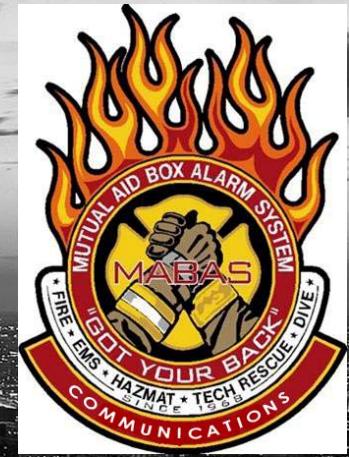


# Illinois Statewide Interoperability Template (SWIT) Familiarization Session

February 2023



ILSIEC

ILLINOIS STATEWIDE INTEROPERABILITY  
EXECUTIVE SUPPORT TEAM

# WHAT IS THE SWIT?

The Illinois Statewide Interoperability Template (SWIT) is a standardized radio template to facilitate effective interagency communications across Illinois.



# SWIT PURPOSE

- Refine and update the legacy Illinois Terrorism Task Force (ITTF) Template to include new and legacy SC21 Talkgroups (TGs)
- Update conventional channels, and include all available Interop Channels in High-Band VHF (National and Federal), UHF (National and Federal), 700MHz, and 800MHz bands



# **JUST ROLL WITH SWIT**

By December 31, 2025, SWIT implementation will be complete.

1. Review the template and recommended visor cards.
2. Get your radios programmed.
3. Load the common patch key CKR1,



# WHEN IN DOUBT

If you have questions or comments about the SWIT, TG use, or interoperability in general... please contact:

- The Statewide Interoperability Coordinator Matthew Miller or
- The Deputy Coordinator Colin Vasconcelles.

Email: [ema.swic@illinois.gov](mailto:ema.swic@illinois.gov)

OPS Center Phone: 217-782-7860

NOTE: Almost all TGs in the SWIT need pre-approval for event use.



# **SWIT DEVELOPMENT AND HISTORY**

The process from then to now.



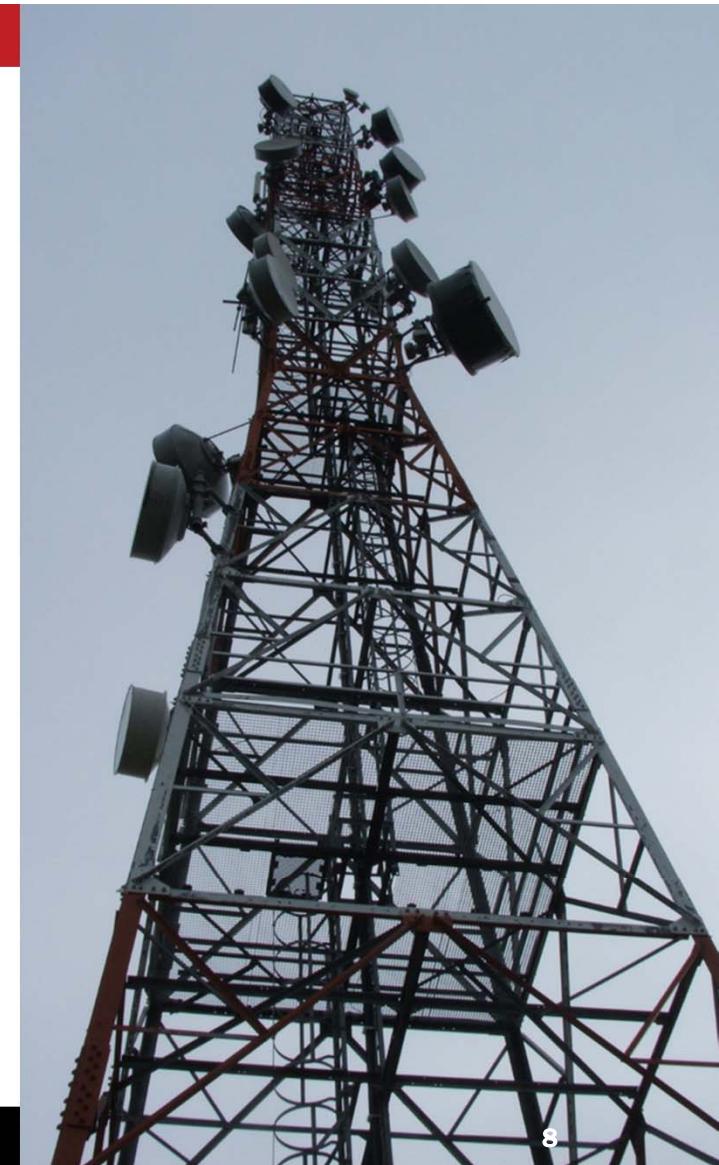
# LESSONS LEARNED LED TO NEEDED CHANGES

Simultaneously events demonstrated need for more frequency and TG resources

- Civil Unrest
  - Law Enforcement Communications Support
  - Need for encrypted communications
  - Expanded need for additional channels or TGs
- Pandemic
  - Communications needs at testing sites
  - Supply/vaccination distribution security concerns

# **IMPROVED INTEROPERABILITY AND EXPANDED RESOURCES**

- Interoperability is achieved and improved by having a coordinated template that supports communications use in all available frequency bands. It serves as the lowest common communications denominator between agencies.
- The SWIC, SIEC, and SIEC Technical Committee recognized the need to update the ITTF template plan to incorporate the lessons learned from the prior events and expand access to all users.



