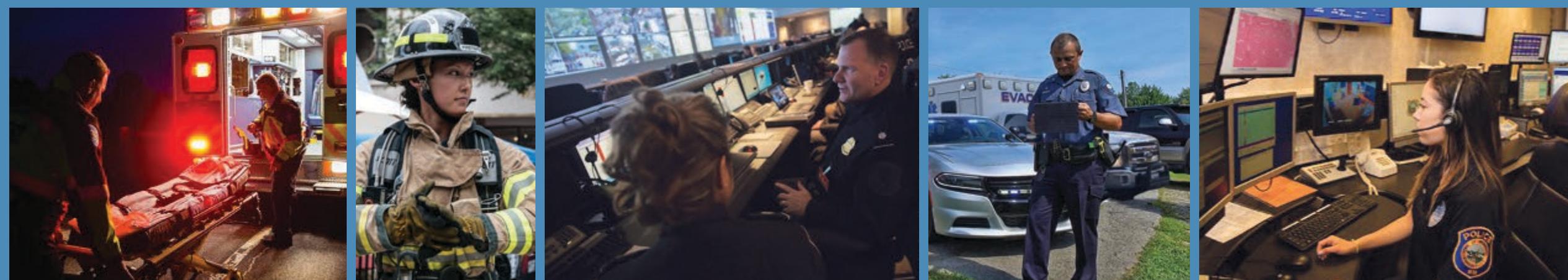




FirstNet Authority Indiana LMR-LTE Interconnection Webinar

June 24, 2020





Edward Parkinson
FirstNet Authority
Chief Executive Officer



David Buchanan
FirstNet Authority
Public Safety Advocacy
Executive Director



John Hunt
FirstNet Authority
Senior Public Safety
Advisor



Kelly Dignin
Indiana Integrated Public
Safety Commission
Executive Director



Amy Haukeness
FirstNet Authority
Senior Public Safety
Product Advisor



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





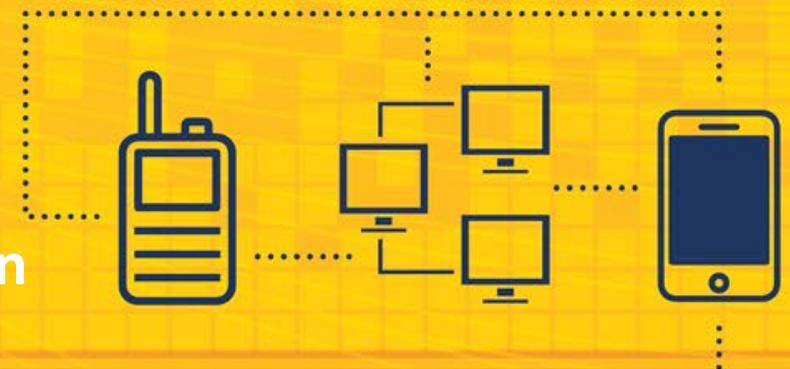
Indiana IPSC LMR-LTE Integration Project

Kelly Dignin | Indiana Integrated Public Safety
Commission Executive Director



LMR/LTE INTERCONNECTIVITY

Kelly Dignin
Executive Director
Integrated Public Safety Commission



June 24, 2020

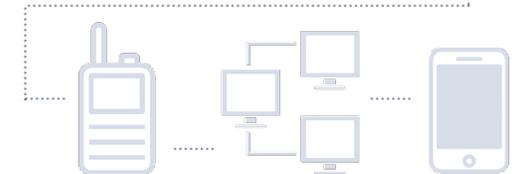
IPSC MISSION

6



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

2007

LMR Complete

Initial system plan buildout complete: 127 communication sites, border to border coverage, 98% statewide

2012

FirstNet

US Congress creates the First Responder Network (FirstNet), nationwide public safety broadband network dedicated solely to PS

9-11

9-11

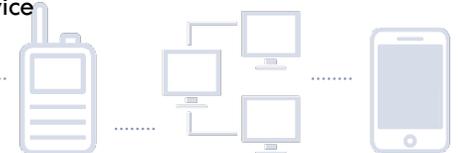
9-11 tragedy spurs dedicated funding source. System build out begins

2001

2009

Statewide Data Sharing

Interoperable communication vision expanded with investment in statewide computer aided dispatch/mobile data device (CAD/MDD) system



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.



