	SECURE7	BZ	174F	5967	Yes	1402	Yes
10	IL-SECLAW10	SECLAW10	SECURE8	BZ	1750	5968	Yes	1402	Yes
11	IL-SECFIRE11	SECFIRE11	SECFIRE1	BZ	1753	5971	Yes	1403	Yes

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12	IL-SECFIRE12	SECFIRE12	SECFIRE2	BZ	1754	5972	Yes	1403	Yes
13	IL-SECCEMA13	SECCEMA13	SECCEMA1	BZ	1755	5973	Yes	1404	Yes
14	IL-SECCEMA14	SECCEMA14	SECCEMA2	BZ	1756	5974	Yes	1404	Yes
15	IL-SECDOT15	SECDOT15	SECDOT1	BZ	1757	5975	Yes	1405	Yes
16	IL-SECDOT16	SECDOT16	SECDOT2	BZ	1758	5976	Yes	1405	Yes

- Use of SECURE A talkgroups must be approved through the SWIC/IEMA & OHS Operations Center. Requests should be made via the IL-CALL SC21 Talkgroup, 217-782-7860 and/or ema.dispatcher@illinois.gov.
- Use of these talkgroups will require radios equipped with AES-256 multi-key hardware encryption.
- Programming of encryption keys must be in compliance with SIEC policies and procedures. Law enforcement, fire keys and 9-1-1 keys have special restrictions. Law Talkgroups/Keys are restricted to authorized Law, COM-L and cache radios. Fire Talkgroups/Keys are restricted to authorized Fire, COM-L and cache radios.
- IL-SEC A1 and IL-SEC A2 may be programmed into dispatch consoles. No other SECURE A or SECURE B talkgroups may be programmed into dispatch radios or be recorded.



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

STARCOM21 SECURE B ZONE

CH.	FRONT POS. DISPLAY	TOP DISPLAY	LEGACY NAME	LEGACY ZONE	TG HEX ID	TG DEC. ID	STATE- WIDE	SLN/ CKR	AES
1	IL-SEC B1	SEC B1	(NEW)	N/A	9114	37140	Yes	1401	Yes
2	IL-SEC B2	SEC B2	(NEW)	N/A	9115	37141	Yes	1401	Yes
3	IL-SEC B3	SEC B3	(NEW)	N/A	9116	37142	Yes	1401	Yes
4	IL-SEC B4	SEC B4	(NEW)	N/A	9117	37143	Yes	1401	Yes
5	IL-SEC B5	SEC B5	(NEW)	N/A	9118	37144	Yes	1401	Yes
6	IL-SEC B6	SEC B6	(NEW)	N/A	9119	37145	Yes	1401	Yes
7	IL-SEC B7	SEC B7	(NEW)	N/A	911A	37146	Yes	1401	Yes
8	IL-SEC B8	SEC B8	(NEW)	N/A	911B	37147	Yes	1401	Yes
9	IL-SEC B9	SEC B9	(NEW)	N/A	911C	37148	Yes	1401	Yes
10	IL-SEC B10	SEC B10	(NEW)	N/A	911D	37149	Yes	1401	Yes
11	IL-SEC B11	SEC B11	(NEW)	N/A	911E	37150	Yes	1401	Yes

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12	IL-SEC B12	SEC B12	(NEW)	N/A	911F	37151	Yes	1401	Yes
13	IL-SEC B13	SEC B13	(NEW)	N/A	9120	37152	Yes	1401	Yes
14	IL-SEC B14	SEC B14	(NEW)	N/A	9121	37153	Yes	1401	Yes
15	IL-SEC B15	SEC B15	(NEW)	N/A	9122	37154	Yes	1401	Yes
16	IL-SEC B16	SEC B16	(NEW)	N/A	9123	37155	Yes	1401	Yes
• All notes for zone SECURE A also apply to zone SECURE B..									



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

STARCOM21 NWS ZONE

CH.	FRONT	TOP	LEGACY	LEGACY	TG HEX	TG DEC. ID	STATE- WIDE	SLN/ CKR	AES
Pos.	DISPLAY	DISPLAY	NAME	ZONE	ID				
1	NWS-CHI	NWSCHI	(NEW)	N/A	9124	37156	Yes	N/A	No
2	NWS-QUAD	NWSQUAD	(NEW)	N/A	9125	37157	Yes	N/A	No
3	NWS-LINC	NWSLINC	(NEW)	N/A	9126	37158	Yes	N/A	No
4	NWS-STL	NWSSTL	(NEW)	N/A	9127	37159	Yes	N/A	No
5	NWS-PDK	NWSPDK	(NEW)	N/A	9128	37160	Yes	N/A	No
6	NWS-MKE	NWSMKE	(NEW)	N/A	9129	37161	Yes	N/A	No
7	NWS-SW	NWS-SW	(NEW)	N/A	912A	37162	Yes	N/A	No
8	RESERVED								
9	RESERVED								
10	RESERVED								
11	RESERVED								

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12 RESERVED

13 RESERVED

14 RESERVED

15 RESERVED

16 RESERVED

• Governance for National Weather Service talkgroups is pending.

• NWS talkgroups may also be programmed into local zones to facilitate ease of operation by the end-user.



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

STARCOM21 MABAS ZONE

CH.	FRONT POS. DISPLAY	TOP DISPLAY	LEGACY NAME	LEGACY ZONE	TG HEX ID	TG DEC. ID	STATE- WIDE	SLN/ CKR	AES
1	MABAS	MABAS	MABAS	BA	767A	30330	Yes		No
2	MABAS SEC	MAB SEC	MABASSEC	MABAS	12DF	4831	Yes	1501	Yes
3	MABAS OPS1	OPS1	OPS	MABAS	12DE	4830	Yes		No
4	MABAS OPS2	OPS2	(NEW)	N/A	12E7	4839	Yes		
5	MABAS OPS3E	OPS3E	OPS SEC	MABAS	12E4	4836	Yes	1501	Yes
6	MABAS OPS4E	OPS4E	(NEW)	N/A	12E8	4840	Yes	1501	Yes
7	IL-HZMT	HZMT	HAZMAT	MABAS	12DB	4827	Yes		No
8	IL-HZMT SEC	HZMT SEC	HZMT SEC	MABAS	12E1	4833	Yes	1501	Yes
9	IL-TRT	TRT	TRT	MABAS	12DC	4828	Yes		No
10	IL-TRT SEC	TRT SEC	TRT SEC	MABAS	12E2	4834	Yes	1501	Yes
11	RESERVED								

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12 RESERVED

13 RESERVED

14 RESERVED

15 RESERVED

16 RESERVED

- Channels 1 - 11 approved for general programming in all Fire Department, Fire Dispatch, COM-L, and authorized cache radios.

- Channels 12 through 16 as determined by MABAS only. Not for general programming.

- Use of the encrypted talkgroups will require radios equipped with AES-256 multi-key hardware encryption.



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IL-SIEC STATEWIDE 700/800 MHz INTEROPERABILITY TEMPLATE

STARCOM21 911 ZONE

CH.	FRONT POS. DISPLAY	TOP DISPLAY	LEGACY NAME	LEGACY ZONE	TG HEX ID	TG DEC. ID	STATE- WIDE	SLN/ CKR	AES
1	IL-TERT N	TERT N	(NEW)	N/A	90F1	37105	Yes	1409	Yes
2	IL-TERT C	TERT C	(NEW)	N/A	90F2	37106	Yes	1409	Yes
3	IL-TERT S	TERT S	(NEW)	N/A	90F3	37107	Yes	1409	Yes
4	911 CAC	911CAC	(NEW)	N/A	90ED	37101	Yes	1407	Yes
5	911 SUP	911SUP	(NEW)	N/A	90EE	37102	Yes	1407	Yes
6	911 TECH	911TECH	(NEW)	N/A	90EF	37103	Yes	1407	Yes
7	R-TECH	RTECH	(NEW)	N/A	90F0	37104	Yes	1408	Yes
8	RESERVED								
9	RESERVED								
10	RESERVED								
11	RESERVED								

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12 RESERVED

13 RESERVED

14 RESERVED

15 RESERVED

16 RESERVED

- Not for general programming/use.

- Zone is restricted to 911 PSAP personnel and radio technicians as determined by SIEC governance.

- 911 talkgroups may also be programmed into local zones to facilitate ease of operation by the end-user. Use of 911 talkgroups will require radios equipped with AES-256 multi-key hardware encryption.



Sec. 3-6 SUGGESTED ZONE AND CHANNEL PROGRAMMING FOR STARCOM21 RADIOS

The following tables in this section illustrate zone and channel programming for STARCOM21 radios which are recommended to ease the transition from the legacy Illinois Terrorism Task Force (ITTF) template to the SWIT.

Once the transition process is complete and the SWIT programming deadline has passed, the zones listed below as “ITTF Old (All Radios)” may be removed from STARCOM21 radios.



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IL-SIEC STATEWIDE INTEROPERABILITY TEMPLATE (SWIT)

ITTF/SWIT Transition - STARCOM21 Radio Programming

	SWIT Basic (All Radios)				SWIT Secure (Optional)	
ZONE→	SWIT	SWIT	SWIT	SWIT	SWIT	SWIT
Pos. ↓	CALLING	INCIDENT A	INCIDENT B	RESERVE A	SECURE A	SECURE B
1	IL-CALL	IL-INC A1	IL-INC B1	IL-RSV 1	IL-SEC A1	IL-SEC B1
2	ILEAS	IL-INC A2	IL-INC B2	IL-RSV 2	IL-SEC A2	IL-SEC B2
3	MABAS	IL-INC A3	IL-INC B3	IL-RSV 3	IL-SEC A3	IL-SEC B3
4	IDPH	IL-INC A4	IL-INC B4	IL-RSV 4	IL-SEC A4	IL-SEC B4
5	IPWMAN	IL-INC A5	IL-INC B5	IL-RSV 5	IL-SEC A5	IL-SEC B5
6	EMA	IL-INC A6	IL-INC B6	IL-RSV 6	IL-SEC A6	IL-SEC B6
7	IL-RGN 2	IL-INC A7	IL-INC B7	IL-RSV 7	IL-SECLAW7	IL-SEC B7
8	IL-RGN 3	IL-INC A8	IL-INC B8	IL-RSV 8	IL-SECLAW8	IL-SEC B8
9	IL-RGN 4	IL-INC A9	IL-INC B9	IL-RSV 9	IL-SECLAW9	IL-SEC B9

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10	IL-RGN 6	IL-INC A10	IL-INC B10	IL-RSV 10	IL-SECLAW10	IL-SEC B10
11	IL-RGN 7	IL-INC A11	IL-INC B11	IL-RSV 11	IL-SECFIRE11	IL-SEC B11
12	IL-RGN 8	IL-INC A12	IL-INC B12	IL-RSV 12	IL-SECFIRE12	IL-SEC B12
13	IL-RGN 9	IL-INC A13	IL-INC B13	IL-RSV 13	IL-SECMA13	IL-SEC B13
14	IL-RGN11	IL-INC A14	IL-INC B14	IL-RSV 14	IL-SECMA14	IL-SEC B14
15	IL-102A	IL-INC A15	IL-INC B15	IL-RSV 15	IL-SECDOT15	IL-SEC B15
16	IL-102B	IL-INC A16	IL-INC B16	IL-RSV 16	IL-SECDOT16	IL-SEC B16

STARCOM TALKGROUP		NON-STARCOM CHANNEL		
UN-ENCRYPTED (CLEAR)	ENCRYPTED (SECURE)	NON-DIGITAL (CLEAR)	DIGITAL P25 (CLEAR)	DIGITAL P25 ENCRYPTED (SECURE)
NOTE: Talkgroups shown in RED are restricted by public safety discipline and are not to be programmed in radios outside of the authorized discipline.				



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IL-SIEC STATEWIDE INTEROPERABILITY TEMPLATE (SWIT)

ITTF/SWIT Transition - STARCOM21 Radio Programming

	(Optional)	ITTF Old (All Radios) <i>Remove after deadline</i>			Conventional Channels (Mixed P25 Digital/Analog)	Interoperability Channels	
ZONE→	SWIT	ITTF	ITTF	ITTF	SWIT	SWIT	SWIT
Pos. ↓	NWS	BA	BB	BZ	BC	BD	BE
1	NWS-CHI	IESMA	RGN 2A	SECURE 1	8CALL90D	7CALL50D	7MOB59D
2	NWS-QUAD	ILEAS	RGN 2B	SECURE 2	8TAC91D	7TAC51D	7DATA69D
3	NWS-LINC	MABAS	RGN 3A	SECURE 3	8TAC92D	7TAC52D	7LAW61D
4	NWS-STL	Pub Hlth	RGN 3B	SECURE 4	8TAC93D	7TAC53D	7LAW62D
5	NWS-PDK	IPWMAN	RGN 4A	SECURE 5	8TAC94D	7TAC54D	7FIRE63D
6	NWS-MKE	Incidnt1	RGN 4B	SECURE 6	8CALL90	7TAC55D	7FIRE64D
7	NWS-SW	Incidnt2	RGN 6A	SECURE 7	8TAC91	7TAC56D	7MED65D
8		Incidnt3	RGN 6B	SECURE 8	8TAC92	7GTAC57D	7MED66D



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9		Incidnt4	RGN 7A	SECLAW 1	8TAC93	7CALL50	7MOB59
10		Incidnt5	RGN 7B	SECLAW 2	8TAC94	7TAC51	7DATA69
11		North A	RGN 8A	SECFIR 1		7TAC52	7LAW61
12		North B	RGN 8B	SECFIR 2		7TAC53	7LAW62
13		Center A	RGN 9A	SECEMA 1		7TAC54	7FIRE63
14		Center B	RGN 9B	SECEMA 2		7TAC55	7FIRE64
15		South A	RGN 11A	SECDOT 1		7TAC56	7MED65
16		South B	RGN 11B	SECDOT 2		7GTAC57	7MED66

STARCOM TALKGROUP		NON-STARCOM CHANNEL		
UN-ENCRYPTED (CLEAR)	ENCRYPTED (SECURE)	NON-DIGITAL (CLEAR)	DIGITAL P25 (CLEAR)	DIGITAL P25 ENCRYPTED (SECURE)
NOTE: Talkgroups shown in RED are restricted by public safety discipline and are not to be programmed in radios outside of the authorized discipline.				



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IL-SIEC STATEWIDE INTEROPERABILITY TEMPLATE (SWIT)

ITTF/SWIT Transition - STARCOM21 Radio Programming

	Conventional Interoperability Channels (Mixed P25 Digital/Analog)					Conventional Secure (Optional)
ZONE→	SWIT	SWIT	SWIT	SWIT	SWIT	SWIT
Pos. ↓	BF	BG	BH	BI	BJ	BY
1	7CALL70D	7MOB79D	7FTAC1D	7MTAC9D	7AG58D	7MOB59DE
2	7TAC71D	7DATA89D	7FTAC2D	A7-US-01D	7AG60D	7MOB79DE
3	7TAC72D	7LAW81D	7FTAC3D	A7-US-02D	7AG67D	7LAW81DE
4	7TAC73D	7LAW82D	7GTAC4D	A7-US-03D	7AG68D	7LAW82DE
5	7TAC74D	7FIRE83D	7GTAC5D	7MTAC9	7AG78D	7FIRE83DE
6	7TAC75D	7FIRE84D	7LTAC6D	A7-US-01	7AG80D	7FIRE84DE



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7	7TAC76D	7MED86D	7LTAC7D	A7-US-02	7AG85D	7MED86DE
8	7GTAC77D	7MED87D	7LTAC8D	A7-US-03	7AG88D	7MED87DE
9	7CALL70	7MOB79	7FTAC1	7-US-01D	7AG58	7MOB59E
10	7TAC71	7DATA89	7FTAC2	7-US-02D	7AG60	7MOB79E
11	7TAC72	7LAW81	7FTAC3	7-US-03D	7AG67	7LAW81E
12	7TAC73	7LAW82	7GTAC4	7-US-01	7AG68	7LAW82E
13	7TAC74	7FIRE83	7GTAC5	7-US-02	7AG78	7FIRE83E
14	7TAC75	7FIRE84	7LTAC6	7-US-03	7AG80	7FIRE84E
15	7TAC76	7MED86	7LTAC7		7AG85	7MED86E
16	7GTAC77	7MED87	7LTAC8		7AG88	7MED87E

STARCOM TALKGROUP		NON-STARCOM CHANNEL		
UN-ENCRYPTED (CLEAR)	ENCRYPTED (SECURE)	NON-DIGITAL (CLEAR)	DIGITAL P25 (CLEAR)	DIGITAL P25 ENCRYPTED (SECURE)
NOTE: Talkgroups shown in RED are restricted by public safety discipline and are not to be programmed in radios outside of the authorized discipline.				



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SECTION 4 Nationwide Interoperability Channels (NIFOG)

VHF Low Band

NON-FEDERAL VHF LOW BAND NATIONAL INTEROPERABILITY CHANNELS				
ASSIGNMENT	CHANNEL NAME	MOB. RX	MOB. TX	RX/TX CTCSS TONE
Law Enforcement	LLAW1	39.460	45.860	156.7
Law Enforcement	LLAW1D	39.460	39.460	156.7
Fire (Proposed)	LFIRE2	39.480	45.880	156.7
Fire (Proposed)	LFIRE2D	39.480	39.480	156.7
Law Enforcement	LLAW3	45.860	39.460	156.7
Law Enforcement	LLAW3D	45.860	45.860	156.7
Fire (Proposed)	LFIRE4	45.880	39.480	156.7
Fire (Proposed)	LFIRE4D	45.880	45.880	156.7
*All channels are Wideband, Analog, Conventional				



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NON-FEDERAL VHF LOW BAND NATIONAL INTEROPERABILITY CHANNELS

ASSIGNMENT	CHANNEL	MOB. RX	MOB. TX	RX/TX
	NAME			CTCSS TONE
• Base station channel use requires an FCC license.				