# **SIEC ACTIONS TOWARDS NEW SWIT**

- June 2021 – Setup workshop to concentrate on the refresh of the ITTF
- July 2021 – Assigned the Technical Subcommittee to address refresh
- September 2021 – Joint Technical/Governance Committee Workshop
- September 2021 – Initial Statewide Interoperability Template Approved
- November 2021 – Statewide Interoperability Template Updated



## TRANSITION FROM THE ITTF TEMPLATE TO THE SWIT



Illinois Statewide Interoperability Executive Committee | Updated plan adopted in November 2021



# ITTF TEMPLATE HISTORY

- In the early 2000s, the Illinois State Police (ISP) moved to a new radio system and other state agencies were ready to follow.
- Concurrently, a few local agencies were developing their own radio systems or planning to join STARCOM 21.
- Many agencies across the state were using VHF and UHF frequencies for years.
- With multiple system migrations, the need to develop interoperability plans was part of ongoing discussions amongst agencies.



# ITTF TEMPLATE HISTORY CONT.

- Through the early 2000's, many public safety agencies increased engagement in interoperable communications, and plans were developed for common TGs and channels designed to achieve operability and interoperability.
- The STARCOM 21 system reached the final acceptance phases in 2007.



# WHAT AN EARLY ITTF TEMPLATE LOOKED LIKE

	Zone							
	AA	AB	AC	AD	AE	AF	AG	
Mode	1	IESMA	RGN 6A	7 TAC 58D	7 TAC 74D	7 CAL 59D	I-CALL D	8CAL-90D
	2	ILEAS	RGN 6B	7 TAC 62D	7 TAC 78D	7 TAC 63D	I-TAC 1 D	8TAC-91D
	3	MABAS	RGN 7A	7 TAC 66D	7 TAC 82D	7 TAC 67D	I-TAC 2 D	8TAC-92D
	4	PUB HLTH	RGN 7B	7 LAW 68D	7 LAW 84D	7 TAC 73D	I-TAC 3 D	8TAC-93D
	5	INCDNT 1	RGN 8A	7 LAW 69D	7 LAW 85D	7 CAL 75D	I-TAC 4 D	8TAC-94D
	6	INCDNT 2	RGN 8B	7 TAC 70D	7 TAC 86D	7 TAC 79D	I-CALL R	8CAL-90R
	7	INCDNT 3	RGN 9A	7 MOB 72D	7 MOB 88D	7 TAC 83D	I-TAC 1 R	8TAC-91R
	8	ZONE 1	RGN 9B	7 TAC 58	7 TAC 74	7 TAC 89D	I-TAC 2 R	8TAC-92R
	9	ZONE 2	RGN 11A	7 TAC 62	7 TAC 78	7 CAL 59	I-TAC 3 R	8TAC-93R
	10	ZONE 3	RGN 11B	7 TAC 66	7 TAC 82	7 TAC 63	I-TAC 4 R	8TAC-94R
	11	RGN 2A		7 LAW 68	7 LAW 84	7 TAC 67		
	12	RGN 2B		7 LAW 69	7 LAW 85	7 TAC 73		
	13	RGN 3A		7 TAC 70	7 TAC 86	7 CAL 75		
	14	RGN 3B		7 MOB 72	7 MOB 88	7 TAC 79		
	15	RGN 4A				7 TAC 83		
	16	RGN 4B				7 TAC 89		

Shown above is the successor "AA" template

Original ITTF " A" template of 32 talkgroups created a “common ground / lowest Common denominator” communications use plan for STARCOM and 700/800 interoperability



# VHF IS STILL IMPORTANT TO SUPPORT INTEROPERABILITY

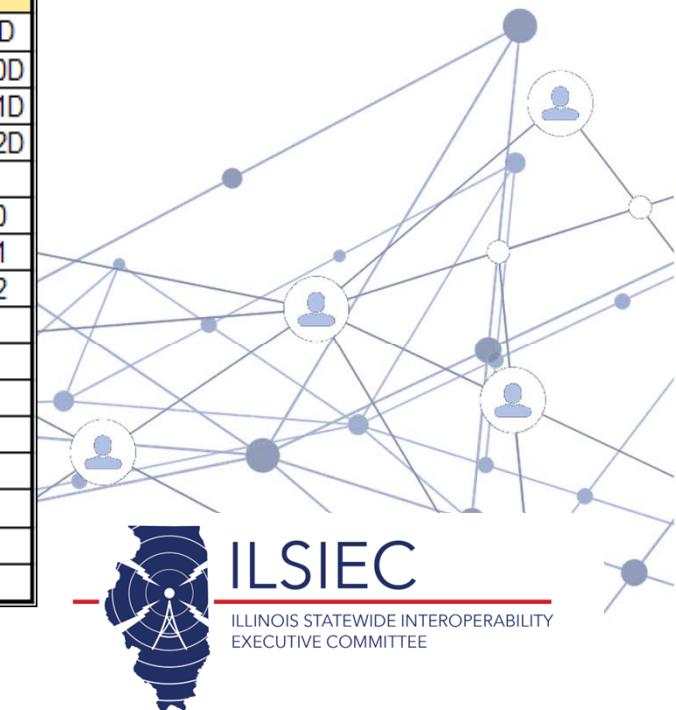
- To support early interoperability, there were over 3000 VHF radios distributed in Illinois to law, fire and emergency management agencies.
- Many agencies in Illinois still utilize the same VHF frequencies that were part of the original VHF template and therefore they are also included in the new SWIT.



