The "State of 911" Webinar Series

National 911 Program
November 21, 2013
12:00 PM EST

911.gov

- The National 911 Program designed this webinar series to provide a unique combination of useful tools, information about Federal and State participation in the NG911 process, and real experiences from early adopters about the NG911 transition process underway in regions around the country

- Webinars will be held bimonthly and consist of presentations from a Federal-level 911 stakeholder and state-level 911 stakeholder, each followed by a 10 minute question and answer period

- For more information on future events, past webinar recordings and presentations, and to learn more about the National 911 Program, please visit www.911.gov

"State of 911" Webinar Series

- 12:00 – 12:20 PM
  - Nicole McGinnis, Deputy Chief, Policy & Licensing Division, Federal Communications Commission (FCC) Public Safety & Homeland Security Bureau (PSHSB)
    - Updates for NG911 including progress on text-to-911 and E911 Phase II location accuracy issues

- 12:20 – 12:30 PM
  - Q&A

- 12:30 – 12:50 PM
  - John Merklinger, Director, City of Rochester/County of Monroe Emergency Communications Department
    - Collaboration with New York State on the Street Address Mapping Program (SAM) and engaging the deaf and hard of hearing community with text-to-911

- 12:50 – 1:00 PM
  - Q&A

Agenda

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Federal Communications Commission
Public Safety and Homeland Security Bureau

State of 911: Next Generation 911
November 21, 2013

Nicole McGinnis
Deputy Chief
Policy & Licensing Division

Overview

- 5-Step Action Plan to Facilitate the Deployment of NG911

- Location Accuracy Issues

- Text-to-911

- NG911 Legal Framework Report to Congress

- Related Proceedings:

  - Net 911 Report

  - Improving 911 Reliability and Continuity

  - Improving Network Transparency and Resiliency

FCC NG911 5-Step Plan

- **Develop location accuracy mechanisms for NG911**
  - E911 Location Accuracy Workshop, pending rulemaking proceeding
- **Enable consumers to send text, photos, and videos to PSAPs**
  - Text-to-911 Bounce-back Order, pending rulemaking proceeding
- **Develop an NG911 funding model**
- **Facilitate the completion and implementation of NG911 technical standards**
- **Work with states and other stakeholders to develop an NG911 governance framework**
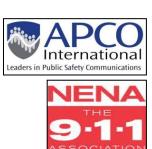 - NG911 Legal Framework Report to Congress

Text-to-911

- <u>Carrier-APCO-NENA Agreement</u>: December 2012

  - Automatic bounce-back message capability by the four major carriers by June 30, 2013
  - Four major carriers will support text-to-911 on their networks by May 15, 2014
  - Quarterly progress reports: started July 2013
  - Commitment to consumer education efforts

Text-to-911

- ## Deployment of Text-to-911 Capability – PSAPs
  - A number of areas across the country have gone live with text-to-911, and a number of trials are still in effect
  - Early trials have gone smoothly, with little to no problem with an increase in incident volume or delayed or dropped text messages

- ## Implementation of Text-to-911 Service – Carriers
  - Depending on the carrier, text-to-911 service is available in Iowa, Maine, Vermont, and in certain jurisdictions in Colorado, Maryland, New York, North Carolina, Ohio, Pennsylvania, Texas, and Virginia
  - All major carriers now provide a bounce-back message to subscribers texting 911, if text-to-911 service is unavailable
  - All major carriers say they are on track to provide text-to-911 service to requesting PSAPs by May 15, 2014.