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VHF Band

Non-Federal VHF National Interoperability Channels

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOB. RX TONE	MOB. TX FREQ	MOB. TX TONE
Calling	VCALL10	155.7525	156.7	155.7525	156.7
Tactical	VTAC11	151.1375	156.7	151.1375	156.7
Tactical	VTAC12	154.4525	156.7	154.4525	156.7
Tactical	VTAC13	158.7375	156.7	158.7375	156.7
Tactical	VTAC14	159.4725	156.7	159.4725	156.7
Tac Rptr (VTAC 14/11)	VTAC33	159.4725	156.7	151.1375	136.5
Tac Rptr (VTAC 13/12)	VTAC34	158.7375	156.7	154.4525	136.5
Tac Rptr (VTAC 14/13)	VTAC35	159.4725	156.7	158.7375	136.5



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Non-Federal VHF National Interoperability Channels

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOB. RX TONE	MOB. TX FREQ	MOB. TX TONE
Tac Rptr (VTAC 11/14)	VTAC36	151.1375	156.7	159.4725	136.5
Tac Rptr (VTAC 12/13)	VTAC37	154.4525	156.7	158.7375	136.5
Tac Rptr (VTAC 13/14)	VTAC38	158.7375	156.7	159.4725	136.5



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Non-Federal VHF National Interoperability Channels

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOB. RX TONE	MOB. TX FREQ	MOB. TX TONE
• All channels are Narrowband, Analog, Conventional and limited to 3 watts ERP North of Line A or East of Line C. • Base station channel use requires an FCC license. • VTAC11-12, VTAC33-34, and VTAC36-37 may not be used in Puerto Rico or the USVI. • VTAC33-38 recommended for deployable tactical repeater use only (FCC Station Class FB2T). • VTAC36-38 are preferred; VTAC33-35 should be used only when necessary due to interference.					



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VHF Public Safety Mutual Aid and Common Channels

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOB. RX TONE	MOB. TX FREE.	MOB. TX TONE
SAR Common*	VSAR16	155.1600	127.3	155.1600	127.3
Fire Mutual Aid (Not available in Puerto Rico and the US Virgin Islands)	VFIRE21	154.2800		154.2800	
	VFIRE22	154.2650		154.2650	
	VFIRE23	154.2950		154.2950	
	VFIRE24	154.2725		154.2725	
	VFIRE25	154.2875		154.2875	
	VFIRE26	154.3025		154.3025	
EMS Mutual Aid	VMED28	155.3400	CSQ	155.3400	156.7
	VMED29	155.3475		155.3475	
Law Enforcement	VLAW31	155.4750		155.4750	
Mutual Aid	VLAW32	155.4825		155.4825	



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VHF Public Safety Mutual Aid and Common Channels

- CTCSS tones vary by jurisdiction. Rules for use of these channels are contained in 47 CFR 90.20. EXCEPT for VSAR16, the recommended CTCSS tones are 156.7 receive and transmit for all channels on this page for interoperability; local use may specify other tones.
- **LICENSING REQUIRED:** These frequencies are NOT covered by the “Blanket Authorization” for nationwide interoperability channels. Use of these channels must be licensed or authorized by STA. Availability subject to other licensed users in the same area.



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UHF Band

Non-Federal UHF National Interoperability Repeater Channels

DESCRIPTION	CH. NAME	MOB. RX	MOB. TX
Calling	UCALL40	453.2125	458.2125
Calling	UCALL40D	453.2125	453.2125
Tactical	UTAC41	453.4625	458.4625
Tactical	UTAC41D	453.4625	453.4625
Tactical	UTAC42	453.7125	458.7125
Tactical	UTAC42D	453.7125	453.7125
Tactical	UTAC43	453.8625	458.8625
Tactical	UTAC43D	453.8625	453.8625
• All channels are Wideband, Analog, Conventional, CTCSS 156.7 TX and RX			
• Base station channel use requires an FCC license.			



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UHF Medical (MED, EMS) Channels

LICENSING REQUIRED: These frequencies are NOT covered by the “Blanket Authorization” for nationwide interoperability channels. Availability subject to other licensed users in the same area.

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOB. RX CTCSS/NAC	MOB. TX FREQ.	MOB. TX CTCSS/NAC
Dispatch*	MED-9	462.9500	See Notes	467.9500	See Notes
	MED-9D	462.9500	“ ”	462.9500	“ ”
Dispatch*	MED-92	462.9625	“ ”	467.9625	“ ”
	MED-92D	462.9625	“ ”	462.9625	“ ”
Dispatch*	MED-10	462.9750	“ ”	467.9750	“ ”
	MED-10D	462.9750	“ ”	462.9750	“ ”
Dispatch*	MED-102	462.9875	“ ”	467.9875	“ ”
	MED-102D	462.9875	“ ”	462.9875	“ ”
Medical	MED-1	463.0000	“ ”	468.0000	“ ”



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UHF Medical (MED, EMS) Channels

LICENSING REQUIRED: These frequencies are NOT covered by the “Blanket Authorization” for nationwide interoperability channels. Availability subject to other licensed users in the same area.

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOB. RX CTCSS/NAC	MOB. TX FREQ.	MOB. TX CTCSS/NAC
Medical (Direct)	MED-1D	463.0000	“ ”	463.0000	“ ”
Medical	MED-12	463.0125	“ ”	468.0125	“ ”
Medical (Direct)	MED-12D	463.0125	“ ”	463.0125	“ ”
Medical	MED-2	463.0250	“ ”	468.0250	“ ”
Medical (Direct)	MED-2D	463.0250	“ ”	463.0250	“ ”
Medical	MED-22	463.0375	“ ”	468.0375	“ ”
Medical (Direct)	MED-22D	463.0375	“ ”	463.0375	“ ”
Medical	MED-3	463.0500	“ ”	468.0500	“ ”
Medical (Direct)	MED-3D	463.0500	“ ”	463.0500	“ ”



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UHF Medical (MED, EMS) Channels

LICENSING REQUIRED: These frequencies are NOT covered by the “Blanket Authorization” for nationwide interoperability channels. Availability subject to other licensed users in the same area.

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOB. RX CTCSS/NAC	MOB. TX FREQ.	MOB. TX CTCSS/NAC
Medical	MED-32	463.0625	“ “	468.0625	“ “
Medical (Direct)	MED-32D	463.0625	“ “	463.0625	“ “
Medical	MED-4	463.0750	“ “	468.0750	“ “
Medical (Direct)	MED-4D	463.0750	“ “	463.0750	“ “
Medical	MED-42	463.0875	“ “	468.0875	“ “
Medical (Direct)	MED-42D	463.0875	“ “	463.0875	“ “
Medical	MED-5	463.1000	“ “	468.1000	“ “
Medical (Direct)	MED-5D	463.1000	“ “	463.1000	“ “
Medical	MED-52	463.1125	“ “	468.1125	“ “



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UHF Medical (MED, EMS) Channels

LICENSING REQUIRED: These frequencies are NOT covered by the “Blanket Authorization” for nationwide interoperability channels. Availability subject to other licensed users in the same area.

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOB. RX CTCSS/NAC	MOB. TX FREQ.	MOB. TX CTCSS/NAC
Medical (Direct)	MED-52D	463.1125	“ ”	463.1125	“ ”
Medical	MED-6	463.1250	“ ”	468.1250	“ ”
Medical (Direct)	MED-6D	463.1250	“ ”	463.1250	“ ”
Medical	MED-62	463.1375	“ ”	468.1375	“ ”
Medical (Direct)	MED-62D	463.1375	“ ”	463.1375	“ ”
Medical	MED-7	463.1500	“ ”	468.1500	“ ”
Medical (Direct)	MED-7D	463.1500	“ ”	463.1500	“ ”
Medical	MED-72	463.1625	“ ”	468.1625	“ ”
Medical (Direct)	MED-72D	463.1625	“ ”	463.1625	“ ”



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UHF Medical (MED, EMS) Channels

LICENSING REQUIRED: These frequencies are NOT covered by the “Blanket Authorization” for nationwide interoperability channels. Availability subject to other licensed users in the same area.

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOB. RX CTCSS/NAC	MOB. TX FREQ.	MOB. TX CTCSS/NAC
Medical	MED-8	463.1750	“ “	468.1750	“ “
Medical (Direct)	MED-8D	463.1750	“ “	463.1750	“ “
Medical	MED-82	463.1875	“ “	468.1875	“ “
Medical (Direct)	MED-82D	463.1875	“ “	463.1875	“ “

• * Used primarily for dispatch; may be used for mutual aid. 47CFR90.20(d)(65).

• Recommended CTCSS tones are 156.7 Hz receive and transmit for all channels on this page for interoperability; local use may specify other CTCSS tones as required by local plan.

700 MHz Band

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700 MHz Nationwide Interoperability Channels

TX NAC: \$293 (65910)

RX NAC \$F7E (396610).

Default Talk Group ID: \$0001 (1₁₀)

“\$” indicates hexadecimal value, “₁₀” subscript indicates decimal value.

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOBILE RX CTCSS/NAC	MOB. TX FREQ.	MOBILE TX CTCSS/NAC
Calling Channel *	7CALL50	769.24375	\$F7E	799.24375	\$293
Calling Channel *	7CALL50D	769.24375	\$F7E	769.24375	\$293
Gen'l Public Safety	7TAC51	769.14375	\$F7E	799.14375	\$293
Gen'l Public Safety	7TAC51D	769.14375	\$F7E	769.14375	\$293
Gen'l Public Safety	7TAC52	769.64375	\$F7E	799.64375	\$293
Gen'l Public Safety	7TAC52D	769.64375	\$F7E	769.64375	\$293
Gen'l Public Safety	7TAC53	770.14375	\$F7E	800.14375	\$293
Gen'l Public Safety	7TAC53D	770.14375	\$F7E	770.14375	\$293
Gen'l Public Safety	7TAC54	770.64375	\$F7E	800.64375	\$293

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700 MHz Nationwide Interoperability Channels

TX NAC: \$293 (659₁₀)

RX NAC \$F7E (3966₁₀).

Default Talk Group ID: \$0001 (1₁₀)

“\$” indicates hexadecimal value, “₁₀” subscript indicates decimal value.

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOBILE RX CTCSS/NAC	MOB. TX FREQ.	MOBILE TX CTCSS/NAC
Gen'l Public Safety	7TAC54D	770.64375	\$F7E	770.64375	\$293
Gen'l Public Safety	7TAC55	769.74375	\$F7E	799.74375	\$293
Gen'l Public Safety	7TAC55D	769.74375	\$F7E	769.74375	\$293
Gen'l Public Safety	7TAC56	770.24375	\$F7E	800.24375	\$293
Gen'l Public Safety	7TAC56D	770.24375	\$F7E	770.24375	\$293
Other Public Safety	7GTAC57	770.99375	\$F7E	800.99375	\$293
Other Public Safety	7GTAC57D	770.99375	\$F7E	770.99375	\$293
Mobile Repeater	7MOB59	770.89375	\$F7E	800.89375	\$293
Mobile Repeater	7MOB59D	770.89375	\$F7E	770.89375	\$293

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700 MHz Nationwide Interoperability Channels

TX NAC: \$293 (659₁₀)

RX NAC \$F7E (3966₁₀).

Default Talk Group ID: \$0001 (1₁₀)

“\$” indicates hexadecimal value, “₁₀” subscript indicates decimal value.

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOBILE RX CTCSS/NAC	MOB. TX FREQ.	MOBILE TX CTCSS/NAC
Law Enforcement	7LAW61	770.39375	\$F7E	800.39375	\$293
Law Enforcement	7LAW61D	770.39375	\$F7E	770.39375	\$293
Law Enforcement	7LAW62	770.49375	\$F7E	800.49375	\$293
Law Enforcement	7LAW62D	770.49375	\$F7E	770.49375	\$293
Fire	7FIRE63	769.89375	\$F7E	799.89375	\$293
Fire	7FIRE63D	769.89375	\$F7E	769.89375	\$293
Fire	7FIRE64	769.99375	\$F7E	799.99375	\$293
Fire	7FIRE64D	769.99375	\$F7E	769.99375	\$293
EMS	7MED65	769.39375	\$F7E	799.39375	\$293

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700 MHz Nationwide Interoperability Channels

TX NAC: \$293 (65910)

RX NAC \$F7E (396610).

Default Talk Group ID: \$0001 (1₁₀)

“\$” indicates hexadecimal value, “₁₀” subscript indicates decimal value.

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOBILE RX CTCSS/NAC	MOB. TX FREQ.	MOBILE TX CTCSS/NAC
EMS	7MED65D	769.39375	\$F7E	769.39375	\$293
EMS	7MED66	769.49375	\$F7E	799.49375	\$293
EMS	7MED66D	769.49375	\$F7E	769.49375	\$293
Mobile Data ***	7DATA69	770.74375	\$F7E	800.74375	\$293
Mobile Data ***	7DATA69D	770.74375	\$F7E	770.74375	\$293
Calling Channel **	7CALL70	773.25625	\$F7E	803.25625	\$293
Calling Channel **	7CALL70D	773.25625	\$F7E	773.25625	\$293
Gen'l Public Safety	7TAC71	773.10625	\$F7E	803.10625	\$293
Gen'l Public Safety	7TAC71D	773.10625	\$F7E	773.10625	\$293

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NATIONWIDE INTEROPERABILITY CHANNELS (NIFOG)



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700 MHz Nationwide Interoperability Channels

TX NAC: \$293 (65910)

RX NAC \$F7E (396610).

Default Talk Group ID: \$0001 (1₁₀)

“\$” indicates hexadecimal value, “₁₀” subscript indicates decimal value.

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOBILE RX CTCSS/NAC	MOB. TX FREQ.	MOBILE TX CTCSS/NAC
Gen'l Public Safety	7TAC72	773.60625	\$F7E	803.60625	\$293
Gen'l Public Safety	7TAC72D	773.60625	\$F7E	773.60625	\$293
Gen'l Public Safety	7TAC73	774.10625	\$F7E	804.10625	\$293
Gen'l Public Safety	7TAC73D	774.10625	\$F7E	774.10625	\$293
Gen'l Public Safety	7TAC74	774.60625	\$F7E	804.60625	\$293
Gen'l Public Safety	7TAC74D	774.60625	\$F7E	774.60625	\$293
Gen'l Public Safety	7TAC75	773.75625	\$F7E	803.75625	\$293
Gen'l Public Safety	7TAC75D	773.75625	\$F7E	773.75625	\$293
Gen'l Public Safety	7TAC76	774.25625	\$F7E	804.25625	\$293

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700 MHz Nationwide Interoperability Channels

TX NAC: \$293 (659₁₀)

RX NAC \$F7E (3966₁₀).

Default Talk Group ID: \$0001 (1₁₀)

“\$” indicates hexadecimal value, “₁₀” subscript indicates decimal value.

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOBILE RX CTCSS/NAC	MOB. TX FREQ.	MOBILE TX CTCSS/NAC
Gen'l Public Safety	7TAC76D	774.25625	\$F7E	774.25625	\$293
Other Public Safety	7GTAC77	774.85625	\$F7E	804.85625	\$293
Other Public Safety	7GTAC77D	774.85625	\$F7E	774.85625	\$293
Mobile Repeater	7MOB79	774.50625	\$F7E	804.50625	\$293
Mobile Repeater	7MOB79D	774.50625	\$F7E	774.50625	\$293
Law Enforcement	7LAW81	774.00625	\$F7E	804.00625	\$293
Law Enforcement	7LAW81D	774.00625	\$F7E	774.00625	\$293
Law Enforcement	7LAW82	774.35625	\$F7E	804.35625	\$293
Law Enforcement	7LAW82D	774.35625	\$F7E	774.35625	\$293

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NATIONWIDE INTEROPERABILITY CHANNELS (NIFOG)



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700 MHz Nationwide Interoperability Channels

TX NAC: \$293 (65910)

RX NAC \$F7E (396610).

Default Talk Group ID: \$0001 (1₁₀)

“\$” indicates hexadecimal value, “₁₀” subscript indicates decimal value.

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOBILE RX CTCSS/NAC	MOB. TX FREQ.	MOBILE TX CTCSS/NAC
Fire	7FIRE83	773.50625	\$F7E	803.50625	\$293
Fire	7FIRE83D	773.50625	\$F7E	773.50625	\$293
Fire	7FIRE84	773.85625	\$F7E	803.85625	\$293
Fire	7FIRE84D	773.85625	\$F7E	773.85625	\$293
EMS	7MED86	773.00625	\$F7E	803.00625	\$293
EMS	7MED86D	773.00625	\$F7E	773.00625	\$293
EMS	7MED87	773.35625	\$F7E	803.35625	\$293
EMS	7MED87D	773.35625	\$F7E	773.35625	\$293
Mobile Data ***	7DATA89	774.75625	\$F7E	804.75625	\$293

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700 MHz Nationwide Interoperability Channels

TX NAC: \$293 (659 ₁₀)	RX NAC \$F7E (3966 ₁₀).	Default Talk Group ID: \$0001 (1 ₁₀)
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"\$" indicates hexadecimal value, "₁₀" subscript indicates decimal value.

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOBILE RX CTCSS/NAC	MOB. TX FREQ.	MOBILE TX CTCSS/NAC
Mobile Data ***	7DATA89D	774.75625	\$F7E	774.75625	\$293

- Authorized emission – 8K10F1E (Digital P25 Phase I Modulation) – 47 CFR §90.548(a)(1)

- Utilize normal squelch in programming which will use the default talkgroup - \$0001 (1₁₀).

- AES Encryption permitted on all but the two nationwide interoperability calling channel. Must have accessible switch or other readily accessible control that permits the radio user to disable encryption. 47 CFR §90.553

- * Recommended as PRIMARY calling channel for 700 MHz Band.

- ** Recommended as SECONDARY calling channel for 700 MHz Band.

- *** Voice communications are permitted on 7DATA89/7DATA869D on a secondary basis – 90.531(b)(1)(i).



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700 MHz Nationwide Air-Ground Channels

LICENSING REQUIRED: THESE FREQUENCIES ARE **NOT** COVERED BY THE “BLANKET AUTHORIZATION” FOR NATIONWIDE INTEROPERABILITY CHANNELS. USE OF THESE CHANNELS MUST BE LICENSED OR AUTHORIZED BY SPECIAL TEMPORARY AUTHORIZATION (STA).

