FirstNet Authority Indiana LMR-LTE Interconnection Webinar
June 24, 2020
Agenda

• Opening Comments - Edward Parkinson and David Buchanan
• Indiana IPSC LMR-LTE Integration Project - Kelly Dignin
• FirstNet Push To Talk – Amy Haukeness
• Q & A – All
• Closing Remarks – John Hunt
Indiana IPSC LMR-LTE Integration Project

Kelly Dignin | Indiana Integrated Public Safety Commission Executive Director
LMR/LTE Interconnectivity

Kelly Dignin
Executive Director
Integrated Public Safety Commission

June 24, 2020
IPSC’s mission is to facilitate statewide public safety communications between local, state and federal public safety agencies. Our goal is to save money and save lives by minimizing the financial and technological barriers to interoperable communications.

“Saving Money, Saving Lives”
IN Communication History

1999
The Beginning
Integrated Public Safety Commission (IPSC) created by the IN General Assembly. “First Step” statewide LMR system

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IN Communication History

2014

P25 Upgrade
LMR System P25 Upgrade. Forklift replacement of equipment at 153 sites, transition of 65,000 users. Contracted biennial upgrades until 2032.

Looking Ahead
IPSC Indiana looks to LMR/LTE connections – two technology solutions considered

2019

TODAY

IPSC staff of 33
- Manage/maintains statewide LMR system
- Manage/maintains statewide shared data system
- FirstNet SPOC
- ESF2 lead, response & recovery, COMU
- SWIC – Interoperable Communications coordination, planning, training and education

Integrated Public Safety Commission
“Next Level” Communication

- 2019 User Needs Survey. LMR to LTE scored lowest
- Regional Workshops ➔ interest soared
### Pros & Cons of LTE

**Pro**
- Cost $aving
- Encryption
- Uses Cellular & WiFi
- Reduces the load on the LMR
- Emergency (Priority)/Scan
- Carrier Agnostic
- CAT Tool (Admin Override).

**Con**
- Mission Critical Reliability?
- Low watts (1 watt vs 3-5 in a portable).
- Still being developed
- PTT ID/Talkgroup ID
- Latency
- Location Service (LTE only)
Two Approaches

1. Direct Connection – LMR system to FirstNet ePTT application via AVPN
2. Critical Connect – Cloud based. Not only LMR to LTE, but also LMR to LMR
1. Direct Connection

Direct Connection using ISSI port from our statewide LMR system to FirstNet

- Low/no cost pilot project
- Connection made early 2020
- Small group of IPSC employees tested to identify issues
- Slow rollout to work out bugs
- COVID-19 use case – ISDH/Strategic National Stockpile distribution
2. Critical Connect

- Cloud-based solution
- Higher initial price tag
- Bigger benefits – Not only LMR to LTE, but LMR to LMR
- First real-life use case – Officer Breanne Leath funeral
- Potential huge savings for agencies
  - Extends coverage
  - Encryption
  - Carrier agnostic
2. Critical Connect

• Cross-border project with Michigan
  ▪ CISA helping develop governance, SOPs, other documentation
  ▪ CISA also helping develop functional exercise which will serve as acceptance testing

• Other FEMA V states also interested
Challenges/Considerations

- COVID-19-caused budget constraints
- Impacts on LMR system
Potential Use Cases

- School Safety
- Fire Ground
- Extends the coverage area for responders
Recommendations to Partners

- Set up LTE to LTE talk groups, and get used to using them.
- Become familiar with the online resources (e.g. CAT Tool and Local Control Portal) and learn how to administer your users.
- Start thinking about the (2-ish) LMR talkgroups that are absolutely necessary. LTE to LTE talkgroups are unlimited, but LMR talkgroups can impact the statewide system – caution is advised!
- Think ahead and plan ahead! Convergence has begun!
Final Thoughts

• IPSC is NOT recommending to take a radio out of the hands of a front-line first responder

• BUT convergence of LMR/LTE/data is truly possible today, and this possibility is revolutionizing public safety communications

• The time to plan is NOW. Proceed cautiously, but by all means, proceed!
FirstNet Push-to-Talk

Amy Haukeness | Senior Public Safety Product Advisor
### FirstNet Push-to-Talk

#### What it is?

- ✓ 3GPP standards-based solution
- ✓ Only PTT solution integrated into the FirstNet network
- ✓ First-of-its-kind offering
- ✓ Evolutionary, growing product

#### What it is *not*?

- ✗ Replacement for LMR
- ✗ A perfectly mature product
- ✗ Just another over-the-top product
FirstNet PTT Release Status

Announced and released into controlled introduction on March 31, 2020

Initial client released with Samsung® XCover FieldPro device*

First ever nationwide mission critical standards-based PTT solution to launch in the United States

Highest priority traffic on the FirstNet network

Focused on augmenting LMR and not replacing

Pricing set at $10/month + $5/month for LMR interoperability**

*This slide does not constitute an endorsement by FirstNet Authority of any product or service, organization or company.

** Source: FirstNet.com, April 2020. See FirstNet.com for latest information on pricing
FirstNet Push-to-Talk

First release delivers initial foundational capabilities for public safety, including:

- 1-to-1 calling
- Group calling
- Ad-hoc group calling
- Identifies user status/presence
- Allow up to 1,000 users per talkgroup
- Ability to declare an emergency and preempt other PTT calls
- Text messaging to groups or individuals
- Mutual aid capabilities

Future capabilities include:

- FirstNet PTT app for Android OS or iOS
- Wi-Fi calling
- Emergency alerts
- LMR to FirstNet PTT

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Thank you for attending!

- For more information on the Indiana Integrated Public Safety Commission, please go to [www.ipsc.in.gov](http://www.ipsc.in.gov)
- For more information on the First Responder Network Authority, please go to [www.firstnet.gov](http://www.firstnet.gov)
- For more information on FirstNet products and services, please go to [www.firstnet.com](http://www.firstnet.com)