Text-to-911 Deployments

State	County	Jurisdiction	PSAPs Accepting Texts	Carriers	Text-to-911 Platform Deployed	Deployment Date
Colorado	Pitkin	City of Aspen and Pitkin County	Pitkin County Emergency Dispatch (Pitkin County and Roaring Fork Valley portion of Eagle County)	Verizon	TCS - Web Browser/GEM911	10/28/2013
Iowa	All	All	All	i-Wireless	Intrado - TXT-2-911	8/1/2009
Maine	All	All	Gray & Orono DPS (for entire state)	Verizon	TCS - SMS to TTY	6/1/2013
Maryland	Frederick	County Wide	Frederick County Emergency Communications Center	Verizon	TCS - Web Browser/GEM911	3/21/2013
New York	Chemung	Chemung County	Chemung County Communication Center	Verizon	TCS - Web Browser/GEM911	8/1/2013
	Monroe	Rochester	Monroe County 911 Center	Verizon	TCS - Web Browser/GEM911	5/24/2013
	Montgomery	Montgomery	Montgmoery County Sheriff's Office	Verizon	TCS - Web Browser/GEM911	
	Oneida	Oriskany	Oneida County Sheriffs Office	Verizon	TCS - Web Browser/GEM911	6/6/2013
	Steuben	Bath	Steuben County E911	Verizon	TCS - Web Browser/GEM911	3/12/2013
North Carolina	Durham	City of Durham	Durham Emergency Communications Center	Verizon	TCS - Web Browser/GEM911	8/1/2011
Ohio	Geauga	Geauga	Geauga County Department of Emergency Services	Verizon	TCS - Web Browser/GEM911	8/20/2013
Pennsylvania	Dauphin	Dauphin	Dauphin County EMA	Verizon	TTY	7/15/2013
	Lancaster	Lancaster	Lancaster County-wide Communications	Verizon	TCS - Web Browser/GEM911	7/10/2013
	Luzerne	Luzerne	Luzerne County	Verizon	TTY	8/14/2013
Texas	Collin	County-wide except city of Plano, city of Garland, city of Richardson, and city of Wylie	Allen Police Department Collin County Sheriffs Department Frisco Police Department McKinney Police Department Murphy Police Department Prosper Police Department Sachse Police Department Emergency Communications Center	Verizon	TCS - Web Browser/GEM911	7/18/2013
	McLennan	McLennan	Woodway Public Safety Department	Verizon	TTY	7/22/2013
	Wise	Decatur	Wise County Sheriffs Department	Verizon	TCS - Web Browser/GEM911	1/17/2013
	Wise	Decatur	Decatur Police Department	Verizon	TCS - Web Browser/GEM911	1/17/2013
	Wise	Bridgeport	Bridgeport Police Department	Verizon	TCS - Web Browser/GEM911	1/17/2013
Vermont	All	All	Vermont State Police - Williston (for entire state)	Verizon	Intrado - TXT-2-911	4/16/2012
	All	All	Vermont State Police - Williston (for entire state)	AT&T	Unknown	6 month trial August 2013 - February 2014
Virginia	James City	James City	James City County	Verizon	TCS - Web Browser/GEM911	9/19/2013
	Southampton	Southampton	Southampton County Sheriff's Office	Verizon	TCS - Web Browser/GEM911	10/1/2013
	York	Yorktown	York-Poquoson-Williamsburg 911 Center	Verizon	TCS - Web Browser/GEM911	12/10/2012

Text-to-911 deployments as of October 29, 2013. Visit www.fcc.gov/text-to-911 for more information.

Text-to-911

- ## <u>Text-to-911 FNPRM</u>: December 2012
  - Reflected Carrier-APCO-NENA Agreement
  - Proposed to require all CMRS providers and interconnected text messaging providers to provide text-to-911 service to any PSAP that requests the service by May 2014
  - Proposed to require all CMRS and text providers to send automated bounce-back messages to consumers attempting to text 911 when text-to-911 service is not available by June 30, 2013

- ## <u>Bounce-back Report & Order</u>: May 2013
  - Requires covered text providers to issue a "bounce back" message to subscribers who attempt to text 911 in an area where the local PSAP does not support text-to-911
  - Bounce-back rules are now in effect and covered text providers are supporting bounce-back capability

E911 Location Accuracy

- The FCC's E911 rules (47 C.F.R. § 20.18) require providers to provide location information based on the following standards:

    - for network-based technologies: 100 meters for 67 percent of calls, 300 meters for 90 percent of calls;

    - for handset-based technologies: 50 meters for 67 percent of calls, 150 meters for 90 percent of calls.

- The wireless landscape has changed since adoption of the E911 requirements in 2010 (*e.g.*, most wireless calls now originate indoors)

- Pending E911 location accuracy rulemaking proceeding examines whether the FCC's E911 Phase II requirements are consistent with evolving wireless call usage and technology, so that the delivery and accuracy of wireless 911 location information can be improved to meet critical public safety needs

E911 Location Accuracy

- **CSRIC Indoor Location Accuracy Test Bed**: March 2013
  - CSRIC III WG3 evaluated the performance and viability of various location technologies in their ability to support indoor environments for E911 services
    - AGPS/AFLT
    - RF fingerprinting
    - network beacon technology
  - Established an indoor location test bed using a variety of morphologies across the San Francisco metropolitan area
  - Report indicates that technologies currently exist that can deliver location information for many indoor environments that is comparable to outdoor location information in its level of accuracy

E911 Location Accuracy

- <u>E911 Location Accuracy Workshop</u>: November 2013

  The workshop brought key stakeholders together to discuss:

  - Impact of the growth in wireless usage, particularly in indoor environments, on the provision of location information

  - Whether existing E911 requirements and carrier practices are sufficient to satisfy evolving PSAP needs

  - E911 call tracking data from certain state and local public safety entities, showing current trends in the provision of Phase II E911 location information to PSAPs (available for review at http://www.fcc.gov/encyclopedia/phase-2-data-sets)

  - Potential solutions for improving delivery of Phase II location information in both outdoor and indoor environments, including advancements in location technology

NG911 Legal Framework Report

- Next Generation 911 Advancement Act directed the FCC to submit a report to Congress containing recommendations for the "legal and statutory framework" for NG911 services