ASSIGNMENT	CHANNEL NAME	MOB. RX FREQ.	MOBILE RX CTCSS/NAC	MOB. TX FREE.	MOBILE TX CTCSS/NAC
Air – Ground	7AG58	769.13125	\$F7E	799.13125	\$293
Air – Ground	7AG58D	769.13125	\$F7E	769.13125	\$293
Air – Ground	7AG60	769.63125	\$F7E	799.63125	\$293
Air – Ground	7AG60D	769.63125	\$F7E	769.63125	\$293
Air – Ground	7AG67	770.13125	\$F7E	800.13125	\$293
Air – Ground	7AG67D	770.13125	\$F7E	770.13125	\$293
Air – Ground	7AG68	770.63125	\$F7E	800.63125	\$293
Air – Ground	7AG68D	770.63125	\$F7E	770.63125	\$293
Air – Ground	7AG58	769.13125	\$F7E	799.13125	\$293



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700 MHz Nationwide Air-Ground Channels

Air – Ground	7AG58D	769.13125	\$F7E	769.13125	\$293
Air – Ground	7AG60	769.63125	\$F7E	799.63125	\$293
Air – Ground	7AG60D	769.63125	\$F7E	769.63125	\$293
Air – Ground	7AG78	773.11875	\$F7E	803.11875	\$293
Air – Ground	7AG78D	773.11875	\$F7E	773.11875	\$293
Air – Ground	7AG80	773.61875	\$F7E	803.61875	\$293
Air – Ground	7AG80D	773.61875	\$F7E	773.61875	\$293
Air – Ground	7AG85	774.11875	\$F7E	804.11875	\$293
Air – Ground	7AG85D	774.11875	\$F7E	774.11875	\$293
Air – Ground	7AG88	774.61875	\$F7E	804.61875	\$293
Air – Ground (LZ)*	7AG88D	774.61875	\$F7E	774.61875	\$293



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700 MHz Nationwide Air-Ground Channels

*7AG88D is recommended for Landing Zone Use

•TX NAC: \$293 (659₁₀). RX NAC \$F7E (3966₁₀). These channels are reserved for air-ground communications to be used by low-altitude aircraft and ground-based stations: See FCC rule 90.531(7). (i) Airborne use of these channels is limited to aircraft flying at or below 457 meters (1500 feet) above ground level. (ii) Aircraft are limited to 2 watts effective radiated power (ERP) when transmitting while airborne on these channels. (iii) Aircraft may transmit on either the mobile or base transmit side of the channel pair. (iv) States are responsible for the administration of these channels.

•Utilize normal squelch in programming which will use the default talkgroup - \$0001 (1₁₀).



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700 MHz LOW POWER ITINERANT CHANNELS

LICENSING REQUIRED: THESE FREQUENCIES ARE **NOT** COVERED BY THE "BLANKET AUTHORIZATION" FOR NATIONWIDE INTEROPERABILITY CHANNELS. USE OF THESE CHANNELS MUST BE LICENSED OR AUTHORIZED BY STA.

ASSIGNMENT	CHANNEL NAME	MOBILE RX	MOBILE RX CTCSS/NAC	MOBILE TX	MOBILE TX CTCSS/NAC
Low Power - PS	7-US-01	769.05625	156.7/ \$F7E	799.05625	156.7/ \$293
Low Power - PS	7-US-01D	769.05625	156.7/ \$F7E	769.05625	156.7/ \$293
Low Power - PS	7-US-02	769.06875	156.7/ \$F7E	799.06875	156.7/ \$293
Low Power - PS	7-US-02D	769.06875	156.7/ \$F7E	769.06875	156.7/ \$293
Low Power - PS	7-US-03	774.99375	156.7/ \$F7E	804.99375	156.7/ \$293



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700 MHz LOW POWER ITINERANT CHANNELS

LICENSING REQUIRED: THESE FREQUENCIES ARE **NOT** COVERED BY THE "BLANKET AUTHORIZATION" FOR NATIONWIDE INTEROPERABILITY CHANNELS. USE OF THESE CHANNELS MUST BE LICENSED OR AUTHORIZED BY STA.

ASSIGNMENT	CHANNEL NAME	MOBILE RX	MOBILE RX CTCSS/NAC	MOBILE TX	MOBILE TX CTCSS/NAC
Low Power - PS	7-US-03D	774.99375	156.7/ \$F7E	774.99375	156.7/ \$293

LICENSING NOTES: These Channels may be licensed for national itinerant mobile use as station class MOI. These channels may be used in either Analog or Digital mode and are limited to 2 watts (ERP).

- Licensees are responsible for the administration of these channels.
- Utilize normal squelch in programming which will use the default talkgroup - \$0001 (1₁₀).



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700 MHz NATIONWIDE DEPLOYABLE TRUNKED SYSTEM CHANNELS

LICENSING REQUIRED: these frequencies are **NOT** covered by the “blanket authorization” for nationwide interoperability channels. Use of these channels must be licensed or authorized by STA.

Common Nationwide System ID: **\$101 (257₁₀)**

Common Nationwide WACN: **\$BF7CC**

“\$” indicates hexadecimal value, “₁₀” subscript indicates decimal value.

ASSIGNMENT	CHANNEL NAME	MOBILE RX	MOBILE RX CTCSS/NAC	MOBILE TX	MOBILE TX CTCSS/NAC
	A	769.23125	-----	799.23125	-----
	B	769.38125	-----	799.38125	-----
	C*	769.73125	-----	799.73125	-----
	D*	769.88125	-----	799.88125	-----
Primary Control Channel	E	774.51875	-----	804.51875	-----
Secondary Control Channel	F	774.86875	-----	804.86875	-----



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700 MHz NATIONWIDE DEPLOYABLE TRUNKED SYSTEM CHANNELS

LICENSING REQUIRED: these frequencies are **NOT** covered by the “blanket authorization” for nationwide interoperability channels. Use of these channels must be licensed or authorized by STA.

Common Nationwide System ID: **\$101 (257₁₀)**

Common Nationwide WACN: **\$BF7CC**

“\$” indicates hexadecimal value, “₁₀” subscript indicates decimal value.

ASSIGNMENT	CHANNEL NAME	MOBILE RX	MOBILE RX CTCSS/NAC	MOBILE TX	MOBILE TX CTCSS/NAC
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*Not available for use above the A-Line in Pennsylvania, New York, and Vermont.

- NRPC is the curator of the common nationwide system keys. To apply for system keys, contact the NRPC: nrpc.us
- Additional working channels separate from this list can be allocated locally to deployable systems subject to individual RPC approval.
- Each deployable trunk system should coordinate their unique NAC Code with the NRPC.



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700 MHZ NATIONWIDE DEPLOYABLE TRUNKED SYSTEM TALKGROUPS

Recommended Talkgroups - Zone "YY Deploy" – System ID \$101

POSITION	CHANNEL NAME	ELIGIBLE USERS/USAGE	TALKGROUP ID (DEC)	TALKGROUP ID (HEX)
1	CALL YY	Calling/Initial Contact TG	201	\$C9
2	CMD YY	Pre-designated Command TG	202	\$CA
3	TAC YY3	General/Tactical Use TG	203	\$CB
4	TAC YY4	General/Tactical Use TG	204	\$CC
5	TAC YY5	General/Tactical Use TG	205	\$CD
6	TAC YY6	General/Tactical Use TG	206	\$CE
7	TAC YY7	General/Tactical Use TG	207	\$CF
8	TAC YY8	General/Tactical Use TG	208	\$D0
9	TAC YY9	General/Tactical Use TG	209	\$D1
10	TAC YY10	General/Tactical Use TG	210	\$D2
11	TAC YY11	General/Tactical Use TG	211	\$D3



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700 MHZ NATIONWIDE DEPLOYABLE TRUNKED SYSTEM TALKGROUPS

Recommended Talkgroups - Zone "YY Deploy" – System ID \$101

POSITION	CHANNEL NAME	ELIGIBLE USERS/USAGE	TALKGROUP ID (DEC)	TALKGROUP ID (HEX)
12	TAC YY12	General/Tactical Use TG	212	\$D4
13	TAC YY13	General/Tactical Use TG	213	\$D5
14	TAC YY14	General/Tactical Use TG	214	\$D6
15	TAC YY15	General/Tactical Use TG	215	\$D7
16	EMER YY	EMERGENCY USE TG	216	\$D8

Common Nationwide System ID:

\$101 (2571₀)

Common Nationwide WACN:

\$BF7CC

"\$" indicates hexadecimal value, "10" subscript indicates decimal value.

• Each deployable trunked system should coordinate their unique NAC Code with the NRPC.

• Duplicate unit IDs with deployable trunked radio systems are a possibility. Subscriber programming resources may be needed to mitigate duplicate ID's.



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700 MHZ NATIONWIDE DEPLOYABLE TRUNKED SYSTEM TALKGROUPS

Recommended Talkgroups - Zone "ZZ Deploy" – System ID \$101

POSITION	CHANNEL NAME	ELIGIBLE USERS/USAGE	TALKGROUP ID (DEC)	TALKGROUP ID (HEX)
1	CALL ZZ	Calling/Initial Contact TG	101	\$65
2	CMD ZZ	Pre-designated Command TG	102	\$66
3	TAC ZZ3	General/Tactical Use TG	103	\$67
4	TAC ZZ4	General/Tactical Use TG	104	\$68
5	TAC ZZ5	General/Tactical Use TG	105	\$69
6	TAC ZZ6	General/Tactical Use TG	106	\$6A
7	TAC ZZ7	General/Tactical Use TG	107	\$6B
8	TAC ZZ8	General/Tactical Use TG	108	\$6C
9	TAC ZZ9	General/Tactical Use TG	109	\$6D
10	TAC ZZ10	General/Tactical Use TG	110	\$6E
11	TAC ZZ11	General/Tactical Use TG	111	\$6F



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700 MHZ NATIONWIDE DEPLOYABLE TRUNKED SYSTEM TALKGROUPS

Recommended Talkgroups - Zone "ZZ Deploy" – System ID \$101

POSITION	CHANNEL NAME	ELIGIBLE USERS/USAGE	TALKGROUP ID (Dec)	TALKGROUP ID (Hex)
12	TAC ZZ12	General/Tactical Use TG	112	\$70
13	TAC ZZ13	General/Tactical Use TG	113	\$71
14	TAC ZZ14	General/Tactical Use TG	114	\$72
15	TAC ZZ15	General/Tactical Use TG	115	\$73
16	EMER ZZ	EMERGENCY USE TG	116	\$74

Common Nationwide System ID:

\$101 (257₁₀)

Common Nationwide WACN:

\$BF7CC

"\$" indicates hexadecimal value, "₁₀" subscript indicates decimal value.

- Each deployable trunked system should coordinate their unique NAC Code with the NRPC.
- Duplicate unit IDs with deployable trunked radio systems are a possibility. Subscriber programming resources may be needed to mitigate duplicate IDs.



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P25 Digital Codes

NAC – NETWORK ACCESS CODES

\$293 (659 ₁₀)	Default NAC
\$F7E (3966 ₁₀)	Receiver will un-squelch with any incoming NAC
\$F7F (3967 ₁₀)	A repeater with this NAC will allow incoming signals to be repeated with the NAC intact

TGID – TALKGROUP ID

\$0001 (1 ₁₀)	Default TGID, should be used in systems where no other talkgroups are defined
\$0000 (0 ₁₀)	No-one or a talkgroup with no users – used for individual call
\$FFFF (65535 ₁₀)	Reserved as a talkgroup which includes everyone

UID – UNIT ID

\$000000	No-one. This value is never assigned to a radio unit
\$000001-\$98767F	For general use.
\$989680-\$FFFFFE	For talk group use or other special purposes.
\$FFFFFF	Designates everyone – used when implementing a group call with a TGID



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P25 Digital Codes

Note: Project 25 System Administrators should be aware of possible Unit ID conflicts when conducting operations with neighboring jurisdictions. System administrators should coordinate Unit IDs with agencies likely to operate on their system(s) to address any radio Unit ID conflicts.

“\$” indicates hexadecimal values, “₁₀” subscript indicates decimal value.



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800 MHz Band

800 MHz Nationwide Interoperability Channels			
DESCRIPTION	CH. NAME	MOBILE RX	MOBILE TX
Calling	8CALL90	851.0125 (866.0125)	806.0125 (821.0125)
Calling – Direct	8CALL90D	851.0125 (866.0125)	851.0125 (866.0125)
Tactical	8TAC91	851.5125 (866.5125)	806.5125 (821.5125)
Tactical - Direct	8TAC91D	851.5125 (866.5125)	851.5125 (866.5125)
Tactical	8TAC92	852.0125 (867.0125)	807.0125 (822.0125)
Tactical - Direct	8TAC92D	852.0125 (867.0125)	852.0125 (867.0125)
Tactical	8TAC93	852.5125 (867.5125)	807.5125 (822.5125)
Tactical - Direct	8TAC93D	852.5125 (867.5125)	852.5125 (867.5125)
Tactical	8TAC94	853.0125 (868.0125)	808.0125 (823.0125)
Tactical - Direct	8TAC94D	853.0125 (868.0125)	853.0125 (868.0125)



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800 MHz Nationwide Interoperability Channels

- CTCSS 156.7(5A) receive and transmit.
- * The frequency in parenthesis, which is 15 MHz higher, is the frequency used before re-banding - channel names were ICALL, ITAC1 - ITAC4. Wideband FM 20K0F3E before and after re-banding.



SECTION 5 Federal Interoperability Channel Plan

Sec. 5-1 INCIDENT RESPONSE

FEDERAL INCIDENT RESPONSE CHANNELS – VHF

LICENSING REQUIRED: These frequencies are NOT covered by the “Blanket Authorization” for nationwide interoperability channels. For Interoperability with Federal Stations Only.

CHANNEL NAME	MOB RECV		MOB XMIT		A	NOTES
	FREQ	TONE	FREQ	TONE	D	
NC 1	169.5375	CSQ	164.7125	167.9	A	Incident Calling
IR 1	170.0125	CSQ	165.2500	167.9	A	Incident Command 1
IR 2	170.4125	CSQ	165.9625	167.9	A	Medical Evac. Control
IR 3	170.6875	CSQ	166.5750	167.9	A	Logistics Control
IR 4	173.0375	CSQ	167.3250	167.9	A	Interagency Convoy
IR 5	169.5375	CSQ	169.5375	167.9	A	Incident Calling



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FEDERAL INCIDENT RESPONSE CHANNELS – VHF

LICENSING REQUIRED: These frequencies are NOT covered by the “Blanket Authorization” for nationwide interoperability channels. For Interoperability with Federal Stations Only.

IR 6	170.0125	CSQ	170.0125	167.9	A	Incident Command 1
IR 7	170.4125	CSQ	170.4125	167.9	A	Medical Evac. Control
IR 8	170.6875	CSQ	170.6875	167.9	A	Logistics Control
IR 9	173.0375	CSQ	173.0375	167.9	A	Interagency Convoy

• Default operations should be carrier squelch on receive, CTCSS 167.9 transmit. If the user can enable/disable without reprogramming the radio, the indicated CTCSS tone should also be programmed for receive, and the user instructed how and when to enable/disable.



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FEDERAL INCIDENT RESPONSE CHANNELS – UHF

LICENSING REQUIRED: These frequencies are NOT covered by the “Blanket Authorization” for nationwide interoperability channels. For Interoperability with Federal Stations Only.

CHANNEL NAME	MOB RECV		MOB XMIT		A	NOTES
	FREQ	TONE	FREQ	TONE	D	
NC 2	410.2375	CSQ	419.2375	167.9	A	Incident Calling
IR 10	410.4375	CSQ	419.4375	167.9	A	Ad Hoc Assignment
IR 11	410.6375	CSQ	419.6375	167.9	A	Ad Hoc Assignment
IR 12	410.8375	CSQ	419.8375	167.9	A	SAR Inc. Command
IR 13	413.1875	CSQ	413.1875	167.9	A	Ad Hoc Assignment
IR 14	413.2125	CSQ	413.2125	167.9	A	Interagency Convoy
IR 15	410.2375	CSQ	410.2375	167.9	A	Incident Calling
IR 16	410.4375	CSQ	410.4375	167.9	A	Ad Hoc Assignment
IR 17	410.6375	CSQ	410.6375	167.9	A	Ad Hoc Assignment
IR 18	410.8375	CSQ	410.8375	167.9	A	SAR Inc. Command

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FEDERAL INCIDENT RESPONSE CHANNELS – UHF

LICENSING REQUIRED: These frequencies are NOT covered by the “Blanket Authorization” for nationwide interoperability channels. For Interoperability with Federal Stations Only.

- Default operations should be carrier squelch on receive, CTCSS 167.9 transmit. If the user can enable/disable without reprogramming the radio, the indicated CTCSS tone should also be programmed for receive, and the user instructed how and when to enable/disable.



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Sec. 5-2 LAW ENFORCEMENT

FEDERAL LAW ENFORCEMENT (LE) CHANNELS – VHF

LICENSING REQUIRED: These frequencies are NOT covered by the “Blanket Authorization” for nationwide interoperability channels. For Interoperability with Federal Stations Only.

CHANNEL NAME	MOB RECV		MOB XMIT		A	NOTES
	FREQ	TONE	FREQ	TONE	D	
LE A ¹	167.0875	CSQ	167.0875	167.9	A	Calling
LE 1 ¹	167.0875	CSQ	162.0875	167.9	A	Tactical
LE 2	167.2500	\$68F	162.2625	\$68F	D	Tactical
LE 3	167.7500	\$68F	162.8375	\$68F	D	Tactical
LE 4	168.1125	\$68F	163.2875	\$68F	D	Tactical
LE 5	168.4625	\$68F	163.4250	\$68F	D	Tactical
LE 6	167.2500	\$68F	167.2500	\$68F	D	Tactical
LE 7	167.7500	CSQ	167.7500	\$68F	D	Tactical
LE 8	168.1125	\$68F	168.1125	\$68F	D	Tactical

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FEDERAL LAW ENFORCEMENT (LE) CHANNELS – VHF

LICENSING REQUIRED: These frequencies are NOT covered by the “Blanket Authorization” for nationwide interoperability channels. For Interoperability with Federal Stations Only.

LE 9	168.4625	\$68F	168.4625	\$68F	D	Tactical
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¹ LE A and LE 1 are analog, with CTCSS 167.9 Tx and CSQ Rx. All other LE channels are digital with NAC \$68F.



