

The Next Generation PSAP: The Intersection of NG9-1-1 and FirstNet



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Today's Session

- **Introductions and Expectations**
- **NG911:**
 - What it is
 - What it changes
- **FirstNet:**
 - What it is
 - What it changes
- **Bringing the two together**

Your Expectations

- What are your expectations from this session?
- How will NG911 and FirstNet fit with your agency
- Why are you here?
- What would you like to take away?
- How can we help you?



NG911; What is it?

- **As little as replacing traditional telephone systems with VoIP systems**
 - Many steps beyond
 - New IP call flows
 - New caller location paradigm
- **Easier and more standard integration of added functionality**
 - Mobile location
 - Text to 911
 - Advanced call routing and forwarding
- **Eventually access to multimedia calls and messaging**

Open The IP Door From The Public

- **As much as opening the path for rich IP multimedia**
 - Obviously happening over time
- **Think of all the types of multimedia you have access to on a phone or computer today**
- **Group messaging**
- **Messaging with data attached**
 - Image
 - Voice recording
 - Video
- **Video calling (Skype, FaceTime, etc.)**

NG911 Possibilities and The PSAP

- **For the Telecommunicator**
 - **Higher levels of attention and multitasking**
 - **Greater immersion in the event**
 - **Less anonymity**

NG911 Possibilities and The PSAP

- **For the center**
 - May change the call flow
 - May change the staffing

Five calls for the same incident

- **Today:**

- Gather information; what can be added to what is known
- If a caller is not involved; The call ends

- **Tomorrow:**

- Asses incoming information (Could be live video)
- Even if not involved; May provide additional perspective

- **How would you handle this?**

What Needs To Change?

- **Todays model allows for a primarily one-to-one interface between the public caller and the Telecommunicator handling the event**
- **Future models may require joint participation by multiple people**

What is FirstNet?

- **Simple answer:**

Nationwide Public Safety Broadband Network

But what does that mean?

- **The easy answer:**

- **Public Safety Grade / Mission Critical 4G data services**
- **Public Safety Grade / Mission Critical 4G cellular phone services**

But what does it really mean?



?...?...?...?...?...?...?...?...?...?...?...?...?

What is FirstNet?

Nationwide Public Safety Broadband Network

But what does that mean?

- **4G services**
 - Data services including Internet access
 - Standard voice services (Cellular telephony)
 - Streaming data services (Video reception, Video transmission, Multimedia)
- **Mission Critical / Public Safety Grade**
 - Improved reliability
 - Improved availability
 - (Future) Mission Critical PTT Voice
 - Priority and Preemption
 - Local Control

Using FirstNet

- **As little as . . . replacing existing data and cellular services with FirstNet**
 - Not much changes
- **Except;**
 - Higher reliability and availability
 - Drives higher utilization and reliance
 - Becomes mission critical

Using FirstNet

- **As much as . . . opening the path for rich IP multimedia to/from the field**
 - **Send and Receive files to/from the field**
 - Pictures, sound clips, video files, maps and other data
 - **Receive streaming multimedia**
 - Live video, car and body cameras
 - One way and two-way live video calls
 - **Easier and more standard integration of added functionality**

FirstNet Opens the IP door to the responders



What data and multimedia do you exchange today?

What could you exchange in the future?

What does this do to the PSAP environment?

- **For the Telecommunicator**
 - Higher levels of attention and multitasking (Again)
 - Greater immersion in the event (Again)
- **For the center**
 - May change the call flow
 - May change the staffing

Now, bring the two events together

- **New Expectations**

- “It’s all IP, . . . Why can’t you . . . ?”
- Real-Time in and Real-Time out means Real-Time through? (NOT!)

- **New requirements**

- Logging and Retention
- Disability Access

- **We don’t know the answers**

- **We do know there are questions**

The Questions We Will All Be Looking To Answer:



How do we connect and control multimedia data;
Into, Within and Across the PSAP?

How do we connect and control multimedia data; Into, Within and Across the PSAP? (Thoughts)

- **Current work-flows must change**
 - But knowledge from current work-flows must be respected
- **New responsibilities will be created**
 - New positions may be required
- **Call-Flow may become branched, rather than linear**
 - Branched in, with several active Call-takers feeding one Dispatcher
 - Branched out, with one call requiring more than one Dispatcher to handle the information flow
- **New roles may come to exist between the Call-taker and the Dispatcher**
 - Connectors
 - Directors
- **New technology requirements**
 - Logging and Retention
 - Disability Access

How do we connect and control multimedia data; Into, Within and Across the PSAP?



Discussion

For More Information

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Thank You!!

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