# THE TRANSITION TO THE “B” ITTF TEMPLATE

	Zone								
	BA	BB	BC	BD	BE	BF	BG	BH	BI
Mode	1 IESMA	RGN 2A	8CALL90D	7CALL50D	7MOB59D	7CALL70D	7MOB79D	7FTAC1D	7MTAC9D
	2 ILEAS	RGN 2B	8TAC91D	7TAC51D	7MOB59DA	7TAC71D	7MOB79DA	7FTAC2D	7NTAC10D
	3 MABAS	RGN 3A	8TAC92D	7TAC52D	7LAW61D	7TAC72D	7LAW81D	7FTAC3D	7NTAC11D
	4 PUB HLTH	RGN 3B	8TAC93D	7TAC53D	7LAW62D	7TAC73D	7LAW82D	7GTAC4D	7NTAC12D
	5 IPWMAN	RGN 4A	8TAC94D	7TAC54D	7FIRE63D	7TAC74D	7FIRE83D	7GTAC5D	7MTAC9
	6 INCDNT 1	RGN 4B	8CALL90	7TAC55D	7FIRE64D	7TAC75D	7FIRE84D	7LTAC6D	7NTAC10
	7 INCDNT 2	RGN 6A	8TAC91	7TAC56D	7MED65D	7TAC76D	7MED86D	7LTAC7D	7NTAC11
	8 INCDNT 3	RGN 6B	8TAC92	7GTAC57D	7MED66D	7GTAC77D	7MED87D	7LTAC8D	7NTAC12
	9 INCDNT 4	RGN 7A	8TAC93	7CALL50	7MOB59	7CALL70	7MOB79	7FTAC1	
	10 INCDNT 5	RGN 7B	8TAC94	7TAC51	7MOB59A	7TAC71	7MOB79A	7FTAC2	
	11 NORTH A	RGN 8A		7TAC52	7LAW61	7TAC72	7LAW81	7FTAC3	
	12 NORTH B	RGN 8B		7TAC53	7LAW62	7TAC73	7LAW82	7GTAC4	
	13 CENTER A	RGN 9A		7TAC54	7FIRE63	7TAC74	7FIRE83	7GTAC5	
	14 CENTER B	RGN 9B		7TAC55	7FIRE64	7TAC75	7FIRE84	7LTAC6	
	15 SOUTH A	RGN 11A		7TAC56	7MED65	7TAC76	7MED86	7LTAC7	
	16 SOUTH B	RGN 11B		7GTAC57	7MED66	7GTAC77	7MED87	7LTAC8	

The "B" Template was developed in 2010.



# ENCRYPTION

In 2016-2017, encryption was adopted and zones BY and BZ were added.

If you plan on encrypting your own TGs or frequencies, the SLN/CKR and KID selection must be coordinated by Motorola in conjunction with the SIEC Encryption Working Group (EWG).

BY- 700  
Interop  
Encrypted

7MOB59DE	SECURE 1
7MOB79DE	SECURE 2
7LAW81DE	SECURE 3
7LAW82DE	SECURE 4
7FIRE83DE	SECURE 5
7FIRE84DE	SECURE 6
7MED86DE	SECURE 7
7MED87DE	SECURE 8
7MOB59E	SECLAW 1
7MOB79E	SECLAW 2
7LAW81E	SECFIR 1
7LAW82E	SECFIR 2
7FIRE83E	SECEMA 1
7FIRE84E	SECEMA 2
7MED86E	SECDOT 1
7MED87E	SECDOT 2

BZ- Secure  
TGs on  
STARCOM

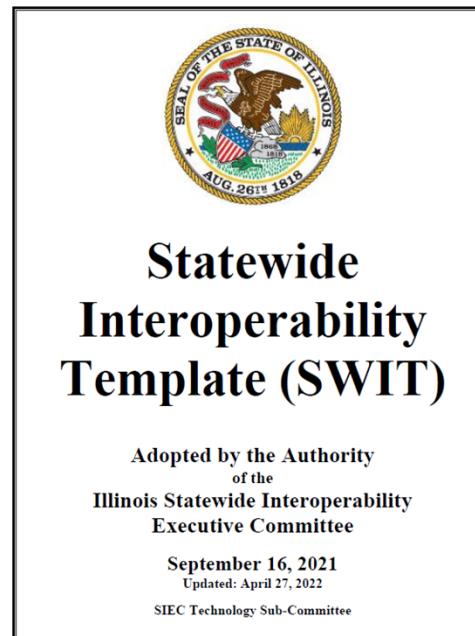


# **SWIT ORIENTATION**

**Review of the SWIT**

# SWIT PROGRAMMING GUIDE

- VHF/UHF/700/800/STAR COM21 PROGRAMMING GUIDE
- Adopted Sept. 16, 2021, and updated April 27, 2022



# GOALS FOR IMPLEMENTATION

- Provide awareness and operational training to users; initial and ongoing training for interoperable communications is imperative for success and all public safety radio users should receive adequate initial and annual training regarding the SWIT and the operation of their communications equipment.
- Provide updates, programming requirements and programming guidance as set forth by the ILSIEC to all agencies and contractors approved to program radios



# GENERAL POINTS ABOUT THE NEW SWIT

- ✓ Established “call” TGs
- ✓ Reorganized Regional TGs
- ✓ Backward Compatibility with the Legacy ITTF Template.
- ✓ Added Discipline-Specific TGs on STARCOM21 (e.g., Fire, Law, 9-1-1, T.E.R.T.)
- ✓ Expanded the number of Encrypted TGs
- ✓ Added “dormant” TGs on STARCOM21 to allow for expansion
- ✓ Includes VHF and UHF: National and Federal