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FEDERAL LAW ENFORCEMENT (LE) CHANNELS – UHF

LICENSING REQUIRED: These frequencies are NOT covered by the “Blanket Authorization” for nationwide interoperability channels. For Interoperability with Federal Stations Only.

CHANNEL NAME	MOB RECV		MOB XMIT		A	NOTES
	FREQ	TONE	FREQ	TONE	D	
LE B ¹	414.0375	CSQ	414.0375	167.9	A	Calling
LE 10 ¹	409.9875	CSQ	418.9875	167.9	A	Tactical
LE 11	410.1875	\$68F	419.1875	\$68F	D	Tactical
LE 12	410.6125	\$68F	419.6125	\$68F	D	Tactical
LE 13	414.0625	\$68F	414.0625	\$68F	D	Tactical
LE 14	414.3125	\$68F	414.3125	\$68F	D	Tactical
LE 15	414.3375	\$68F	414.3375	\$68F	D	Tactical
LE 16 ¹	409.9875	CSQ	409.9875	167.9	A	Tactical
LE 17	410.1875	\$68F	410.1875	\$68F	D	Tactical
LE 18	410.6125	\$68F	410.6125	\$68F	D	Tactical

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FEDERAL LAW ENFORCEMENT (LE) CHANNELS – UHF

LICENSING REQUIRED: These frequencies are NOT covered by the “Blanket Authorization” for nationwide interoperability channels. For Interoperability with Federal Stations Only.

¹ LE B, LE 10, and LE 16 are analog, with CTCSS 167.9 Tx and CSQ Rx. All other LE channels are digital with NAC \$68F.



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Sec. 5-3 FEDERAL INTEROPERABILITY SEARCH AND RESCUE

FEDERAL/NON-FEDERAL SEARCH AND RESCUE COMMAND

CHANNEL NAME	MOB RECV		MOB XMIT		A	NOTES
	FREQ	TONE	FREQ	TONE	D	
IR 12	410.8375	CSQ	419.8375	167.9	A	
VTAC14	159.4725	156.7	159.4725	156.7	A	
UTAC43	453.8625	156.7	458.8625	156.7	A	
8TAC94	853.0125	156.7	808.0125	156.7	A	Post Re-Banding
Marine Ch 17 ²	156.8500	CSQ	156.8500	CSQ	A	Requires FCC STA



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FEDERAL/NON-FEDERAL SEARCH AND RESCUE OPERATIONS

SAR FUNCTIONS	FREQUENCY/CHANNEL(S)		
Ground Operations	155.1600 narrowband FM		
Maritime Operations ¹	VHF Marine ch.21A or 23A as specified by U.S. Coast Guard Sector Commander		
Air Operations – Civilian	123.1000 MHz AM		
Air Operations – USCG/Military	345.0 MHz AM for initial contact only, then move to 282.8 MHz AM or another working channel		
Air Rescue Assets to Air Rescue Assets (deconfliction)	As chartered on standard air chart or MULTICOM 122.850 (south or west sector) & 122.900 MHz (north or east sector), or as specified by the Federal Aviation Administration (FAA). 122.850 may not be used for testing or exercise.		
Ground to Air SAR Working Channel ²	Marine Chan. 83A	Marine Channels 21A, 23A, 81A and 83A alternates are as specified by the local USCG Sector Commander	
Ground to Maritime SAR Working Channel ²	Marine Chan. 21A		
Maritime/Air/Ground SAR Working Channel ²	Marine Chan. 83A		



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EMS/Medical Support	155.3400 (narrowband FM)
Hailing ¹ & DISTRESS only – Maritime/Air/Ground	Marine channel 16

VHF Marine Channels



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2-VHF Marine Channels

CHANNEL	FREQUENCY	TONE	USAGE
16	156.8000 W	CSQ	International Distress, Safety and Calling
17	156.8500 W	CSQ	State & local govt maritime control
21A	157.0500 W	CSQ	U.S. Coast Guard assigned
23A	157.1500 W	CSQ	U.S. Coast Guard assigned
81A	157.0750 W	CSQ	Environmental protection ops or as assigned
83A	157.1750 W	CSQ	U.S. Coast Guard assigned

¹ Use VHF Marine channel 16 to make contact (30 seconds max), then move to the appropriate *working* channel as directed by the local USCG Sector Commander. Non-maritime use of any VHF Maritime channel requires FCC Special Temporary Authority or appropriate license. VHF marine channels use wideband FM. Emission 16K00F3E.

Direction from USCG, FCC, or FAA overrides information in this table. This table does not convey authority to operate.



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SECTION 6 Amateur Radio Resources

Sec. 6-1 AMATEUR RADIO REPEATERS

ILLINOIS AMATEUR VHF/UHF REPEATERS

NORTH ZONE

COUNTY	IDENTIFIER	RECEIVE		TRANSMIT		A D	REMARKS
		FREQUENCY	TONE	FREQUENCY	TONE		
LAKE	LIBERTYVILLE	147.180	127.3	147.780	127.3	A	
LAKE	LIBERTYVILLE	442.525	114.8	447.525	114.8	A	
LAKE	LAKE ZURICH	443.850	114.8	448.850	114.8	A	
LAKE	-	442.975	114.8	447.975	114.8	A	
HENRY	GALVA	145.490	225.7	144.890	225.7	A/D	C4FM
HENRY	KEWANEE	442.175	225.7	447.175	225.7	A/D	C4FM
KNOX*	GALEBURG	147.000	103.5	146400	103.5	A/D	C4FM
KNOX	GALESBURG	444.450	103.5	449.450	103.5	A/D	C4FM

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ILLINOIS AMATEUR VHF/UHF REPEATERS

NORTH ZONE

COUNTY	IDENTIFIER	RECEIVE		TRANSMIT		A	REMARKS
		FREQUENCY	TONE	FREQUENCY	TONE	D	
KNOX	GALESBURG	147.210	107.2	147.810	107.2	A/D	C4FM
COOK	PALATINE	442.800	114.8	447.800	114.8	A	
COOK	ARLINGTON	441.500	123.0	446.500	123.0	A	



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ILLINOIS AMATEUR VHF/UHF REPEATERS

CENTRAL ZONE

COUNTY	IDENTIFIER	RECEIVE		TRANSMIT		A	REMARKS
		FREQUENCY	TONE	FREQUENCY	TONE	D	
BOND*	GREENVILLE	147.165	103.5	147.765	103.5	D	P25
MACOPIN	VIRDEN	444.250	103.5	449.250	103.5	A	
MACOPIN*	CARLINVILLE	146.865	103.5	146.265	103.5	A	
MARION	CENTRALIA	442.200	103.5	447.200	103.5	A	
MACON	DECATUR	443.800	77.0	448.800	77.0	A	
MCLEAN	BLOOMINGTON	146.790	103.5	146.190	103.5	A	
OGLE*	CHANA	147.165	146.2	147.765	103.5	A/D	P25 NAC 293
CLAY*	FLORA	146.700	103.5	146.100	103.5	A	
CLAY	FLORA	442.075		442.065		A/D	C4FM



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ILLINOIS AMATEUR VHF/UHF REPEATERS

CENTRAL ZONE

COUNTY	IDENTIFIER	RECEIVE		TRANSMIT		A	REMARKS
		FREQUENCY	TONE	FREQUENCY	TONE	D	
RICHLAND*	NOBLE	146.760	94.8	146.160	94.8	A/D	C4FM
RICHLAND	NOBLE	442.375	71.9	447.375	71.9	A/D	C4FM
MENARD*	ATHENS	147.045	103.5	147.645	103.5	A	
SANGAMON*	SPRINGFIELD	443.000	94.8	448.000	94.8	A	
SANGAMON	SPRINGFIELD	443.70625	CC 5	448.70625	CC 5	D	DMR
SHELBY*	WILLIAMSBURG	147.390	203.5	147.990	203.5	A	
IROQUIS *	CRESENTY CITY	147.030	103.5	147.630	103.5	A	
IROQUIS	WATSEKA	444.625	103.5	449.625	103.5	A	
MACOUPIN	GILLESPIE	444.250	103.5	449.250	103.5	A	
MACOUPIN*	CARLINVILLE	146.865	103.5	146.265	103.5	A	



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ILLINOIS AMATEUR VHF/UHF REPEATERS

CENTRAL ZONE

COUNTY	IDENTIFIER	RECEIVE		TRANSMIT		A	REMARKS
		FREQUENCY	TONE	FREQUENCY	TONE	D	
MACOUPIN	GILLESPIE	146.8200	CSQ	146.2200	CSQ	A	
OGLE*	CHANA	147.1650	146.2	147.7650	146.2	A	
SANGAMON	SPRINGFIELD	146.6850	94.5	146.0850	94.5	A	
MORGAN	JACKSONVILLE	146.7750	103.5	146.1750	103.5	A	
SANGAMON	PAWNEE	146.8050	94.8	146.2050	94.8	A	
CHRISTIAN	TAYLORVILLE	146.9950	79.7	146.3950	79.7	A	
SANGAMON	SPRINGFIELD	443.78125		448.78125		D	D-STAR REF051ID
LOGAN	MT. PULASKI	443.825	94.8	448.825	94.8	A	
SANGAMON	SPRINGFIELD	444.325	94.8	449.325	94.8	D	FUSION



ILLINOIS AMATEUR VHF/UHF REPEATERS

CENTRAL ZONE

COUNTY	IDENTIFIER	RECEIVE		TRANSMIT		A	REMARKS
		FREQUENCY	TONE	FREQUENCY	TONE	D	
SANGAMON	SPRINGFIELD	444.400	103.5	449.400	103.5	D	Also DMR CC5 (link is external)
SANGAMON	CANTRALL	444.500	CC1	449.500	CC1	D	DMR



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ILLINOIS AMATEUR VHF/UHF REPEATERS

SOUTH ZONE

COUNTY	IDENTIFIER	RECEIVE		TRANSMIT		A	REMARKS
		FREQUENCY	TONE	FREQUENCY	TONE	D	
JEFFERSON	MT. VERNON	147.135	88.5	147.735	88.5	A	
POPE*	HEROD	146.880	CSQ	146.280	88.5	A	LINKED TO AVA
JACKSON*	AVA	147.090	CSQ	147.690	88.5	A	LINKED TO HEROD
UNION*	ALTO PASS	146.850	CSQ	146.250	88.5	A	
JOHNSON	TUNNEL HILL	147.345	CSQ	147.945	88.5	A	
FRANKLIN	BENTON	146.805	CSQ	146.205	88.5	A	
MASSAC	METROPOLIS	146.225	CSQ	146.825	123	A	
WABASH	MT. CARMEL	146.940	94.8	146.340	94.8	A/D	C4FM
WABASH	MT. CARMEL	444.725	114.8	449.725	114.8	A	

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ILLINOIS AMATEUR VHF/UHF REPEATERS

SOUTH ZONE

COUNTY	IDENTIFIER	RECEIVE		TRANSMIT		A	REMARKS
		FREQUENCY	TONE	FREQUENCY	TONE	D	
WABASH	MT. CARMEL	444.775	114.8	449.775	114.8	A/D	C4FM
WABASH	-	443.875	151.4	448.875	151.4	A	
INDIANA	EVANSVILLE	147.150	91.5	147.750	91.5	A	

Sec. 6-2 ILLINOIS AUXCOMM AMATEUR FREQUENCIES

AUXCOMM Amateur Frequencies				
NAME	RX FREQ.	TX FREQ.	MODE	PURPOSE
3905	3.9050	3.9050	LSB	Primary HF
7230	7.2300	7.2300	LSB	Secondary HF



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AUXCOMM Amateur Frequencies

NAME	RX FREQ.	TX FREQ	MODE	PURPOSE
IDEN	145.6100	145.6100	FM Packet 1200 Bd	WINLINK
IL2A	146.5200	146.5200	FM (Wideband)	Nationwide Calling
IL2B	147.5250	147.5250	FM (Wideband)	
IL2C	147.5700	147.5700	FM (Wideband)	
ILUHFA	446.0000	446.0000	FM (Wideband)	Nationwide Calling
ILUHFB	446.4000	446.4000	FM (Wideband)	
ILUHFC	446.7000	446.7000	FM (Wideband)	For Fritz

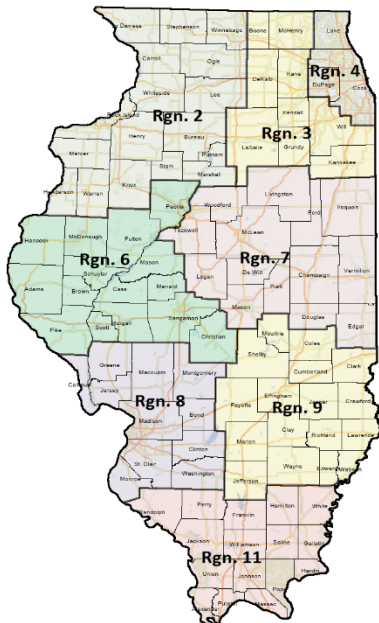
*Note: Transmitting on amateur radio frequencies requires an appropriately licensed amateur radio operator. Refer to FCC Rules, Part 97, or the American Radio Relay League for more detailed information.



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SECTION 7 Illinois Maps

Sec. 7-1 IEMA & OHS REGIONS



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REGION	ADDRESS	PHONE	FAX
2	1325 N Galena Ave Dixon, IL 61021-1009	815-288-1455	815-288-5650
3	1639 Champlain St., Ottawa, IL 61350	815-433-7161	815-433-7165
4	9511 W Harrison St., Des Plaines, IL 60016-1563	847-294-4717	847-294-4715
6	2200 South Dirksen Parkway Springfield, IL 62703-4528	217-782-0922	217-558-4810
7	2125 South First St., Ste 309, Champaign, IL 61820	217-278-3535	217-352-1316
8	10045 Bunkum Road, Fairview Heights, IL 62208-1703	618-394-2233	618-394-2239
9	327 South Hotze Road, Salem, IL 62881	618-662-4474	618-662-4448
11	2309 W Main St., Ste 110, Marion, IL 62959-1196	618-662-4474	618-662-4448

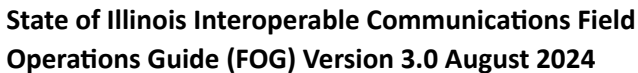


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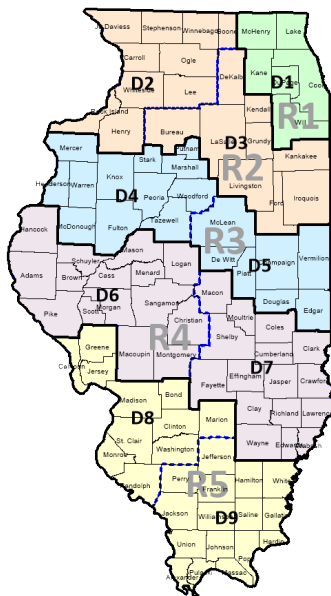
Sec. 7-2

ILLINOIS DEPARTMENT OF PUBLIC HEALTH REGIONS





ILLINOIS DEPARTMENT OF TRANSPORTATION REGIONS AND DISTRICTS

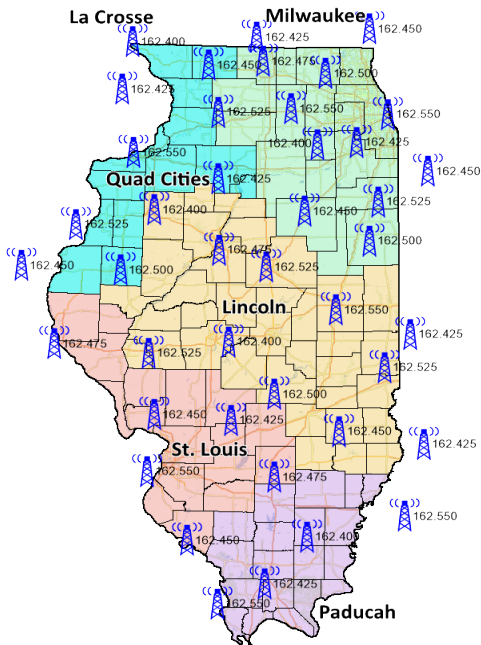




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Sec. 7-4

NATIONAL WEATHER SERVICE (NWS) RADIO SITES



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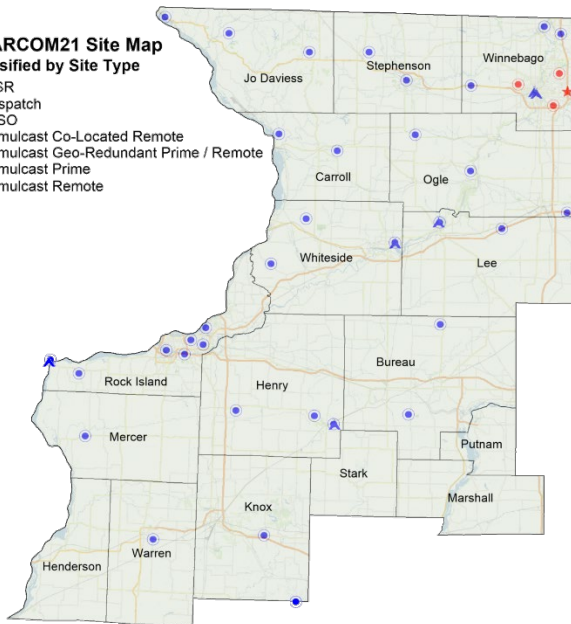
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Sec. 7-5 STARCOM21 SITE MAPS

Sec. 7-5(a) IEEMA & OHS Region 2

STARCOM21 Site Map Classified by Site Type

- ASR
- ▲ Dispatch
- ▲ MSO
- Simulcast Co-Located Remote
- ☆ Simulcast Geo-Redundant Prime / Remote
- ★ Simulcast Prime
- Simulcast Remote