- Report issued to Congress on February 22, 2013

- Report contained recommendations for:
  - A legal and regulatory framework for the development of NG911 services and the transition from legacy 911 to NG911 networks;
  - Legal mechanisms to ensure efficient and accurate transmission of 911 caller information to emergency response agencies;
  - Removing jurisdictional barriers and inconsistent legacy regulations

NET 911 Fee Report

- Pursuant to the New and Emerging Technologies 911 Improvement Act of 2008 (NET 911 Act)

- Fourth report (2011) released Dec. 21, 2012; Fifth report (2012) should be released before the end of 2013

- Annual report on the collection and distribution of 911 and Enhanced 911 (E911) fees and charges by states, the District of Columbia, U.S. territories, and Indian territories

- How states used 911 fees in 2011 to address NG911 costs:

  - "Thirty-three respondents indicate that their 911 funding mechanism allows for distribution of 911 funds for the implementation of NG911. Three respondents report that their funding mechanism does not allow for the use of 911 funds for NG911 implementation. Of the states that indicated that their funding mechanism allows for NG911 funding, sixteen states indicated that they used 911 funds for NG911 programs in 2011." *Fourth Annual NET 911 Fee Report* at 14, ¶ 22.

Improving 911 Reliability and Continuity

- **<u>Reliability and Continuity NPRM</u>: March 2013**

  - Seeks comment on improving the reliability and continuity of 911 networks

  - Outlines a range of options based on recommendations from the 2012 *Derecho Report* –

    - In the wake of the June 2012 derecho, the Public Safety and Homeland Security Bureau conducted a comprehensive inquiry into communications failures that resulted from the derecho

    - The Report concluded that 911 communications were disrupted, in large part, due to avoidable planning and system failures

    - The Report identified several key areas for improvement, many of which correspond to existing best practices

Improving Network Transparency and Resiliency

- ## Transparency & Resiliency NPRM: September 2013

  - Service impacts from recent storms, including Superstorm Sandy in 2012, have not been evenly distributed among mobile wireless service providers

  - The NPRM proposes to require wireless service providers to submit to the FCC, for public disclosure on a daily basis during and immediately after disasters, the percentage of operational cell sites for each county within a designated disaster area

  - Would provide consumers with a yardstick for comparing wireless performance in emergencies and encourage competition

  - Seeks comment on alternative measures that could improve wireless network resiliency (*e.g.,* alternative forms of disclosure; back-up power or other performance standards)

  - Comments due in January, reply comments in February

Questions?

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Please dial *1 to ask a question.

Questions

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NG-9-1-1 EARLY ADOPTION

John M Merklinger-Director
Rochester/Monroe County 911 Center

NG-9-1-1 Steps

- Review current architecture at the PSAP
  - CAD, Phone, Radio, connectivity, fiber, network, GIS, staff training and ability, call volume & staff needs
  - USDOL report 12% increase needed by 2020
  - APCO Project Retains/Erlang C
- Review current architecture & capabilities with your LEC
- Review your statewide capabilities
- Plan for steps moving forward for the future

NG-9-1-1

- Street Address Mapping in NYS (SAM)
  - Objective-Create a statewide authoritative address point database to support Next Generation 9-1-1 and other purposes
  - Joint project with all 62 counties & the NYS Office of Information Technology Services
  - Grant funded two stage project
  - Need to follow all NENA NG-911 GIS data file standard, Civic Location Data Exchange Location Format (CLDXF)

NG-9-1-1 in Monroe County

- Immediate Need-large deaf community with 48,000 deaf and hard of hearing residents. Largest per capita in the United States.
  - Needed a better way to serve that community
- Need to allow text to 911 while no dollars were available financially
- Solution GEM-911 from TCS for Verizon Wireless (Verizon is largest carrier in area)
  - Free product uses web browser
  - Minimal training for staff

NG-9-1-1 in Monroe County

- GEM-911 Continued
  - Provided GIS data of PSAP boundary to TCS and Verizon
  - Programming of firewall/surf control software to allows access to the web browser address
  - Build security file for each employee off administrator account
  - Provide training for all employees
  - Set go live date

NG-9-1-1 in Monroe County

- Education piece for text to 911
  - Involve the deaf community early
  - We contacted and worked with the RSD, NTID, HLAAA Rochester Chapter, Deaf Times news letter and other advocacy groups
  - Practice with the deaf community
  - Have deaf community present at your training classes
  - Continue to collaborate with them after go live
    - They have many great contacts

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Please dial *1 to ask a question.

Questions

- Thank you to all of today's presenters and participants and we look forward to seeing you at our next "State of 911" webinar

Date	Presenters	Registration
Thursday, January 9, 2014	**TBD**	Registration will open December 5, 2013
Wednesday, March 19, 2014	**TBD**	Registration will open February 14, 2014

Future "State of 911" Webinars

911.gov

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For questions regarding future webinars, please contact NG911wg@bah.com

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