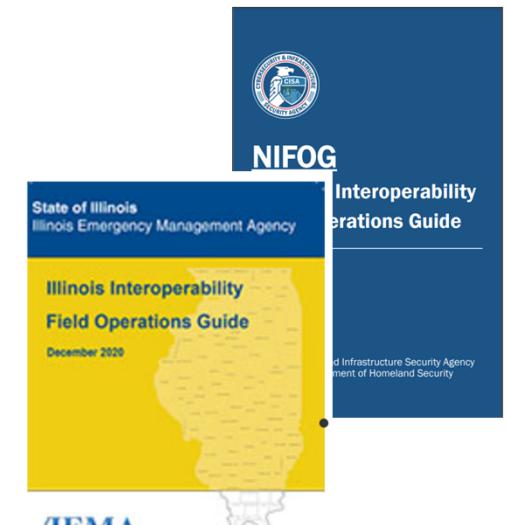
# BACKWARD COMPATIBILITY

ITTF / SWIT NAMING CROSSWALK												
ZONE	CALLING			INCIDENT A			SECURE A			MABAS		
Chan	SWIT Name	Legacy Name	ITTF Zone	SWIT Name	Legacy Name	ITTF Zone	SWIT Name	Legacy Name	ITTF Zone	SWIT Name	Legacy Name	ITTF Zone
1	IL-CALL	IESMA	BA	IL-INC A1	INCIDNT1	BA	IL-SEC A1	SECURE1	BZ	MABAS	MABAS	BA
2	ILEAS	ILEAS	BA	IL-INC A2	INCIDNT2	BA	IL-SEC A2	SECURE2	BZ	MABAS SEC	MABASSEC	MABAS
3	MABAS	MABAS	BA	IL-INC A3	INCIDNT3	BA	IL-SEC A3	SECURE3	BZ	MABAS OPS1	OPS	MABAS
4	IDPH	IDPH	BA	IL-INC A4	INCIDNT4	BA	IL-SEC A4	SECURE4	BZ	MABAS OPS2	(NEW)	N/A
5	IPWMAN	IPWMAN	BA	IL-INC A5	INCIDNT5	BA	IL-SEC A5	SECURE5	BZ	MABAS OPS3E	OPS SEC	MABAS
6	EMA	NORTH A	BA	IL-INC A6	RGN 2A	BB	IL-SEC A6	SECURE6	BZ	MABAS OPS4E	(NEW)	N/A
7	IL-RGN 2	RGN 2B	BB	IL-INC A7	RGN 3A	BB	IL-SECLAW7	SECLAW1	BZ	IL-HZMT	HAZMAT	MABAS
8	IL-RGN 3	RGN 3B	BB	IL-INC A8	RGN 4A	BB	IL-SECLAW8	SECLAW2	BZ	IL-HZMT SEC	HZMT SEC	MABAS
9	IL-RGN 4	RGN 4B	BB	IL-INC A9	RGN 6A	BB	IL-SECLAW9	SECURE7	BZ	IL-TRT	TRT	MABAS
10	IL-RGN 6	RGN 6B	BB	IL-INC A10	RGN 7A	BB	IL-SECLAW10	SECURE8	BZ	IL-TRT SEC	TRT SEC	MABAS
11	IL-RGN 7	RGN 7B	BB	IL-INC A11	RGN 8A	BB	IL-SEC FIRE11	SEC FIRE1	BZ			
12	IL-RGN 8	RGN 8B	BB	IL-INC A12	RGN 9A	BB	IL-SEC FIRE12	SEC FIRE2	BZ			
13	IL-RGN 9	RGN 9B	BB	IL-INC A13	RGN 11A	BB	IL-SEC EMA13	SEC EMA1	BZ			
14	IL-RGN11	RGN 11B	BB	IL-INC A14	NORTH B	BA	IL-SEC EMA14	SEC EMA2	BZ			
15	IL-102A	SOUTH A	BA	IL-INC A15	CENTER A	BA	IL-SEC DOT15	SEC DOT1	BZ			
16	IL-102B	SOUTH B	BA	IL-INC A16	CENTER B	BA	IL-SEC DOT16	SEC DOT2	BZ			



# SWIT PROGRAMMING GUIDE KEY ELEMENTS

- All 700/800 MHz mobile and portable radios should be programmed with the 700/800 MHz interoperability channels contained herein, regardless if you use STARCOM21 or other radio system as your primary.
- All STARCOM21 radios used by field personnel must be programmed with the Calling, Incident A, Incident B and Reserve zones.
- VHF and UHF users need to include VHF and UHF interop channels
- Users of independent 700/800 TRS should include channels of the simplex and repeated pairs that are found in the SWIT



IEMA



# SWIT PROGRAMMING GUIDE KEY ELEMENTTS (Cont.)

- All new radios procured for use on the STARCOM21 system that include encryption 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.
- Programming of encryption keys must be in compliance with SIEC policies and procedures. Law enforcement, fire and 9-1-1 keys have special restrictions. SIEC encryption keys must be used; local encryption keys are not permitted on SWIT defined interoperable frequencies.
- Encrypted channels listed in this template require P25 digital radios with AES-256 multi-key hardware encryption.



# The "All Important" Common Patch Key CKR 1

- In order to successfully create secure patches through the STARCOM system using encrypted talkgroups , it is necessary in almost all cases to utilize the correct CKR and encryption key also known as Common Patch Key 1 (CPK 1)
- CPK 1 is available through Motorola, SWIC office , The Encryption Working Group and other authorized distribution points.