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

Looking Ahead

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

2019

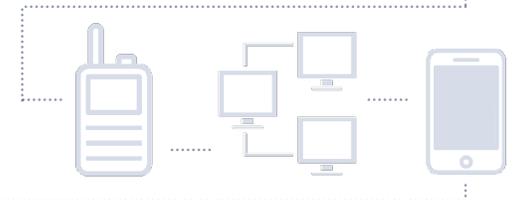


“Next Level” Communication

9



- 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)

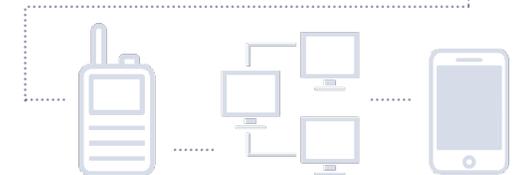
LMR to LTE in Indiana

11



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



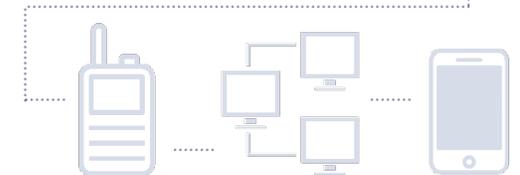
1. Direct Connection

12



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

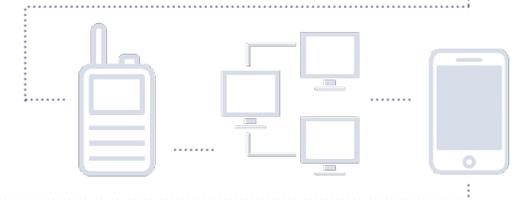


2. Critical Connect

13



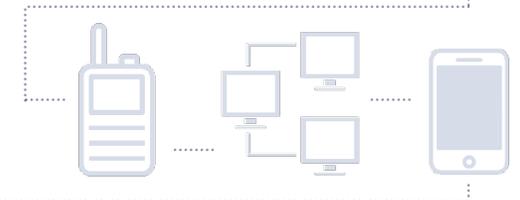
- Cloud-based solution
- Higher initial price tag
- Bigger benefits – Not only LMR to LTE, but LMR to LMR
- First real-life use case – Officer Breanne Leath funeral
- Potential huge savings for agencies
 - Extends coverage
 - Encryption
 - Carrier agnostic



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

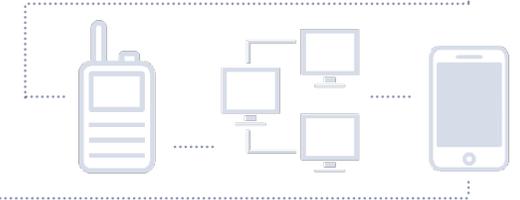


Challenges/Considerations

15



- COVID-19-caused budget constraints
- Impacts on LMR system

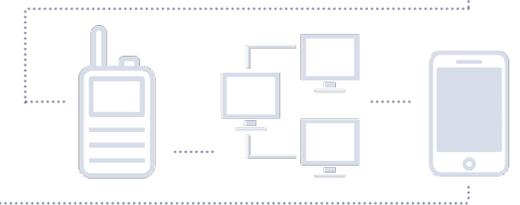


Potential Use Cases

16



- School Safety
- Fire Ground
- Extends the coverage area for responders



Recommendations to Partners



17

- 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!