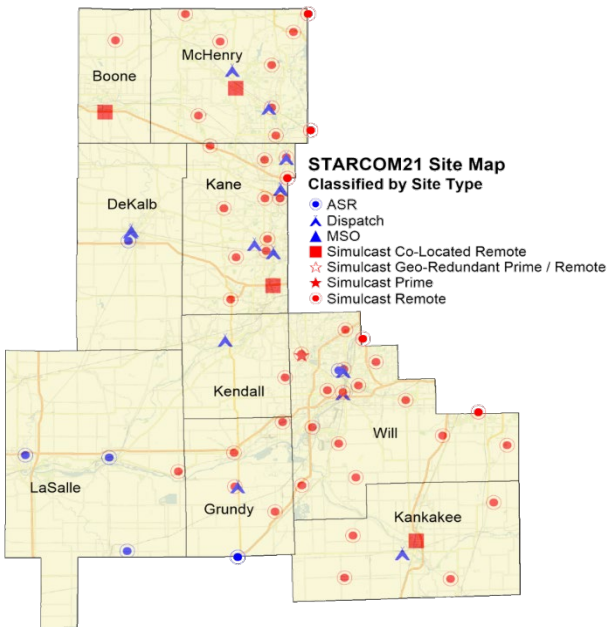
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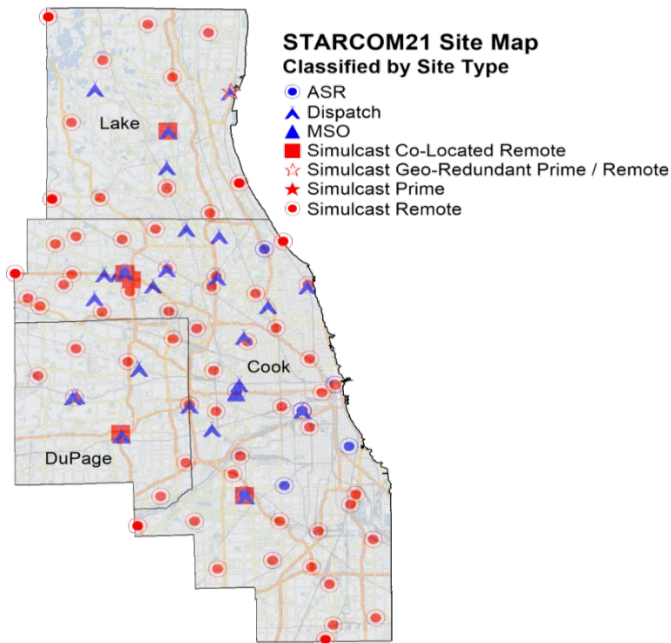
Sec. 7-5(b) IEMA & OHS Region 3





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Sec. 7-5(c) IEMA & OHS Region 4





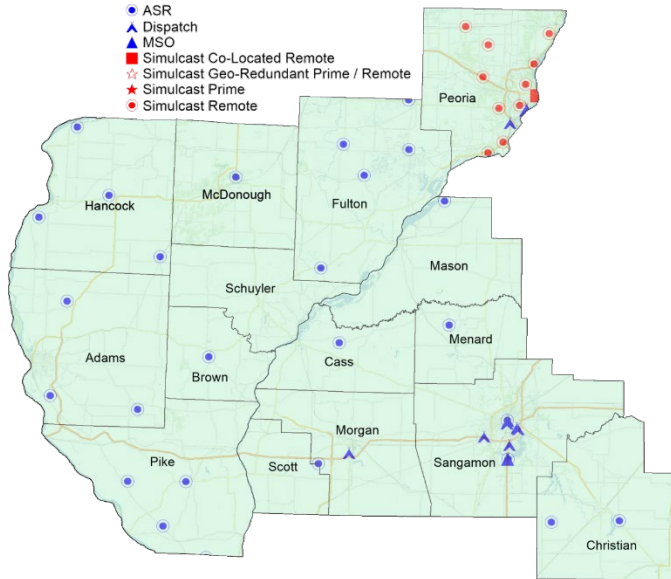
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Sec. 7-5(d) IEMA & OHS Region 6

STARCOM21 Site Map

Classified by Site Type

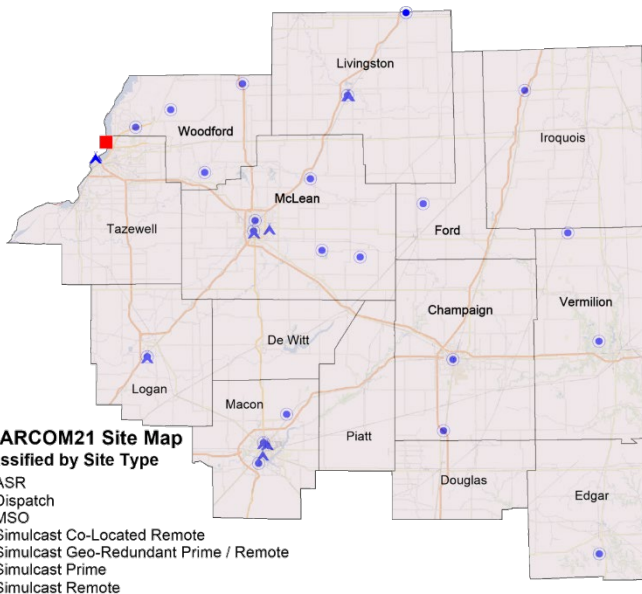
- ASR
- ▲ Dispatch
- ▲ MSO
- Simulcast Co-Located Remote
- ☆ Simulcast Geo-Redundant Prime / Remote
- ★ Simulcast Prime
- Simulcast Remote





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Sec. 7-5(e) IEMA & OHS Region 7



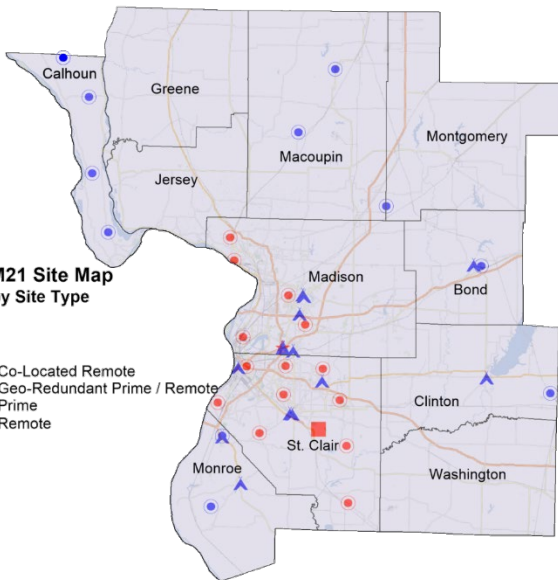


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Sec. 7-5(f) IEMA & OHS Region 8

STARCOM21 Site Map
Classified by Site Type

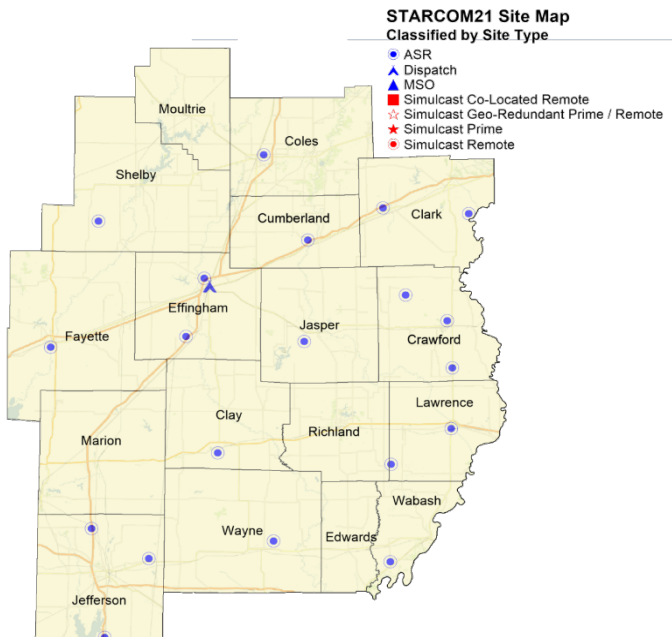
- ASR
- ▲ Dispatch
- ▲ MSO
- Simulcast Co-Located Remote
- ☆ Simulcast Geo-Redundant Prime / Remote
- ★ Simulcast Prime
- Simulcast Remote





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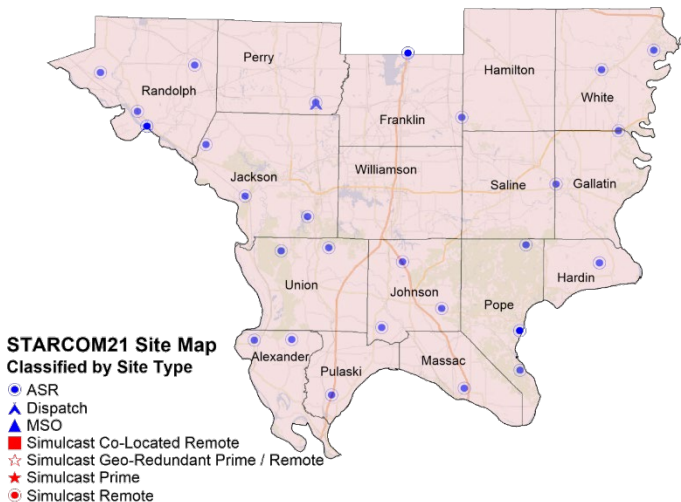
Sec. 7-5(g) IEMA & OHS Region 9

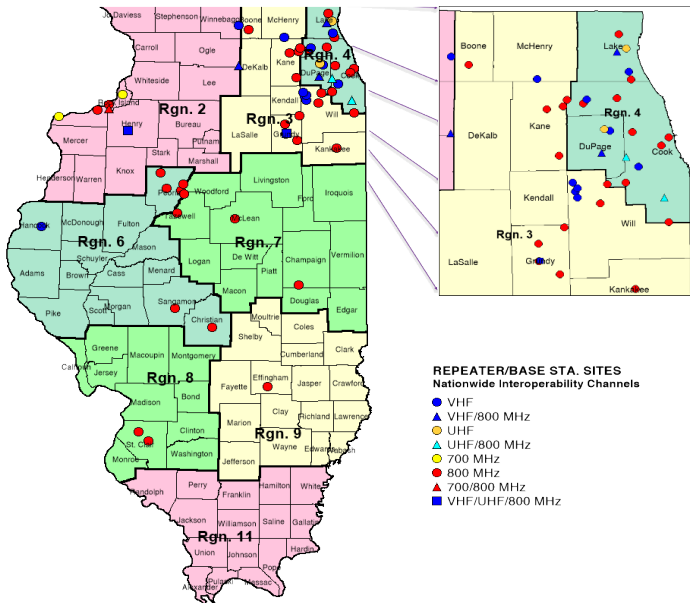
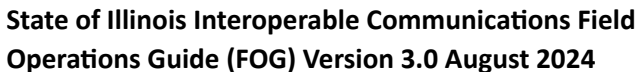




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Sec. 7-5(h) IEMA & OHS Region 11







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Sec. 7-7

ILLINOIS STATE POLICE TROOP MAP



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SECTION 8 State Agency Dispatch Centers

State Agency Dispatch Centers		
DISPATCH CENTER	LOCATION	PHONE
ILLINOIS EMERGENCY MANAGEMENT AGENCY (IEMS)		
IEMA & OHS Operations Center	2200 South Dirksen Parkway, Springfield, IL	217-782-7860
ILLINOIS STATE POLICE (ISP)		
ISP Troop 1 (Sterling Dispatch)	Sterling	815-632-4010
ISP Troop 2 (Sterling Dispatch)	Sterling	815-632-4010
ISP Troop 3 (Chicago Dispatch)	Chicago	847-294-4400
ISP Troop 4 (Pontiac Dispatch)	Pontiac	815-844-1500
ISP Troop 5 (Pontiac Dispatch)	Pontiac	815-844-1500
ISP Troop 6 (Springfield Dispatch)	Springfield	217-786-6677
ISP Troop 7 (Pontiac Dispatch)	Pontiac	815-844-1500
ISP Troop 8 (Collinsville Dispatch)	Collinsville	618-346-3610



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State Agency Dispatch Centers

DISPATCH CENTER	LOCATION	PHONE
ISP Troop 9 (Du Quoin Dispatch)	Du Quoin	618-542-2171
ISP Troop 10 (Du Quoin Dispatch)	Du Quoin	618-542-2171
ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT)		
IDOT Headquarters	Springfield	217-782-2937
IDOT District 1	Schaumburg	847-705-4602
IDOT District 2	Dixon	815-284-5401
IDOT District 3	Ottawa	815-434-8431
IDOT District 4	Peoria	309-671-4487
IDOT District 5	Paris	217-466-7294
IDOT District 6	Springfield	217-782-7316
IDOT District 7	Effingham	217-342-8272
IDOT District 8	Collinsville	618-346-3237
IDOT District 9	Carbondale	618-351-5338



SECTION 9 Interoperability Repeaters and Base Stations

Sec. 9-1 UHF BAND

UHF Band INTEROPERABILITY REPEATERS					
REG.	COUNTY	AGENCY ¹	AGENCY PHONE	TOWER LOCATION	CHANNEL ²
3	Grundy	Grundy Co. 911 Center	815-942-0336	IL47/IL113 Morris	UCALL40, ALL UTAC
4	DuPage	Illinois Tollway	630-241-6800	I-355/Army Trail Addison	UCALL40, ALL UTAC
4	Cook	Chicago OEMC	312-746-9241	Chicago	UCALL40, ALL UTAC ³
4	Cook	Chicago OEMC	312-746-9241	Chicago	UCALL40, ALL UTAC ³
4	Lake	Illinois Tollway	630-241-6800	I-94/IL137 Libertyville	UCALL40, ALL UTAC
4	Cook	Illinois Tollway	630-241-6800	I-294/I-80 Markham	UCALL40, ALL UTAC



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UHF Band INTEROPERABILITY REPEATERS

REG.	COUNTY	AGENCY ¹	AGENCY PHONE	TOWER LOCATION	CHANNEL ²
4	Cook	Illinois Tollway	630-241-6800	I-294/55th St Western Springs	UCALL40, ALL UTAC

¹ Unless otherwise noted, make requests through the IEMA & OHS Operations Center at

217-782-7860.

² ALL UTAC signifies that all tactical UHF channels (UTAC41-UTAC43) are available.

³ Can be patched to VHF or UHF conventional channels.



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Sec. 9-2 700 MHz BAND

700 MHz Band INTEROPERABILITY REPEATERS					
REG.	COUNTY	AGENCY ¹	AGENCY PHONE	TOWER LOCATION	CHANNEL ²
2	Rock Island	Rock Island County		Illinois	7TAC55
2	Rock Island	Rock Island County		Port Byron	7TAC56
¹ Unless otherwise noted, make requests through the IEMA & OHS Operations Center at 217-782-7860 .					
² Can be patched to VHF or UHF conventional channels.					

Sec. 9-3 800 MHz BAND

800 MHz Band INTEROPERABILITY REPEATERS					
RGN.	COUNTY	AGENCY ¹	AGENCY PHONE	TOWER LOCATION	CHANNEL ²
6	Sangamon	ISP Springfield	217-786-6677	3700 Lake Shore Dr., Springfield	8CALL90, 8TAC91, 8TAC92



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800 MHz Band INTEROPERABILITY REPEATERS

RGN.	COUNTY	AGENCY ¹	AGENCY PHONE	TOWER LOCATION	CHANNEL ²
2	Boone	Illinois Tollway	630-271-7586	I-90/US20, Belvidere	8CALL90 ALL 8TAC
2	Ogle	Illinois Tollway	630-271-7586	I-88/I-39, Rochelle	8CALL90 ALL 8TAC
2	Rock Island	ISP Sterling	815-632-4010	800 Hillcrest, East Moline	8CALL90, 8TAC91
3	Grundy	Grundy Co SO	815-942-0336	IL47/IL113, Morris	8CALL90, ALL 8TAC
3	Grundy	Grundy Co. SO	815-942-0336	IL47/IL113, Morris	8CALL90, 8TAC91, 8TAC92
3	Kane	Elgin PD	847-289-2700	120 S State St, Elgin	8CALL90, 8TAC91
3	Kane	Illinois Tollway	630-271-7586	I-88/IL25, Aurora	8CALL90 ALL 8TAC
3	Kankakee	ISP Pontiac	815-844-1500	500 Kinzie Ave, Bradley	8CALL90, 8TAC92
3	Will	Illinois Tollway	630-271-7586	I-355/127th St., Lemont.	8CALL90, ALL 8TAC
3	Will	Will County EMA	815-740-0911	I-355/Spring Brook Toll Plaza	8CALL90, 8TAC91 8TAC92, 8TAC94

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INTEROPERABILITY REPEATERS



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800 MHz Band INTEROPERABILITY REPEATERS

RGN.	COUNTY	AGENCY ¹	AGENCY PHONE	TOWER LOCATION	CHANNEL ²
4	Cook	Chicago OEMC	312-746-9241	Chicago	8CALL90, ALL 8TAC
4	Cook	Chicago OEMC	312-746-9241	Chicago	8CALL90, ALL 8TAC
4	Cook	Cook County SO	847-294-4733	26th/California, Chicago	8TAC91
4	Cook	Cook County SO	847-294-4733	IL58/Barrington Rd., Hoffman Estates	8TAC92
4	Cook	Cook County SO	847-294-4733	Ashland/Sauk Trail, Palos Park	8TAC93
4	Cook	Cook County SO	847-294-4733	McCarthy/Wolf Rd., Steger	8TAC94
4	Cook	Illinois Tollway	630-271-7586	I-294/I-80, Markham	8CALL90, ALL 8TAC
4	Cook	Illinois Tollway	630-271-7586	I-294/55th St., Western Springs	8CALL90, ALL 8TAC
4	Cook	NW Central Disp.	847-398-1130	1975 East Davis St., Arlington Hts.	8CALL90, ALL 8TAC



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800 MHz Band INTEROPERABILITY REPEATERS

RGN.	COUNTY	AGENCY ¹	AGENCY PHONE	TOWER LOCATION	CHANNEL ²
4	DuPage	Illinois Tollway	630-271-7586	I-355/I-88, Lisle	8TAC91, 8TAC94
4	Kane	Illinois Tollway	630-271-7586	I-90/IL25, Elgin	8CALL90, ALL 8TAC
4	Lake	Illinois Tollway	630-271-7586	I-294/I-94, Deerfield	8CALL90, ALL 8TAC
4	Lake	Illinois Tollway	630-271-7586	I-94/IL132, Gurnee	8CALL90, ALL 8TAC
4	Lake	Lake County SO	847-549-5200	1303 N Milwaukee, Libertyville	8CALL90, ALL 8TAC
6	Christian	ISP Springfield	217-786-6677	Route 29, Taylorville	8CALL90, 8TAC92
6	Peoria	ISP Pontiac	815.844.1500	6035 N Knoxville, Peoria	8CALL90, 8TAC92
7	McLean	ISP Pontiac	815-844-1500	Waterson Dorm, Normal	8CALL90, 8TAC92
8	St. Clair	St Clair County	618-971-5409	3001 Save Rd., Bellville	8CALL90, 8TAC91



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800 MHz Band INTEROPERABILITY REPEATERS

RGN.	COUNTY	AGENCY ¹	AGENCY PHONE	TOWER LOCATION	CHANNEL ²
8	St. Louis MO	St Louis PD	314-231-1212	1200 Clark, St. Louis	8CALL90, ALL 8TAC
9	Effingham	ISP Du Quoin	618.542.2171	4320 N 950th St., Mason	8CALL90, 8TAC92

¹ Unless otherwise noted, make requests through the IEMA & OHS Operations Center at **217-782-7860**.