# **SWIT PROGRAMMING GUIDE**

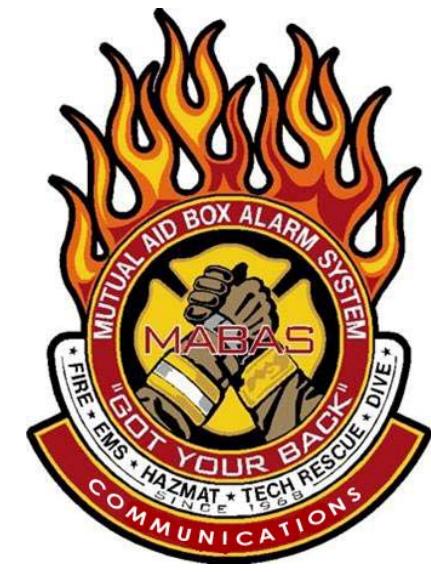
## **KEY ELEMENTS (Cont.)**

- Encryption may be used for VFED-IR, VFED-LE and UFED-LE channels identified in the SWIT with encryption as "Selectable". These are NTIA frequencies that are generally utilized by federal agencies. At the direction of and in partnership with a federal agency they may be used by a SLTT partner.
- If an agency desires to program these frequencies, radios should be programmed for selectable encryption using the SLN/CKR identified in the SWIT for the above channels.



# SAMPLE MABAS FIRE VHF & UHF TEMPLATE

Channel Position	VCALL Zone	VFIRE Zone	VMED Zone	VFED-IR Zone	UCALL Zone	UFED-IR Zone
1	VCALL10	IFERN	MERCI340	NC 1	UCALL40D	NC 2
2	VTAC11	IFERN2	MERCI400	IR 1	UTAC41D	IR 10
3	VTAC12	VFIRE21	VMED28	IR 2	UTAC42D	IR 11
4	VTAC13	VFIRE22	VMED29	IR 3	UTAC43D	IR 12
5	VTAC14	VFIRE23	VSAR16	IR 4	UCALL40	IR 13
6	VTAC33	VFIRE24	RESERVED	IR 5	UTAC41	IR 14
7	VTAC34	VFIRE25	RESERVED	IR 6	UTAC42	IR 15
8	VTAC35	VFIRE26	RESERVED	IR 7	UTAC43	IR 16
9	VTAC36	IREACH	RESERVED	IR 8	RESERVED	IR 17
10	VTAC37	ESMARN	RESERVED	IR 9	RESERVED	IR 18
11	VTAC38	GRAY FG	RESERVED	CG-COM-N	RESERVED	RESERVED
12	STL CALL	BLACK FG	RESERVED	CG-COM-C	RESERVED	RESERVED
13	STL TAC	GOLD FG	RESERVED	CG-COM-S	RESERVED	RESERVED
14	IEMA VHF1	BLUE FG	RESERVED	CG-TAC-N	RESERVED	RESERVED
15	ESMARN	WHITE FG	RESERVED	CG-TAC-C	RESERVED	RESERVED
16	IREACH	RED FG	RESERVED	CG-TAC-S	RESERVED	RESERVED