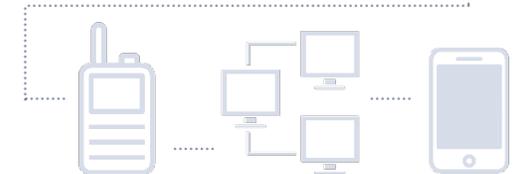


Final Thoughts

18



- 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

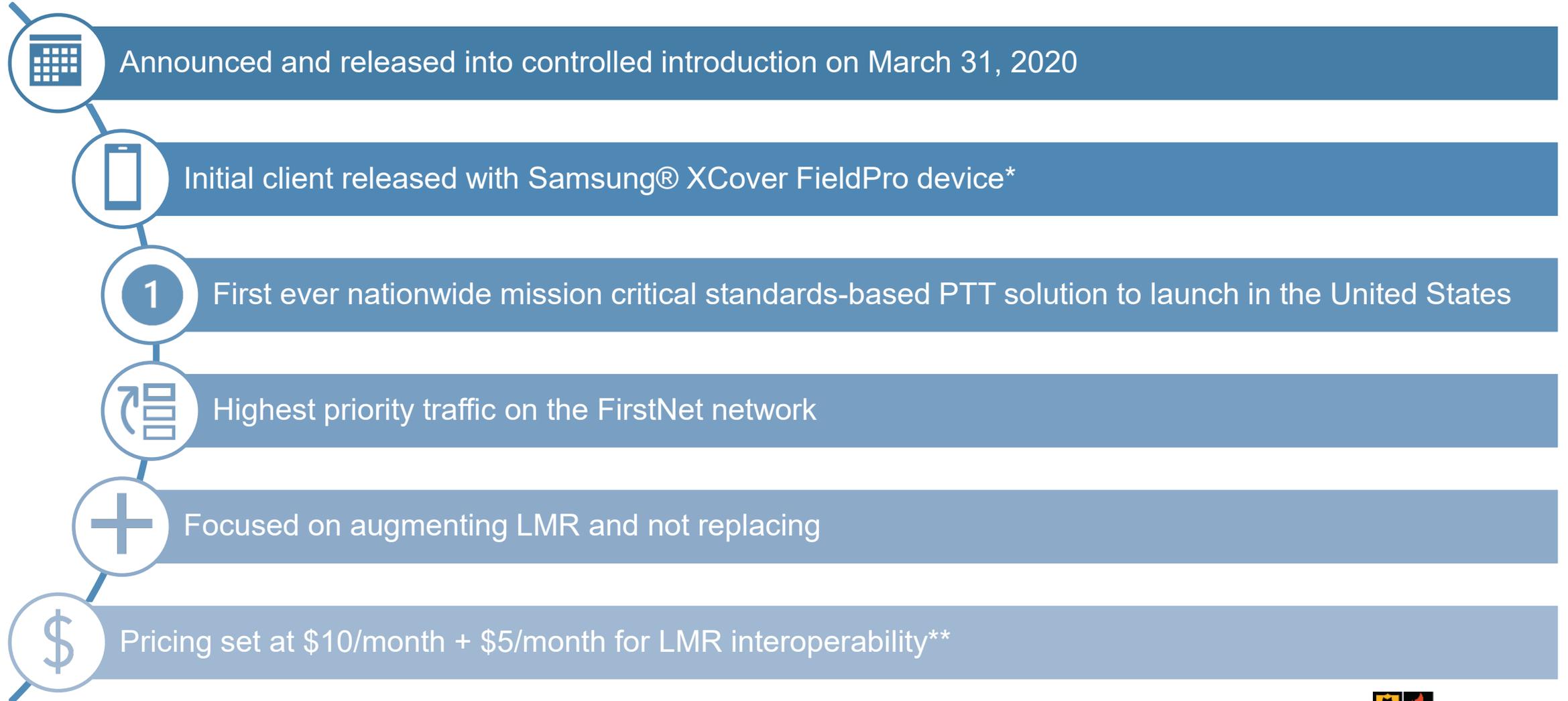
What it is?

- ✓ 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

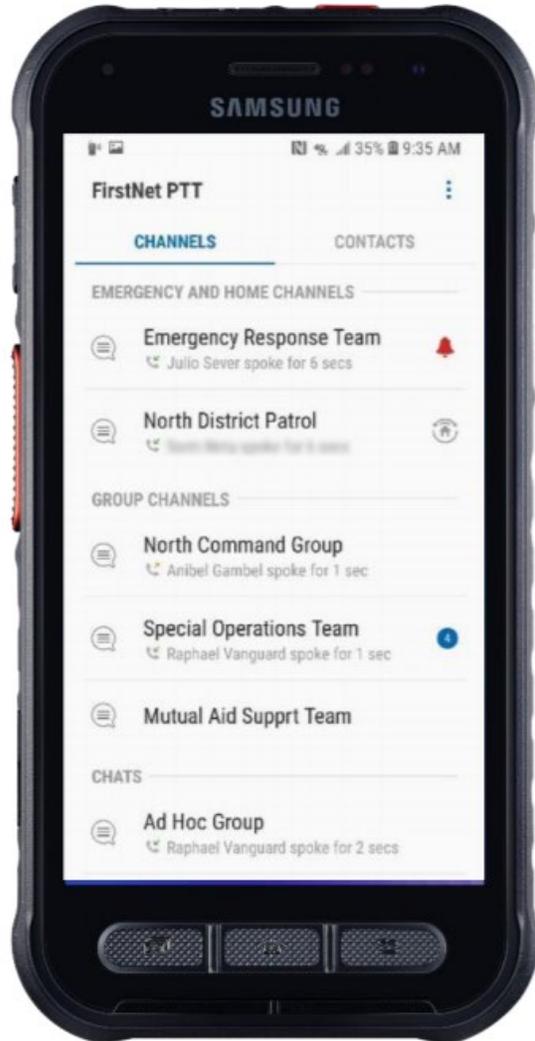
FirstNet PTT Release Status



*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



Q&A



Thank you for attending!

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

