

Text to 911

Presented by:

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Text to 911

Why text to 911 is necessary:

- ▣ ~330 million connected wireless devices in the U.S.
 - Population is approximately 313 million
- ▣ Wireless-only households are on the rise
 - ~32% of adults & 36% of children live in wireless-only households
 - More than 98% of Americans have access to 3G or 4G services
- ▣ Exponential increases in text messaging
 - More than 8 trillion texts sent last year
 - ▣ Up 1.1 trillion from the previous year

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Why text to 911 is necessary (continued...)

- ▣ *34 million Americans that are deaf and hard of hearing who rely on texting to communicate*
- ▣ *Emergencies where voice calls may be detrimental to the callers safety Caller expectations*

Text to 911

INFORMATION TO KNOW:

- NENA, APCO and the four major cellular carriers signed agreement to provide text to 911 by May 15, 2014
 - AT&T, T-Mobile, Sprint and Verizon
- The FCC is has an advisory group working on Text to 911
 - This advisory group, the Emergency Access Advisory Group, is recommending a true national focused SMS Interim Text to 911
 - There is also a national group working on establishing common methods and procedures across all carriers and TCC providers to meet May 15, 2014 service date

Text to 911

Four Types of Text for emergency communication:

- Vendor / Over The Top (OTT) offerings
- Initial forms of Interim Text to 911
- National SMS Interim Text – carrier based
- Long Term Text integrated via NG911

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- ▣ **Vendor / Over The Top (OTT) offerings:**
 - ▣ Non-Carrier text approaches (often installed at PSAP by PSAP or County based), handled locally by Public Safety
 - ▣ NENA Education Committee is working on a Guide document to help PSAPs determine what they need to ask vendors when they are approached.
 - ▣ A Q&A document is being produced for App providers to give them better knowledge of what 9-1-1 involves pertaining to their design and communications with potential Public Safety customers.
 - ▣ Customers text a short code rather than text to 911

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- ▣ **Initial forms of Interim Text to 911:**
 - ▣ Intermediate trials of carrier involved text via vendors. IE: York County, VA, Wise County, TX, Stueben County, NY, State of Vermont, etc.
 - ▣ Similarities to National SMS Interim Text Solution
 - These trials are a single cellular vendor using and intermediary vendor for delivery
 - ▣ Some versions deliver text to a remote web server only
 - ▣ Some may converge to the National SMS approach
 - ▣ These approaches are able to work as a standalone methods in addition to a national approach

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National SMS Interim Text - carrier based:

- Delivers text TO the PSAP
- PSAPs choose the type of delivery method
(Text to TTY, Internet Portal, IP to local server, true NG911)
- PSAP can automatically capture content and logging info
- It currently appears that each PSAP will be able to choose when and if they take SMS Interim Text on the initial approach
- Utilizes the ATIS/TIA Text Control Center (TCC) standard

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Long Term Text integrated via NG911:

- Will utilize IMS and MMES to interface to NG911 using IP
- Designed to allow maximum PSAP operational benefits
- Ability to handle carrier based text end to end in any given area depends on availability of IMS, MMES, and fairly complete NG911 features
- Ability to handle text from Internet service providers will ONLY be available with true NG911 texting solutions

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IMPORTANT TO REMEMBER:

- ▣ Interim texting solution
 - Will not have the same level of connectivity and service as NG will have.
 - Will only deliver SMS, no other forms of text messaging, ie: MMS,IMS, RTT, etc.
 - What's the difference between SMS -short message service, MMS - multimedia service, IMS - instant message service, RTT - real time text, etc.

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Frequently Asked Questions:

- How will the text message be delivered to the proper PSAP?
- (Will vary based on the solution you use)
 - Routing – is different than wireless voice calls
 - Routed by Centroid location
 - You will need to consider your current routing concerns and work with the carriers on this.

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FAQs Continued:

- ▣ How can we communicate quickly and efficiently with the caller?
 - Consider pre-programmed condensed questions
 - Review your SOPs and determine prioritization of questions

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FAQs Continued:

- ▣ How many conversations can be handled at one time?
 - Local control – NENA’s Text to 911 Information Document will be available soon. It suggests a maximum of 5.
 - Will be dependent on the solution you choose
 - If you choose a text to TTY solution, this will be determined on the number of the 911 trunks you have
 - If you choose the IP Portal or delivery via IP CPE, thresholds can be set for the number of text sessions per agency/positions through the vendor

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 - This will be dependent on the solution you chose
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FAQs Continued:

- ▣ Will pre-paid wireless consumers be able to send text to 911?
 - ▣ Pre-paid consumers will have to consult with Pre Paid phone vendors to determine if they are able to text to 911.
- ▣ Will the text conversation drop as the texter moves between jurisdictional boundaries?
- ▣ The text caller is anchored to the originating PSAP until the call taker ends the conversation.

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FAQ's Continued:

- ▣ Are there time delays?
 - Dependant on the solution your agency chooses. One of the solutions takes the 911 text messages out of the normal flow path and put into text control center which only has text messages, so they are seeing message delivery in less than a minute. If the text message isn't delivered, the system continues to attempt delivery. Text messages require less bandwidth, thus text messages can be sent with a lower coverage strength.

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FAQs Continued:

- ▣ How will texting work with call queues?
 - If you choose the TTY option, the text message will come through your 9-1-1 trunks, being placed in a queue and tie up a trunk.
 - If using web portal, each agency will set the thresholds for the volume of calls through your intermediary vendor.

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FAQs Continued:

- ▣ The FCC's EAAC working group has received agreement by the carriers to provide bounce back messages.
- ▣ Other circumstances, the call will alternate route to the agency default settings.
- ▣ All of this is for the interim solution for right now, things will evolve as decisions are made on the carrier level, vendor level, standards level.
- ▣ Does a text to 9-1-1 session place a cell phone into the emergency mode so that the caller can only text the 9-1-1 Center?
 - No, it does not. The caller can carry on another SMS conversation.

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FAQs Continued:

- ▣ How many texts are anticipated to come into the PSAP's?
 - The studies thus far have shown that the call volume is underutilized and training is necessary to keep the skill sets fresh.
- ▣ How will a PSAP handle a volume of text calls during a disaster?
 - Depends on the solution you chose
 - Consult with legal council
 - Texting Trials and Countries using this for years are not seeing large volumes

Questions?