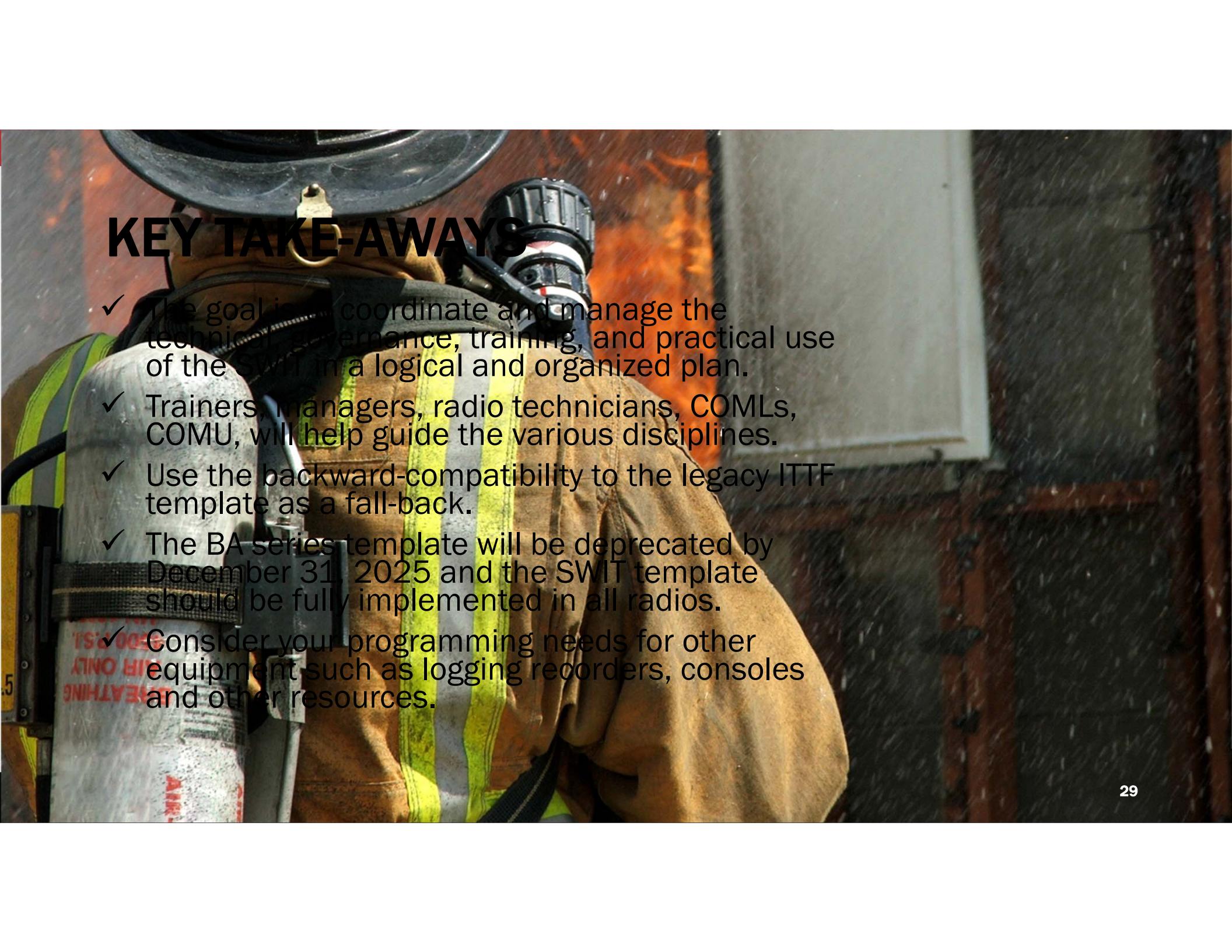
# SAMPLE MABAS FIRE 7/800 MHz TEMPLATE

Channel Position	SWIT-BC Zone	SWIT-BD Zone	SWIT-BE Zone	SWIT-BF Zone	SWIT-BG Zone	SWIT-BH Zone	SWIT-BI Zone	SWIT-BJ Zone	SECURE-BY Zone
1	8CALL90D	7CALL50D	7MOB59D	7CALL70D	7MOB79D	7FTAC1D	7MTAC9D	7AG58D	7MOB59DE
2	8TAC91D	7TAC51D	7DATA69D	7TAC71D	7DATA89D	7FTAC2D	A7-US-01D	7AG60D	7MOB79DE
3	8TAC92D	7TAC52D	7LAW61D	7TAC72D	7LAW81D	7FTAC3D	A7-US-02D	7AG67D	7LAW81DE
4	8TAC93D	7TAC53D	7LAW62D	7TAC73D	7LAW82D	7GTAC4D	A7-US-03D	7AG68D	7LAW82DE
5	8TAC94D	7TAC54D	7FIRE63D	7TAC74D	7FIRE83D	7GTAC5D	7MTAC9	7AG78D	7FIRE83DE
6	8CALL90	7TAC55D	7FIRE64D	7TAC75D	7FIRE84D	7LTAC6D	A7-US-01	7AG80D	7FIRE84DE
7	8TAC91	7TAC56D	7MED65D	7TAC76D	7MED86D	7LTAC7D	A7-US-02	7AG85D	7MED86DE
8	8TAC92	7GTAC57D	7MED66D	7GTAC77D	7MED87D	7LTAC8D	A7-US-03	7AG88D	7MED87DE
9	8TAC93	7CALL50	7MOB59	7CALL70	7MOB79	7FTAC1	7-US-01D	7AG58	7MOB59E
10	8TAC94	7TAC51	7DATA69	7TAC71	7DATA89	7FTAC2	7-US-02D	7AG60	7MOB79E
11	RESERVED	7TAC52	7LAW61	7TAC72	7LAW81	7FTAC3	7-US-03D	7AG67	7LAW81E
12	RESERVED	7TAC53	7LAW62	7TAC73	7LAW82	7GTAC4	7-US-01	7AG68	7LAW82E
13	RESERVED	7TAC54	7FIRE63	7TAC74	7FIRE83	7GTAC5	7-US-02	7AG78	7FIRE83E
14	RESERVED	7TAC55	7FIRE64	7TAC75	7FIRE84	7LTAC6	7-US-03	7AG80	7FIRE84E
15	RESERVED	7TAC56	7MED65	7TAC76	7MED86	7LTAC7	RESERVED	7AG85	7MED86E
16	RESERVED	7GTAC57	7MED66	7GTAC77	7MED87	7LTAC8	RESERVED	7AG88	7MED87E

# SAMPLE MABAS FIRE STARCOM21 TEMPLATE

Channel Position	CALLING Zone	INCIDENT A Zone	INCIDENT B Zone	RESERVE A Zone	SECURE A Zone	SECURE B Zone	MABAS Zone
1	IL-CALL	IL-INC A1	IL-INC B1	IL-RSV 1	IL-SEC A1	IL-SEC B1	MABAS
2	ILEAS	IL-INC A2	IL-INC B2	IL-RSV 2	IL-SEC A2	IL-SEC B2	MABAS SEC
3	MABAS	IL-INC A3	IL-INC B3	IL-RSV 3	IL-SEC A3	IL-SEC B3	MABAS OPS1
4	IDPH	IL-INC A4	IL-INC B4	IL-RSV 4	IL-SEC A4	IL-SEC B4	MABAS OPS2
5	IPWMAN	IL-INC A5	IL-INC B5	IL-RSV 5	IL-SEC A5	IL-SEC B5	MABAS OPS3E
6	EMA	IL-INC A6	IL-INC B6	IL-RSV 6	IL-SEC A6	IL-SEC B6	MABAS OPS4E
7	IL-RGN 2	IL-INC A7	IL-INC B7	IL-RSV 7	IL-SECLAW7	IL-SEC B7	RESERVED
8	IL-RGN 3	IL-INC A8	IL-INC B8	IL-RSV 8	IL-SECLAW8	IL-SEC B8	IL-HZMT
9	IL-RGN 4	IL-INC A9	IL-INC B9	IL-RSV 9	IL-SECLAW9	IL-SEC B9	IL-HZMT SEC
10	IL-RGN 6	IL-INC A10	IL-INC B10	IL-RSV 10	IL-SECLAW10	IL-SEC B10	IL-TRT
11	IL-RGN 7	IL-INC A11	IL-INC B11	IL-RSV 11	IL-SECFIRE11	IL-SEC B11	IL-TRT SEC
12	IL-RGN 8	IL-INC A12	IL-INC B12	IL-RSV 12	IL-SECFIRE12	IL-SEC B12	RESERVED
13	IL-RGN 9	IL-INC A13	IL-INC B13	IL-RSV 13	IL-SECEMA13	IL-SEC B13	RESERVED
14	IL-RGN11	IL-INC A14	IL-INC B14	IL-RSV 14	IL-SECEMA14	IL-SEC B14	RESERVED
15	IL-102A	IL-INC A15	IL-INC B15	IL-RSV 15	IL-SECDOT15	IL-SEC B15	RESERVED
16	IL-102B	IL-INC A16	IL-INC B16	IL-RSV 16	IL-SECDOT16	IL-SEC B16	RESERVED