² ALL 8TAC signifies that all four tactical 800 MHz channels (8TAC91 - 8TAC94) are available.

³ Can be patched to VHF or UHF conventional channels.



SECTION 10 STRATEGIC TECHNOLOGY RESERVE (STR)

The state of Illinois has developed the STR: pre-positioned, interoperable communications assets that support interoperable communications and can restore basic communications when terrestrial communications are non-existent, or severely compromised. The STR equipment includes Mission Ready Packages (MRPs) and Deployable Communications Resources and are described in the following sub-sections.

Sec. 10-1 STR LOCATIONS

Illinois STR Resources locations are shown by IEMA & OHS Region in the following maps.



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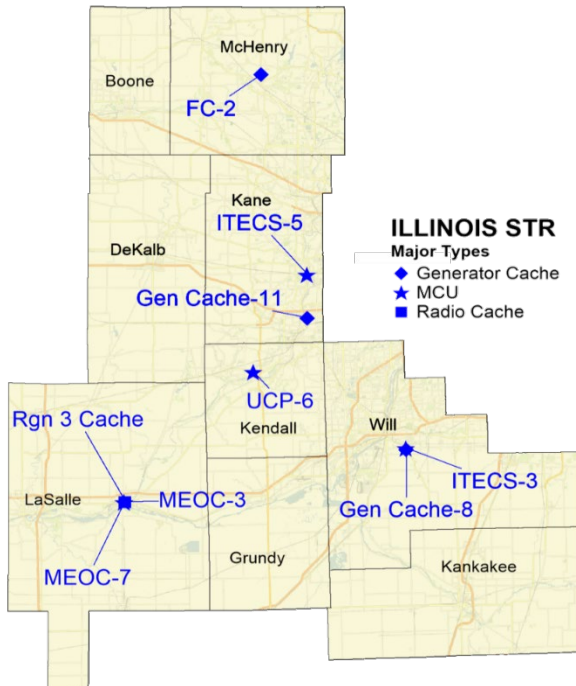
Sec. 10-1(a) Region 2





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Sec. 10-1(b) Region 3



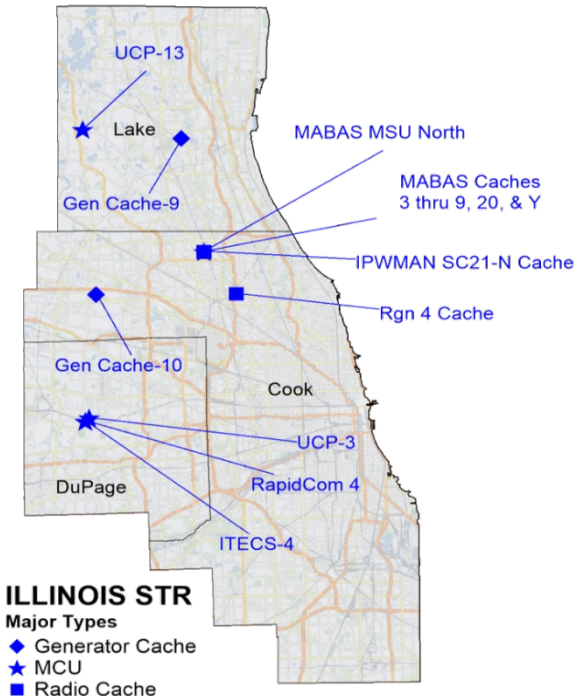
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Sec. 10-1(c) Region 4



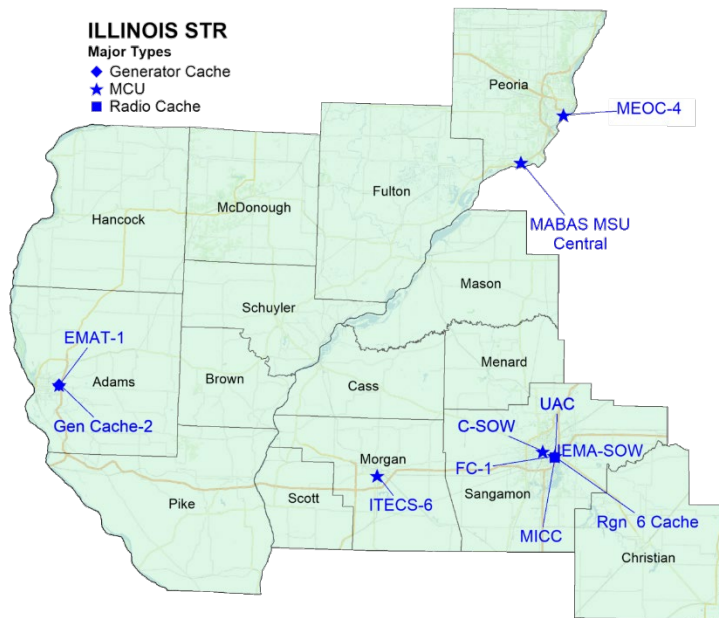
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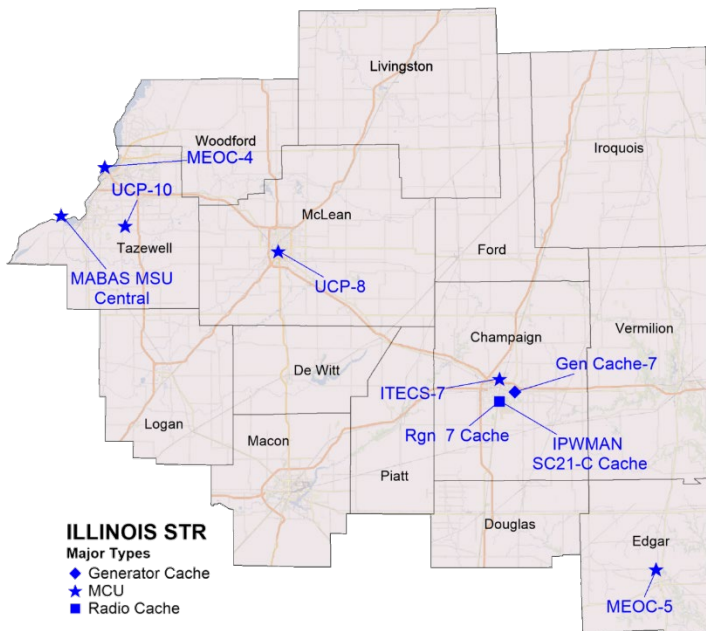
Sec. 10-1(d) Region 6





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Sec. 10-1(e) Region 7





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Sec. 10-1(f) Region 8



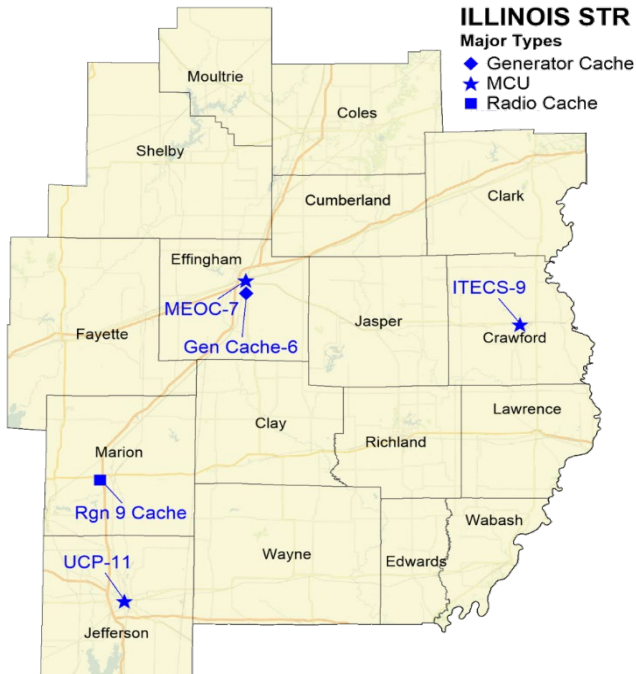
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Sec. 10-1(g) Region 9



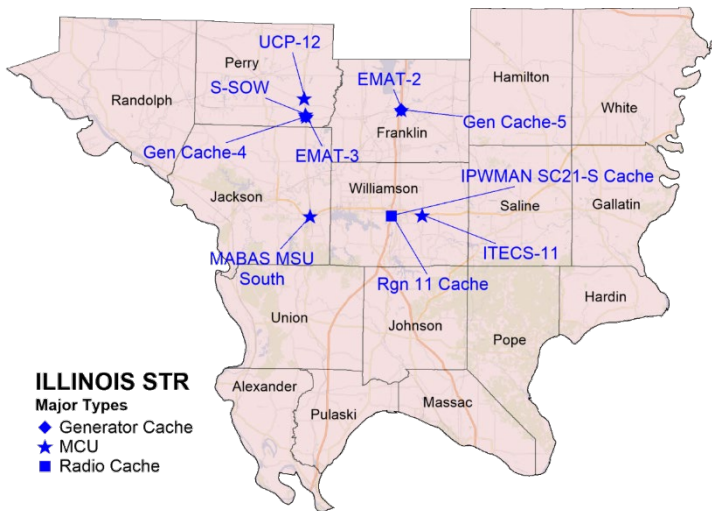
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Sec. 10-1(h) Region 11





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Sec. 10-2 MISSION READY PACKAGES (MRPs)

MRPs streamline the process of obtaining and providing mutual aid by identifying all the resources available to assist other jurisdictions during a critical incident. MRPs in Illinois are based on either a Unified Command Post (UCP) platform or an Illinois Transportable Emergency Communications System (ITECS) platform and one or more communications gateways, deployable interoperability repeaters, and radio caches.

Sec. 10-2(a) Illinois Mission Ready Packages Equipment Detail

MRPs identified in this guide contain a minimum of the following equipment:

MRP EQUIPMENT	MRP BASED ON	
	ITECS PLATFORM	UCP PLATFORM
VEHICLE		
DESCRIPTION	Trailer Towed by Ford F550	Freightliner 40' custom body
COMMAND SEATING	0	6



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MRP EQUIPMENT	MRP BASED ON	
	ITECS PLATFORM	UCP PLATFORM
RADO SEATING	0	4
OVERALL DIMENSIONS	8'x16'	40' X 8'
HEIGHT CLEARANCE IN TRANSIT	12' 6"	12' 6"
TOTAL WEIGHT		
TRAILER TONGUE TYPE	Ball Mount 2 5/16	NA
TONGUE WEIGHT		NA
MINIMUM TOW VEHICLE SPECIFICATIONS	Ford F550 (Incl.)	
TYPE AND SPECIFICATIONS OF EQUIPMENT SHELTER	8x8 Aluminum	
FOOTPRINT REQUIRED FOR COMPLETE DEPLOYMENT	60'x30' typical 120' X 120' with Guys	12' by 50'



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MRP EQUIPMENT	MRP BASED ON	
	ITECS PLATFORM	UCP PLATFORM
POWER SOURCE		
SHORE POWER CONNECTOR	L14-30 Single Phase	L14-50 Single Phase
SHORE POWER REQUIREMENTS	120/240V 30A 3 Wire	120/240V 50A 3 Wire
GENERATOR SPECIFICATIONS	ONAN 10Kw	ONAN 12Kw
GENERATOR FUEL TYPE(s) SUPPORTED	Diesel	Diesel
GENERATOR FUEL CAPACITY	25 Gallons	25 Gallons
GENERATOR RUN TIME UNDER LOAD	36 Hours	72 Hours
SOLAR POWER:	On Request to STR	
TOWER SPECIFICATIONS		
TYPE	Alumatower	
HEIGHT	55 Feet	
WIND RATING		
ANTENNA HARDWARE		



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MRP EQUIPMENT	MRP BASED ON	
	ITECS PLATFORM	UCP PLATFORM
NUMBER AND TYPE OF ANTENNAS SUPPLIED	9 on Tower 3 Roof Mount	Roof Mount
FEEDLINE CONNECTOR TYPE(S)	N Connector	N Connector
ABILITY TO INSTALL ADDITIONAL ANTENNAS	Yes	Yes
ANTENNA ANALYZER	1	
ANTENNA KIT WITH LMR400 CABLES	1	
CONVENTIONAL REPEATERS		
FREQUENCY BANDS	VHF/UHF/700/800	
DIGITAL MODES SUPPORTED	P25 700 only	
NUMBER OF STATIONS ON EACH BAND	1 on each band	
POWER OUTPUT	U/800 50W, 700 10W	
ABILITY TO REPROGRAM DURING DEPLOYMENT	V/U/800: YES 700: NO	



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MRP EQUIPMENT	MRP BASED ON	
	ITECS PLATFORM	UCP PLATFORM
ENCRYPTION TYPES SUPPORTED	AES256	
BACKHAUL CONNECTIVITY		
METHODS, SPECIFICATIONS	Satellite Voice/Data	
GATEWAY EQUIPMENT		
ACU-1000 GATEWAY WITH 10 DSP CARDS	1	
C/AT-ICRI GATEWAY		1



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MRP EQUIPMENT	MRP BASED ON	
	ITECS PLATFORM	UCP PLATFORM
RADIO CACHE EQUIPMENT		
EF JOHNSON VHF CONV. PORTABLE	24	
EF JOHNSON UHF CONV. PORTABLE	24	
EF JOHNSON 800 MHz CONV. PORTABLE	11	
HARRIS XG-100 TRI-BAND PORTABLE	40	
MOTOROLA XTS 1500 7/8 PORTABLE		12
MOTOROLA XTS 1500 SINGLE-UNIT CHARGER		12
TACTICAL REPEATERS		
UHF REPEATER 50W	1	
800 REPEATER 50W	1	
700 PORTABLE REPEATER 10W	1	1
VEHICLE RADIO EQUIPMENT		



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MRP EQUIPMENT	MRP BASED ON	
	ITECS PLATFORM	UCP PLATFORM
VHF LOW MOBILE RADIO	1	1
VHF HIGH MOBILE RADIO	4	4
UHF MOBILE RADIO	2	1
700/800 MOBILE RADIO	3	3
V/U/7/8 MULTI-BAND MOBILE RADIO	1	1
HF RADIO	1	1
AIRCRAFT RADIO	1	1



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MRP EQUIPMENT	MRP BASED ON	
	ITECS PLATFORM	UCP PLATFORM
NON-LMR EQUIPMENT		
SATELLITE SYSTEM	1	1
VOIP PHONE LINES (VIA SATELLITE_	0	0
VERIZON WIRELESS BROADBAND/PHONE	1	1
FIRSTNET WIRELESS BROADBAND/PHONE	1	1
IP PHONE SYSTEM/12 PHONES	1	1
VIDEO CONFERENCE CAPABLE		1
VIKING RING GENERATOR	2	
2 PHONE POE SWITCHES	2	
COMPUTER AND IT EQUIPMENT		
24 PORT NETWORK SWITCH	2	
300 Ft NETWORK EXTENSION CABLES	2	
LAPTOP COMPUTER	1	1



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MRP EQUIPMENT	MRP BASED ON	
	ITECS PLATFORM	UCP PLATFORM
ALL IN ONE LASER PRINTER	1	1
WIDE FORMAT PRINTER		1
NAS DEVICE	1	1
•UCP-13 Gateway and Radio Cache equipment includes: 24 APX-7000 VHF/700/800 P25 portable radios, 4 multi-unit chargers, 1 C/AT-ICRI, and 1 TCB-4 Tactical Communications Bridge. •UCP-10 and UCP-13 have a Panasonic hybrid phone system with 5 handsets,		



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Sec. 10-2(b) Illinois MRPs

The following table identifies MRPs available for deployment in Illinois. For MRP requests, contact the IEMA & OHS Operations Center at 217-782-7860.

Illinois Mission Ready Packages					
UNIT ID	HOST AGENCY	COUNTY	PLATFORM	EMA REGION	STORAGE LOCATION
ITECS 02	Ogle County Sheriff	Ogle	ITECS	02	Wheaton
ITECS 03	Will County EMA	Will	ITECS	03	Joliet
ITECS 04	DuPage County OEM	DuPage	ITECS	04	Wheaton
ITECS 06	City of Jacksonville	Morgan	ITECS	06	Jacksonville
ITECS 05	Kane County Sheriff	Kane	ITECS	03	Geneva
ITECS 07	Champaign Fire Dept.	Champaign	ITECS	07	Champaign
ITECS 08	Monroe County EMA	Monroe	ITECS	08	Waterloo
ITECS 09	Crawford County EMA	Crawford	ITECS	09	Robinson
ITECS 11	City of Marion	Williamson	ITECS	11	Marion



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Illinois Mission Ready Packages

UCP 01	Adams County EMA	Adams	UCP	06	Quincy
UCP 02	Bureau County Sheriff	Bureau	UCP	02	Princeton
UCP 03	DuPage County Sheriff	DuPage	UCP	04	Wheaton
UCP 04	Galesburg Police Dept.	Knox	UCP	02	Galesburg
UCP 05	JoDaviess County EMA	JoDaviess	UCP	02	Galena
UCP 06	Kendall County Sheriff	Kendall	UCP	03	Yorkville
UCP 07	Madison County EMA	Madison	UCP	08	Wood River
UCP 08	McLean County Sheriff	McLean	UCP	07	Bloomington
UCP 09	Rock Island Co. Sheriff	Rock Island	UCP	02	Rock Island
UCP 10*	Tazewell County EMA	Tazewell	UCP	07	Pekin
UCP 11	Jefferson Co. Sheriff	Jefferson	UCP	09	Mt. Vernon
UCP 12	Du Quoin ESDA	Perry	UCP	11	Du Quoin
UCP 13*	Wauconda Fire	Lake	UCP	4	Volo

* See detail notes above, for equipment differences



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Sec. 10-3 DEPLOYABLE INTEROPERABILITY RESOURCES

Deployable Interoperability Resources are described in the following sub-sections.