C  
INTEROPERABILITY  
COMMITTEE

A dramatic photograph of a firefighter in full protective gear, including a helmet and oxygen tank, spraying a powerful stream of water onto a bright orange and yellow fire. Water droplets are visible in the air around the nozzle. The firefighter's face is partially obscured by the gear.

## KEY TAKE-AWAYS

- ✓ The goal is to coordinate and manage the technical performance, training, and practical use of the SWIT in a logical and organized plan.
- ✓ Trainers, managers, radio technicians, COMLs, COMU, will help guide the various disciplines.
- ✓ Use the backward-compatibility to the legacy ITTF template as a fall-back.
- ✓ The BA Series template will be deprecated by December 31, 2025 and the SWIT template should be fully implemented in all radios.
- ✓ Consider your programming needs for other equipment such as logging recorders, consoles and other resources.

# Goals for Fire Departments in Illinois

- Program VHF Radios to include MABAS Frequencies:
  - IFERN & IFERN 2
  - RED, WHITE, BLUE, GOLD, BLACK & GRAY Firegrounds
- Program VHF Radios for State & National Mutual Aid & Interoperability Frequencies
  - Create Radio Zones that follow the SWIT Document



# Goals for Fire Departments in Illinois

- Program UHF Radios to include National Interoperability frequencies as listed in the SWIT.
- Program 7/800 MHz radios to include National Interoperability frequencies as listed in the SWIT.
- Update STARCOM21 radios, new names and new talkgroups
  - Encrypted Radios (AES256) can include most MABAS encrypted talkgroups



# **JUST ROLL WITH SWIT**

By December 31, 2025, SWIT implementation will be complete.

1. Review the template and recommended visor cards.
2. Get your radios programmed.
3. Load the common patch key CKR1, aka CPK1.



# FIRE SERVICE VISOR CARD (FRONT)

MABAS / FIRE - EMS Visor Card

Page 1

ZONE	VCALL	UCALL	VFIRE	VMED	VFED-IR	UFED-IR	SWIT-BC	SWIT-BD	SWIT-BE	SWIT-BF	SWIT-BG
CHAN											
1	VCALL10	UCALL40D	IFERN	MERC1340	NC 1	NC 2	8CALL90D	7CALL5D	7MOB59D	7CALL70D	7MOB79D
2	VTAC11	UTAC41D	IFERN2	MERC1400	IR 1	IR 10	8TAC91D	7TAC51D	7DATA69D	7TAC71D	7DATA89D
3	VTAC12	UTAC42D	VFIRE21	VMED28	IR 2	IR 11	8TAC92D	7TAC52D	7LAW61D	7TAC72D	7LAW81D
4	VTAC13	UTAC43D	VFIRE22	VMED29	IR 3	IR 12	8TAC93D	7TAC53D	7LAW62D	7TAC73D	7LAW82D
5	VTAC14	UCALL40	VFIRE23	VSAR16	IR 4	IR 13	8TAC94D	7TAC54D	7FIRE63D	7TAC74D	7FIRE83D
6	VTAC33	UTAC41	VFIRE24	RESERVED	IR 5	IR 14	8CALL90	7TAC55D	7FIRE64D	7TAC75D	7FIRE84D
7	VTAC34	UTAC42	VFIRE25	RESERVED	IR 6	IR 15	8TAC91	7TAC56D	7MED65D	7TAC76D	7MED86D
8	VTAC35	UTAC43	VFIRE26	RESERVED	IR 7	IR 16	8TAC92	7GTAC57D	7MED66D	7GTAC77D	7MED87D
9	VTAC36	RESERVED	IREACH	RESERVED	IR 8	IR 17	8TAC93	7CALL50	7MOB59	7CALL70	7MOB79
10	VTAC37	RESERVED	ESMARN	RESERVED	IR 9	IR 18	8TAC94	7TAC51	7DATA69	7TAC71	7DATA89
11	VTAC38	RESERVED	GRAY FG	RESERVED	CG-COM-N	RESERVED	RESERVED	7TAC52	7LAW61	7TAC72	7LAW81
12	STL CALL	RESERVED	BLACK FG	RESERVED	CG-COM-C	RESERVED	RESERVED	7TAC53	7LAW62	7TAC73	7LAW82
13	STL TAC	RESERVED	GOLD FG	RESERVED	CG-COM-S	RESERVED	RESERVED	7TAC54	7FIRE63	7TAC74	7FIRE83
14	IEMA VHF1	RESERVED	BLUE FG	RESERVED	CG-TAC-N	RESERVED	RESERVED	7TAC55	7FIRE64	7TAC75	7FIRE84
15	ESMARN	RESERVED	WHITE FG	RESERVED	CG-TAC-C	RESERVED	RESERVED	7TAC56	7MED65	7TAC76	7MED86
16	IREACH	RESERVED	RED FG	RESERVED	CG-TAC-S	RESERVED	RESERVED	7GTAC57	7MED66	7GTAC77	7MED87

# FIRE SERVICE VISOR CARD (REAR)

MABAS / FIRE - EMS Visor Card												Page 2
ZONE	SWIT-BH	SWIT-BI	SWIT-BJ	SWIT-BY	CALLING	INCIDENT A	INCIDENT B	RESERVE A	SECURE A	SECURE B	MABAS	
CHAN				** See Note					**See Note			** See Note
1	7FTAC1D	7MTAC9D	7AG58D	7MOB59DE	IL-CALL	IL-INC A1	IL-INC B1	IL-RSV 1	IL-SEC A1	IL-SEC B1	MABAS	
2	7FTAC2D	A7-US-01D	7AG60D	7MOB79DE	ILEAS	IL-INC A2	IL-INC B2	IL-RSV 2	IL-SEC A2	IL-SEC B2	MABAS SEC	
3	7FTAC3D	A7-US-02D	7AG67D	7LAW81DE	MABAS	IL-INC A3	IL-INC B3	IL-RSV3	IL-SEC A3	IL-SEC B3	MABAS OPS1	
4	7GTAC4D	A7-US-03D	7AG68D	7LAW82DE	IDPH	IL-INC A4	IL-INC B4	IL-RSV 4	IL-SEC A4	IL-SEC B4	MABAS OPS2	
5	7GTAC5D	7MTAC9	7AG78D	7FIRE83DE	IPWMAN	IL-INC A5	IL-INC B5	IL-RSV 5	IL-SEC A5	IL-SEC B5	MABAS OPS3E	
6	7LTAC6D	A7-US-01	7AG80D	7FIRE84DE	EMA	IL-INC A6	IL-INC B6	IL-RSV 6	IL-SEC A6	IL-SEC B6	MABAS OPS4E	
7	7LTAC7D	A7-US-02	7AG85D	7MED86DE	IL-RGN 2	IL-INC A7	IL-INC B7	IL-RSV 7	IL-SECLAW7	IL-SEC B7	RESERVED	
8	7LTAC8D	A7-US-03	7AG88D	7MED87DE	IL-RGN 3	IL-INC A8	IL-INC B8	IL-RSV 8	IL-SECLAW8	IL-SEC B8	IL-HZMT	
9	7FTAC1	7-US-01D	7AG58	7MOB59E	IL-RGN 4	IL-INC A9	IL-INC B9	IL-RSV 9	IL-SECLAW9	IL-SEC B9	IL-HZMT SEC	
10	7FTAC2	7-US-02D	7AG60	7MOB79E	IL-RGN 6	IL-INC A10	IL-INC B10	IL-RSV 10	IL-SECLAW10	IL-SEC B10	IL-TRT	
11	7FTAC3	7-US-03D	7AG67	7LAW81E	IL-RGN 7	IL-INC A11	IL-INC B11	IL-RSV 11	IL-SECFIRE11	IL-SEC B11	IL-TRT SEC	
12	7GTAC4	7-US-01	7AG68	7LAW82E	IL-RGN 8	IL-INC A12	IL-INC B12	IL-RSV 12	IL-SECFIRE12	IL-SEC B12	RESERVED	
13	7GTAC5	7-US-02	7AG78	7FIRE83E	IL-RGN 9	IL-INC A13	IL-INC B13	IL-RSV 13	IL-SECEMA13	IL-SEC B13	RESERVED	
14	7LTAC6	7-US-03	7AG80	7FIRE84E	IL-RGN 11	IL-INC A14	IL-INC B14	IL-RSV 14	IL-SECEMA14	IL-SEC B14	RESERVED	
15	7LTAC7	RESERVED	7AG85	7MED86E	IL-102 A	IL-INC A15	IL-INC B15	IL-RSV 15	IL-SECDOT15	IL-SEC B15	RESERVED	
16	7LTAC8	RESERVED	7AG88	7MED87E	IL-102 B	IL-INC A16	IL-INC B16	IL-RSV 16	IL-SECDOT16	IL-SEC B16	RESERVED	
	** The programming and use of certain frequencies, talkgroups, and encryption keys is restricted to specific disciplines. Please refer to the SWIT											

# WHEN IN DOUBT

If you have questions or comments about the SWIT, TG use, or interoperability in general... please contact:

- The Statewide Interoperability Coordinator Matthew Miller or
- The Deputy Coordinator Colin Vasconcelles.

Email: [ema.swic@illinois.gov](mailto:ema.swic@illinois.gov)

OPS Center Phone: 217-782-7860

NOTE: Almost all TGs in the SWIT need pre-approval for event use.



# MABAS FREQUENCY/TALKGROUP QUESTIONS

If you have questions or comments about the SWIT, MABAS frequencies, TG use, or interoperability in general... please contact:

- Paul Maplethorpe  
MABAS Communications  
[maplethorpe@mabas-il.org](mailto:maplethorpe@mabas-il.org)



# Questions?



Thank you for your  
dedication to operability and  
interoperability!