Sec. 10-3(a) Deployable Repeaters

Sec. 10-3.(a-1) ITECS/UCP REPEATERS

UNIT NO.	OWNING AGENCY	LOCATION	AGENCY PHONE No.	REQ. PHONE No. (24/7)	FREQ. BAND
ITECS 2	Ogle Co. SO	Oregon	815-732-1101	217-782-7860	VHF
ITECS 2	Ogle Co. SO	Oregon	815-732-1101	217-782-7860	UHF
ITECS 2	Ogle Co. SO	Oregon	815-732-1101	217-782-7860	700
ITECS 2	Ogle Co. SO	Oregon	815-732-1101	217-782-7860	800
ITECS 3	Will Co. EMA	Joliet	815-740-0911	217-782-7860	VHF
ITECS 3	Will Co. EMA	Joliet	815-740-0911	217-782-7860	UHF
ITECS 3	Will Co. EMA	Joliet	815-740-0911	217-782-7860	700



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UNIT NO.	OWNING AGENCY	LOCATION	AGENCY PHONE No.	REQ. PHONE No. (24/7)	FREQ. BAND
ITECS 3	Will Co. EMA	Joliet	815-740-0911	217-782-7860	800
ITECS 4	DuPage Co. OEM	Wheaton	630-682-7207	217-782-7860	VHF
ITECS 4	DuPage Co. OEM	Wheaton	630-682-7207	217-782-7860	UHF
ITECS 4	DuPage Co. OEM	Wheaton	630-682-7207	217-782-7860	700
ITECS 4	DuPage Co. OEM	Wheaton	630-682-7207	217-782-7860	800
ITECS 5	Kane Co. SO	Geneva	630-232-5986	217-782-7860	VHF
ITECS 5	Kane Co. SO	Geneva	630-232-5986	217-782-7860	UHF
ITECS 5	Kane Co. SO	Geneva	630-232-5986	217-782-7860	700
ITECS 5	Kane Co. SO	Geneva	630-232-5986	217-782-7860	800
ITECS 6	Jacksonville, IL	Jacksonville	217-479-3570	217-782-7860	VHF
ITECS 6	Jacksonville, IL	Jacksonville	217-479-3570	217-782-7860	UHF
ITECS 6	Jacksonville, IL	Jacksonville	217-479-3570	217-782-7860	700



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UNIT NO.	OWNING AGENCY	LOCATION	AGENCY PHONE No.	REQ. PHONE No. (24/7)	FREQ. BAND
ITECS 6	Jacksonville, IL	Jacksonville	217-479-3570	217-782-7860	800
ITECS 7	Champaign FD	Champaign	217.333.8911	217-782-7860	VHF
ITECS 7	Champaign FD	Champaign	217.333.8911	217-782-7860	UHF
ITECS 7	Champaign FD	Champaign	217.333.8911	217-782-7860	700
ITECS 7	Champaign FD	Champaign	217.333.8911	217-782-7860	800
ITECS 8	Monroe Co. EMA	Waterloo	618-939-8681x243	217-782-7860	VHF
ITECS 8	Monroe Co. EMA	Waterloo	618-939-8681x243	217-782-7860	UHF
ITECS 8	Monroe Co. EMA	Waterloo	618-939-8681x243	217-782-7860	700
ITECS 8	Monroe Co. EMA	Waterloo	618-939-8681x243	217-782-7860	800

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UNIT NO.	OWNING AGENCY	LOCATION	AGENCY PHONE No.	REQ. PHONE No. (24/7)	FREQ. BAND
ITECS 9	Crawford Co. EMA	Robinson	618-546-1515	217-782-7860	VHF
ITECS 9	Crawford Co. EMA	Robinson	618-546-1515	217-782-7860	UHF
ITECS 9	Crawford Co. EMA	Robinson	618-546-1515	217-782-7860	700
ITECS 9	Crawford Co. EMA	Robinson	618-546-1515	217-782-7860	800
ITECS 11	Marion, IL	Marion	618-925-6391	217-782-7860	VHF
ITECS 11	Marion, IL	Marion	618-925-6391	217-782-7860	UHF
ITECS 11	Marion, IL	Marion	618-925-6391	217-782-7860	700
ITECS 11	Marion, IL	Marion	618-925-6391	217-782-7860	800
UCP 01	Adams Co. EMA	Quincy		217-782-7860	700
UCP 02	Bureau Co. SO	Princeton	815-875-3344	217-782-7860	700
UCP 03	DuPage Co. SO	Wheaton	630-682-7207	217-782-7860	700
UCP 04	Galesburg PD	Galesburg	309-343-9151	217-782-7860	700



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UNIT NO.	OWNING AGENCY	LOCATION	AGENCY PHONE No.	REQ. PHONE No. (24/7)	FREQ. BAND
UCP 05	Jo Daviess Co. EMA	Galena	815-777-2141	217-782-7860	700
UCP 06	Kendall Co. SO	Yorkville	630-553-0911	217-782-7860	700
UCP 07	Madison Co. EMA	Wood River	618-296-2400	217-782-7860	700
UCP 08	McLean Co. SO	Bloomington	309-888-5030	217-782-7860	700
UCP 09	Rock Island Co. SO	Rock Island	309-788-8988	217-782-7860	700
UCP 10	Tazewell Co. EMA	Tremont	309-477-2234	217-782-7860	700
UCP 11	Jefferson Co. SO	Mt. Vernon	618-244-8004	217-782-7860	700
UCP 12	Du Quoin ESDA	Du Quoin	618-542-2131	217-782-7860	700
UCP 13	Wauconda FD	Volo	847-438-2349	217-782-7860	700

Sec. 10-3(b) Deployable Gateways

The tables below describe the deployable gateways that are available for use.



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Sec. 10-3.(b-1) ITECS/UCP DEPLOYABLE GATEWAYS

UNIT NO.	PLATFORM	OWNING AGENCY	LOCATION	AGENCY PHONE NO.	REQ. PHONE No. (24/7)
ITECS 2	ITECS	Ogle Co. SO	Oregon	815-732-1101	217-782-7860
ITECS 3	ITECS	Will Co. EMA	Joliet	815-740-0911	217-782-7860
ITECS 4	ITECS	DuPage Co. OEM	Wheaton	630-682-7207	217-782-7860
ITECS 5	ITECS	Kane Co. SO	Geneva	630-232-5986	217-782-7860
ITECS 6	ITECS	Jacksonville, IL	Jacksonville	217-479-3570	217-782-7860
ITECS 7	ITECS	Champaign FD	Champaign	217-333-8911	217-782-7860
ITECS 8	ITECS	Monroe Co. EMA	Waterloo	618-939-8681 x243	217-782-7860
ITECS 9	ITECS	Crawford Co. EMA	Robinson	618-546-1515	217-782-7860
ITECS 11	ITECS	Marion, IL	Marion	618-925-6391	217-782-7860
UCP 01	UCP	Adams Co. EMA	Quincy		217-782-7860



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UNIT NO.	PLATFORM	OWNING AGENCY	LOCATION	AGENCY PHONE NO.	REQ. PHONE No. (24/7)
UCP 02	UCP	Bureau Co. SO	Princeton	815-875-3344	217-782-7860
UCP 03	UCP	DuPage Co. SO	Wheaton	630-682-7207	217-782-7860
UCP 04	UCP	Galesburg PD	Galesburg	309-343-9151	217-782-7860
UCP 05	UCP	Jo Daviess Co. EMA	Galena	815-777-2141	217-782-7860
UCP 06	UCP	Kendall Co. SO	Yorkville	630-553-0911	217-782-7860
UCP 07	UCP	Madison Co. EMA	Wood River	618-296-2400	217-782-7860
UCP 08	UCP	McLean Co. SO	Bloomington	309-888-5030	217-782-7860
UCP 09	UCP	Rock Island Co. SO	Rock Island	309-788-8988	217-782-7860
UCP 10	UCP	Tazewell Co. EMA	Tremont	309-477-2234	217-782-7860
UCP 11	UCP	Jefferson Co. SO	Mt. Vernon	618-244-8004	217-782-7860
UCP 12	UCP	Du Quoin ESDA	Du Quoin	618-542-2131	217-782-7860



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UNIT NO.	PLATFORM	OWNING AGENCY	LOCATION	AGENCY PHONE NO.	REQ. PHONE No. (24/7)
UCP 13	UCP	Wauconda FD	Volo	847-438-2349	217-782-7860



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Sec. 10-3(c) Radio Caches

The tables below describe the deployable radio caches that are available for use.

Sec. 10-3.(c-1) RADIO CACHE PROGRAMMING

Illinois cache radio programming will incorporate the frequency band applicable portion of the SWIT.

Sec. 10-3.(c-2) ITECS/UCP RADIO CACHES

UNIT No.	PLATFOR M	OWNING AGENCY	LOCATION	AGENCY PHONE No.	REQ. PHONE No. (24/7)
ITECS 2	ITECS	Ogle Co. SO	Oregon	815-732-1101	217-782-7860
ITECS 3	ITECS	Will Co. EMA	Joliet	815-740-0911	217-782-7860
ITECS 4	ITECS	DuPage Co. OEM	Wheaton	630-682-7207	217-782-7860
ITECS 5	ITECS	Kane Co. SO	Geneva	630-232-5986	217-782-7860
ITECS 6	ITECS	Jacksonville, IL	Jacksonville	217-479-3570	217-782-7860
ITECS 7	ITECS	Champaign FD	Champaign	217-333-8911	217-782-7860



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UNIT NO.	PLATFOR M	OWNING AGENCY	LOCATION	AGENCY PHONE No.	REQ. PHONE No. (24/7)
ITECS 8	ITECS	Monroe Co. EMA	Waterloo	618-939-8681 x243	217-782-7860
ITECS 9	ITECS	Crawford Co. EMA	Robinson	618-546-1515	217-782-7860
ITECS 11	ITECS	Marion, IL	Marion	618-925-6391	217-782-7860
UCP 01	UCP	Adams Co. EMA	Quincy		217-782-7860
UCP 02	UCP	Bureau Co. SO	Princeton	815-875-3344	217-782-7860
UCP 03	UCP	DuPage Co. SO	Wheaton	630-682-7207	217-782-7860
UCP 04	UCP	Galesburg PD	Galesburg	309-343-9151	217-782-7860
UCP 05	UCP	Jo Daviess Co. EMA	Galena	815-777-2141	217-782-7860
UCP 06	UCP	Kendall Co. SO	Yorkville	630-553-0911	217-782-7860
UCP 07	UCP	Madison Co. EMA	Wood River	618-296-2400	217-782-7860



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UNIT NO.	PLATFOR M	OWNING AGENCY	LOCATION	AGENCY PHONE No.	REQ. PHONE No. (24/7)
UCP 08	UCP	McLean Co. SO	Bloomington	309-888.5030	217-782-7860
UCP 09	UCP	Rock Island Co. SO	Rock Island	309-788-8988	217-782-7860
UCP 10	UCP	Tazewell Co. EMA	Tremont	309-477-2234	217-782-7860
UCP 11	UCP	Jefferson Co. SO	Mt. Vernon	618-244-8004	217-782-7860
UCP 12	UCP	Du Quoin ESDA	Du Quoin	618-542-2131	217-782-7860
UCP 13	UCP	Wauconda FD	Volo	847-438-2349	217-782-7860

Sec. 10-3.(c-3) IEMA & OHS RADIO CACHES

REGION	NO. OF RADIOS	IEMA & OHS OFFICE	LOCATION	PHONE No.	REQ. PHONE No. (24/7)
2	36	Dixon	1325 N Galena Ave Dixon	815-288-1455	217-782-7860
3	36	Ottawa	1639 Champlain St., Ottawa	815-433-7161	217-782-7860



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REGION	NO. OF RADIOS	IEMA & OHS OFFICE	LOCATION	PHONE NO.	REQ. PHONE No. (24/7)
4	36	Des Plaines	9511 W Harrison St., Des Plaines	847-294-4717	217-782-7860
6	36	Springfield	2200 South Dirksen Parkway Springfield	217-782-0922	217-782-7860
7	36	Champaign	2125 South First St., Ste 309, Champaign	217-278-3535	217-782-7860
8	36	Fairview Heights	10045 Bunkum Road, Fairview Heights	618-394-2233	217-782-7860
9	36	Salem	327 South Hotze Road, Salem	618-662-4474	217-782-7860
11	36	Marion	2309 W Main St., Ste 110, Marion	618-662-4474	217-782-7860



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Sec. 10-3.(c-4) IPWMAN/MABAS RADIO CACHES

UNIT No.	No. OF RADIOS	LOCATION	MODEL	BANDS	REQ. PHONE No. (24/7)
IPWMAN SC21-N	18	Wheeling,	APX7000	VHF, 700/800	217-782-7860
IPWMAN SC21-C	18	Champaign	APX7000	VHF, 700/800	217-782-7860
IPWMAN SC21-S	18	Marion	APX7000	VHF, 700/800	217-782-7860
MABAS Cache 3	12	233 W Hintz Rd., Wheeling	APX7000	VHF, 700/800	847-724-5700
MABAS Cache 4	12	233 W Hintz Rd., Wheeling	APX7000	VHF, 700/800	847-724-5700
MABAS Cache 5	12	233 W Hintz Rd., Wheeling	APX7000	VHF, 700/800	847-724-5700
MABAS Cache 6	12	233 W Hintz Rd., Wheeling	APX7000	VHF, 700/800	847-724-5700



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UNIT No.	No. OF RADIOS	LOCATION	MODEL	BANDS	REQ. PHONE No. (24/7)
MABAS Cache 7	12	233 W Hintz Rd., Wheeling	APX7000	VHF, 700/800	847-724-5700
MABAS Cache 8	12	233 W Hintz Rd., Wheeling	APX7000	VHF, 700/800	847-724-5700
MABAS Cache 9	12	233 W Hintz Rd., Wheeling	APX7000	VHF, 700/800	847-724-5700
MABAS Cache Y	50	233 W Hintz Rd., Wheeling	XTS5000	700/800	847-724-5700
MABAS Cache 20	100	233 W Hintz Rd., Wheeling	APX8000	VHF, UHF, 700/800	847-724-5700



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Sec. 10-3(d) IDOT Mobile Emergency Operations Center (MEOC)

24/7 PHONE (REQUESTS)		217-782-7860					
POINT OF CONTACT (REQUESTS)		IEMA & OHS Operations Center					
EMAIL (REQUESTS)		ema.dispatcher@illinois.gov					
STR PURPOSE		Mobile EOC					
DEPLOYMENT METHOD		Towed					
SHORELINE		100 ft. provided with assorted NEMA connectors, 12A draw					
GENERATOR		Gasoline-powered with 8 hrs. of fuel provided (5 gal.)					
VOICE/DATA COMMS.		2 voice lines (external)/Cellular data (Cradlepoint)					
TIME TO SETUP AND DEPLOY		1 hr.					
		AVAIL. SEATING					
IDENTIFIER	LOCATION KEPT	RADO	CONF.	RADIOS	STAR-COM	MAST HT.	GATE-WAY



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IDOT D2 MEOC	Dixon	1	4-6	L/V/U/7/8	Yes	22 ft.	Yes
IDOT D3 MEOC	Ottawa	1	4-6	L/V/U/7/8	Yes	22 ft.	Yes
IDOT D4 MEOC	Peoria	1	4-6	L/V/U/7/8	Yes	22 ft.	Yes
IDOT D5 MEOC	Paris	1	4-6	L/V/U/7/8	Yes	22 ft.	Yes
IDOT D7 MEOC	Effingham	1	4-6	L/V/U/7/8	Yes	22 ft.	Yes



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Sec. 10-3(e) IDOT Mobile Incident Command Center (MICC)

24/7 PHONE (REQUESTS)		217-782-7860					
POINT OF CONTACT (REQUESTS)		IEMA & OHS Operations Center					
EMAIL (REQUESTS)		ema.dispatcher@illinois.gov					
STR PURPOSE		Mobile EOC					
DEPLOYMENT METHOD		Driven					
SHORELINE		100 ft. provided with assorted NEMA connectors, 12A draw					
GENERATOR		Gasoline-powered with 8 hrs. of fuel provided (5 gal.)					
VOICE/DATA COMMS.		2 voice lines (external)/Cellular data (Cradlepoint)					
TIME TO SETUP AND DEPLOY		1 hr.					
		AVAIL. SEATING					
IDENTIFIER	LOCATION KEPT	RADO	CONF.	RADIOS	STAR-COM	MAST HT.	GATEWAY

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IDOT D3 MICC	Ottawa, IL	2	4	L/V/U/7/8	Yes	22 ft.	Yes
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Sec. 10-3(f) IEMA & OHS Field Command

24/7 PHONE (REQUESTS)		217-782-7860					
POINT OF CONTACT (REQUESTS)		IEMA & OHS Operations Center					
EMAIL (REQUESTS)		ema.dispatcher@illinois.gov					
STR PURPOSE		Incident Command					
DEPLOYMENT METHOD		Driven					
SHORELINE		75 ft. provided.					
GENERATOR		None					
VOICE/DATA COMMS.		8 PBX voice lines VoIP/Cellular/Landline Satellite, Cellular, and Wired Internet					
TIME TO SETUP AND DEPLOY		1 hr.					
		AVAIL. SEATING					
IDENTIFIER	LOCATION KEPT	RADO	CONF.	RADIOS	STAR-COM	MAST HT.	OTHER



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IEMA & OHS Field Command 1	Springfield, IL	1	15	L/V/U/7/8	Yes	50 ft.	CCTV
IEMA & OHS Field Command 2	Springfield, IL	1	15	L/V/U/7/8	Yes	50 ft.	CCTV



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Sec. 10-3(g) IEMA & OHS Unified Area Command (UAC)

24/7 PHONE (REQUESTS)	217-782-7860					
POINT OF CONTACT (REQUESTS)	IEMA & OHS Operations Center					
EMAIL (REQUESTS)	ema.dispatcher@illinois.gov					
STR PURPOSE	Areawide Command					
DEPLOYMENT METHOD	Driven					
SHORELINE	75 ft. provided. Requires 208 VAC and electrician to wire					
GENERATOR	Diesel-powered with 72 hrs. of fuel provided (100 gal.)					
VOICE/DATA COMMS.	30 PBX voice lines VoIP/Cellular/Landline Satellite, Cellular, and Wired Internet					
TIME TO SETUP AND DEPLOY	1 hr.					
		AVAIL. SEATING				



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IDENTIFIER	LOCATION KEPT	RADO	CONF.	RADIOS	STAR-COM	MAST HT.	OTHER
IEMA & OHS UAC	Springfield, IL	2	20	L/V/U/7/8	Yes	45 ft.	CCTV



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Sec. 10-3(h) IESMA Emergency Management Assistance Team (EMAT) Trailer

24/7 PHONE (REQUESTS)	217-782-7860					
POINT OF CONTACT (REQUESTS)	IEMA & OHS Operations Center					
EMAIL (REQUESTS)	ema.dispatcher@illinois.gov					
STR PURPOSE	Emergency Management Assistance Team (EMAT) Incident Command					
DEPLOYMENT METHOD	Towed					
SHORELINE	Not specified					
GENERATOR	EMAT 3 and 4 are equipped with propane-powered 5,500-watt generators.					
VOICE/DATA COMMS.	Cellular voice/data (LTE)					
TIME TO SETUP AND DEPLOY	1 hr.					
		AVAIL. SEATING				



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IDENTIFIER	LOCATION KEPT	RADO	CONF.	RADIOS	STAR-COM	MAST HT.	GENERATOR
EMAT 1	Quincy, IL	2	6	L/V/U/7/8	Yes	40 ft.	None
EMAT 2	Benton, IL	2	6	L/V/U/7/8	Yes	40 ft.	None
EMAT 3	Du Quoin, IL	2	6	L/V/U/7/8	Yes		5.5 kW
EMAT 4	Princeton, IL	2	6	L/V/U/7/8	Yes		5.5 kW



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Sec. 10-3(i) MABAS Mobile Support Units (MSU)

24/7 PHONE (REQUESTS)	847-724-5700
POINT OF CONTACT (REQUESTS)	R.E.D Center
EMAIL (REQUESTS)	
STR PURPOSE	Mobile Workspace/Command Post
SHORELINE	Driven
DEPLOYMENT METHOD	50 ft. provided with assorted NEMA connectors
GENERATOR	Diesel-powered, draws from main diesel tank
VOICE/DATA COMMUNICATIONS	▪ 1 external VoIP line, Starlink data ▪ Cellular data (CradlePoint), FirstNet and Verizon ▪ VHF and Starcom radios (front and rear) ▪ APX6000 STARCOM Portables (6) ▪ Large plotter, Credentialing system



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TIME TO SETUP AND DEPLOY		30 min.			
		AVAIL. SEATING			
IDENTIFIER	LOCATION KEPT	RADO	COMMAND	RADIOS	STARCOM
MSU North	Wheeling	1	5	VHF/700/800	Yes
MSU Northwest	Shannon	1	5	VHF/700/800	Yes
MSU Central	Mapleton	1	5	VHF/700/800	Yes
MSU South	Carbondale	1	5	VHF/700/800	Yes



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Sec. 10-3(j) RapidCom

24/7 PHONE (REQUESTS)	217-782-7860
POINT OF CONTACT (REQUESTS)	IEMA & OHS Operations Center
EMAIL (REQUESTS)	ema.dispatcher@illinois.gov
STR PURPOSE	Communications Support
SHORELINE	120 VAC
DEPLOYMENT METHOD	Driven
GENERATOR	Gasoline-powered with 24 hrs. of fuel provided.
VOICE/DATA COMMUNICATIONS	• 4 SIP on IP Phone system with 12-36 IP Phones, 2 SIP Phones in Command Case. • PepWave Modem with FirstNet & Verizon • WiFi at vehicle and provide remote WiFi in CP. • Wireless bridges to extend IP functionality. • VHF, UHF, 700 MHz, and 800 MHz repeaters.



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TIME TO SETUP AND DEPLOY		1 hr.					
		AVAIL. SEATING					
IDENTIFIER	LOCATION KEPT	RAD O	CONF.	RADIOS	STARCO M	MAST HT.	OTHER
RapidCom4	Wheaton, IL	0	0	L/V/U/7/8	Yes	21 ft	ACU- 2000



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Sec. 10-3(k) STARCOM21 Site on Wheels (SOW)

24/7 PHONE (REQUESTS)		217-782-7860			
POINT OF CONTACT (REQUESTS)		IEMA & OHS Operations Center			
EMAIL (REQUESTS)		ema.dispatcher@illinois.gov			
STR PURPOSE		STARCOM21 trunked radio site			
DEPLOYMENT METHOD		Towed or Airlift			
SHORELINE		Not specified			
GENERATOR		Gasoline-powered with 36 hrs. of fuel provided (25 gal.)			
VOICE/DATA COMMS.		Satellite-based backhaul to STARCOM21			
TIME TO SETUP AND DEPLOY		1 hr.			
IDENTIFIER	LOCATION KEPT	SATELLITE DATA	GENERATOR	MAST HT.	CONV. REPEATER CHANNEL
North SOW	Sterling, IL	Backhaul	Included	60 ft.	8TAC91
Central SOW	Springfield, IL	Backhaul	Included	60 ft.	8TAC92

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IEMA & OHS SOW	Springfield, IL	Backhaul	Included	60 ft.	8TAC94
South SOW	Du Quoin, IL	Backhaul	Included	60 ft.	8TAC93



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Sec. 10-3(I) Mobile Generators

24/7 PHONE (REQUESTS)		217-782-7860						
POINT OF CONTACT (REQUESTS)		IEMA & OHS Operations Center						
EMAIL (REQUESTS)		ema.dispatcher@illinois.gov						
STR PURPOSE		Deployable generator						
DEPLOYMENT METHOD		Towed						
TIME TO SETUP AND DEPLOY		1 hr.						
			OUTPUT POWER (kVA)					FUEL
REGION	HOST AGENCY	LOCATION KEPT	30	45	60	100	OTHER	TYPE
2	Lee Co EMA	Dixon			4			Diesel
3	Aurora EMA	Aurora	1		4			Diesel
3	Will Co EMA	Joliet	1		4	1		Diesel
3	McHenry Co EMA	Woodstock			5	1		Diesel



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4	Hoffman Estates EMA	Hoffman Estates	1		4			Diesel
4	Lake Co EMA	Libertyville	1		3	1		Diesel
6	Adams Co EMA	Quincy	1		4	1		Diesel
7	Champaign Co EMA	Urbana	1		4	1		Diesel
8	Macoupin Co EMA	Carlinville	1		4	1		Diesel
9	Effingham Co EMA	Effingham			5	1		Diesel
10	Franklin Co EMA	Benton	1		5	1		Diesel
11	Du Quoin EMA	Du Quoin	1		5	1		Diesel



SECTION 11 Emergency Wireless Carrier Services

Interoperable communications requirements for responses to many incidents and planned events can be handled with the coordinated response of local, regional, and state resources. However, other responses and events may require additional support due to their location, scope, or other factors. Some national wireless carrier providers provide emergency response services and capabilities to meet these needs.

Coordination of resource deployments by wireless carrier services should be coordinated through the IEMA & OHS Operations Center at 217-782-7860.

WIRELESS SERVICE PROVIDER	24/7 PHONE
FirstNet	800-574-7000
T-Mobile Emergency Response Team	Dedicated Support Line: 888-639-0020 GETS Users: 254-295-2220
Verizon Response Team	Support Line: 800-981-9885
USCC Response Team	Support Line: 877-785-5819



SECTION 12 Technical Reference

Sec. 12-1 EMERGENCY SUPPORT FUNCTIONS (ESF)

ESF #	Function
ESF#1	Transportation
ESF #2	Communications
ESF #3	Public Works and Engineering
ESF #4	Firefighting
ESF #5	Emergency Management
ESF #6	Mass Care, Housing and Human Services
ESF #7	Resource Support
ESF #8	Public Health and Medical Services
ESF #9	Urban Search and Rescue



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ESF #	Function
ESF #10	Oil and Hazardous Materials Response
ESF #11	Agriculture and Natural Resources
ESF #12	Energy
ESF #13	Public Safety and Security
ESF #14	Long Term Community Recovery
ESF #15	External Affairs



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Sec. 12-2 CTCSS TONES AND CODES

CTCSS (Continuous Tone Coded Squelch System)					
TONES and CODES					
Freq. (Hz)	ICOM No.	Motorola PL	Freq. (Hz)	ICOM No.	Motorola PL
67.0	01	XZ	136.5	21/04	4Z
69.3**	--	WZ	141.3	22/13	4A
71.9	02	XA	146.2	23/05	4B
74.4	03	WA	151.4	24/14	5Z
77.0	04	XB	156.7	25/06	5A
79.7	05	WB	162.2	26	5B
82.5	06	YZ	167.9	27/07	6Z
85.4	07	YA	173.8	28	6A
88.5	08	YB	179.9	29	6B
91.5	09	ZZ	186.2	30	7Z
94.8	10	ZA	192.8	31	7A
97.4	11	ZB	203.5	32	M1
100.0	12/09	1Z	206.5	--	8Z
103.5	13/08	1A	210.7	33	M2



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CTCSS (Continuous Tone Coded Squelch System)

TONES and CODES

Freq. (Hz)	ICOM No.	Motorola PL	Freq. (Hz)	ICOM No.	Motorola PL
107.2	14/10	1B	218.1	34	M3
110.9	15/01	2Z	225.7	35	M4
114.8	16/11	2A	229.1	--	9Z
118.8	17	2B	233.6	36	M5
123.0	18/02	3Z	241.8	37	M6
127.3	19/12	3A	250.3	38	M7
131.8	20/03	3B	254.1	--	0Z

**** 69.4 in some radios**

Sec. 12-3 DCS CODES

DCS (Digital Coded Squelch) CODES

NORMAL	INVERTED	NORMAL	INVERTED	NORMAL	INVERTED
023	047	223	134	445	043
025	244	225	122	446	255
026	464	226	411	452	053
031	627	243	351	454	266
032	051	244	025	455	332

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DCS (Digital Coded Squelch) CODES

NORMAL	INVERTED	NORMAL	INVERTED	NORMAL	INVERTED
036	172	245	072	462	252
043	445	246	523	464	026
047	023	251	165	465	331
051	032	252	462	466	662
053	452	255	446	503	162
054	413	261	732	506	073
065	271	263	205	516	432
071	306	265	156	523	246
072	245	266	454	526	325
073	506	271	065	532	343
074	174	274	145	546	132
114	712	306	071	565	703
115	152	311	664	606	631
116	754	315	423	612	346
122	225	325	526	624	632
125	365	331	465	627	031
131	364	332	455	631	606
132	546	343	532	632	624
134	223	346	612	654	743
143	412	351	243	662	466
145	274	356	212	664	311

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DCS (Digital Coded Squelch) CODES

NORMAL	INVERTED	NORMAL	INVERTED	NORMAL	INVERTED
152	115	364	131	703	565
155	731	365	125	712	114
156	265	371	734	723	431
162	503	411	226	731	155
165	251	412	143	732	261
172	036	413	054	734	371
174	074	423	315	743	654
205	263	431	723	754	116
212	356	432	516		



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Sec. 12-4 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



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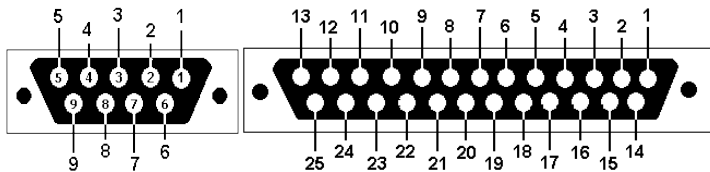
\$989680-\$FFFFFE	For talkgroup use or other special purposes
FFFFFFF	Designates everyone – used when implementing a group call with a TGID3



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Sec. 12-5 RS-232 SERIAL CONNECTOR PIN-OUTS (DB9 AND DB25)

“Front” refers to the ends with the pins; “rear” refers to the end with the cable. The following is a view of the pins, looking at the front of the female connector (rear of male):



DB9	DB25	SIGNAL	DB9	DB25	SIGNAL
1	8	Carrier Detect	6	6	Data Set Ready
2	3	Receive Data	7	4	Request to Send
3	2	Transmit Data	8	5	Clear to Send
4	10	Data Terminal Ready	9	22	Ring Indicator
5	1, 7	Ground **			

****** On the DB25, 1 is the protective ground, 7 is the signal ground.



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Sec. 12-6 TELEPHONE CONNECTOR PIN-OUTS

Pin numbers are from left to right, holding the plug with the contacts up and looking at the side that does not have the spring clip.

PIN	RJ25	RJ14	RJ11
1	T3		
2	T2	T2	
3	R1	R1	R1
4	T1	T1	T1
5	R2	R2	
6	R3		

CIRCUIT	BANDED	SOLID
T1	White/Blue	Green
R1	Blue/White	Red
T2	White/Orange	Black
R2	Orange/White	Yellow
T3	White/Green	White
R3	Green/White	Blue
T4	White/Brown	Orange
R4	Brown/White	Brown



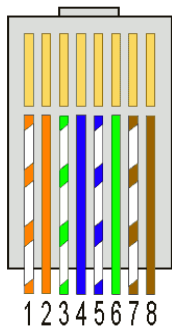
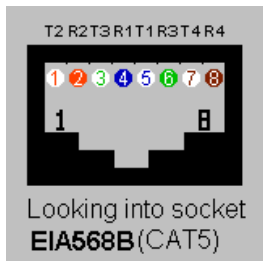
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Sec. 12-7 RJ-45 PIN-OUTS

Sec. 12-7(a) Color Codes for T568B

PIN	COLOR	PAIR	NAME
1	White/Orange	2	TxData+
2	Orange	2	TxData-
3	White/Green	3	RecvData+
4	Blue	1	
5	White/Blue	1	
6	Green	3	RecvData-
7	White/Brown	4	
8	Brown	4	

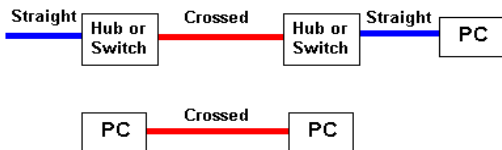
Note that the odd pin numbers are always the white with stripe color.



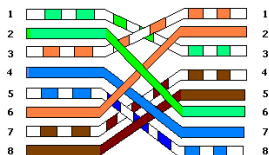


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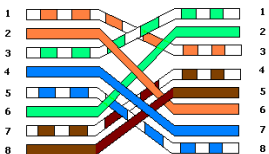
Sec. 12-7(b) CAT5 Straight and Crossover Cables



TIA/EIA 568A Crossed Wiring



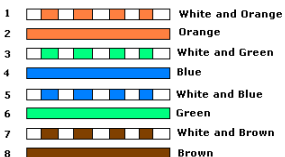
TIA/EIA 568B Crossed Wiring



TIA/EIA 568A Wiring



TIA/EIA 568B Wiring





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Sec. 12-8 TELEPHONE BLOCK WIRING (25 PAIR)

TELEPHONE BLOCK WIRING (25 PAIR)			
TIP RING	TIP COLOR (REV. RING)	50 PIN POSITION	66 OR 110 BLOCK POSITION
1	White/Blue	26,1	1,2
2	White/Orange	27,2	3,4
3	White/Green	28,3	5,6
4	White/Brown	29,4	7,8
5	White/Slate	30,5	9,10
6	Red/Blue	31,6	11,12
7	Red/Orange	32,7	13,14
8	Red/Green	33,8	15,16
9	Red/Brown	34,9	17,18
10	Red/Slate	35,10	19,20
11	Black/Blue	36,11	21,22
12	Black/Orange	37,12	23,24
13	Black/Green	38,13	25,26
14	Black/Brown	39,14	27,28
15	Black/Slate	40,15	29,30
16	Yellow/Blue	41,16	31,32
17	Yellow/Orange	42,17	33,34
18	Yellow/Green	43,18	35,36



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TELEPHONE BLOCK WIRING (25 PAIR)

TIP RING	TIP COLOR (REV. RING)	50 PIN POSITION	66 Or 110 BLOCK POSITION
19	Yellow/Brown	44,19	37,38
20	Yellow/Slate	45,20	39,40
21	Violet/Blue	46,21	41,42
22	Violet/Orange	47,22	43,44
23	Violet/Green	48,23	45,46
24	Violet/Brown	49,24	47,48
25	Violet/Slate	50,25	49,50



SECTION 13 Interoperability “Watch Out” Situations

- Incidents using channels in more than one spectrum band.
- Unable to communicate critical information due to radio congestion.
- Unfamiliar with radio system(s) or assigned radio functionality.
- Instructions and assignments not clear.
- Inadequate communication with responders or supervisors.
- Dispatch to Dispatch channel patching.
- Inadequate number of tactical channels available or assigned.
- Multiple conversations on the same talkgroup or channel.
- Radio systems used for interoperability do not completely support the incident and lack good radio coverage.
- High levels of background noise.



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- Emergency button activation – who is receiving the notification?
- Multiple agencies performing radio programming at the incident.
- Organizations in the system do not use the same vocabulary.
- Mobile gateway devices being used in a strategic (wide area) rather than tactical (local) environment.
- Multiple mobile gateways available at the incident.
- Single COML for the incident is not identified.
- Working in the deep interior of a building, parking garage, or underground.



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SECTION 14 Notes

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