PUBLIC SAFETY ANSWERING POINTS (PSAPS) REAL-TIME TEXT EDUCATION DAY

October 2, 2018

Panel: PSAP Model Infrastructure for Real Time Text (RTT) Adoption
Disclaimer: The opinions contained in this presentation are those of the panelists, and do not reflect the views of the Federal Communications Commission (FCC), FCC management, or FCC staff.
Panelists

- Mark Fletcher, Chief Architect, Worldwide Public Safety, Avaya
- Jeff Knighton, President, Hamilton Innovations
- Drew Morin, Director, Federal Cybersecurity Technology and Engineering Programs, T-Mobile
- Richard Muscat, Director of Regulatory Affairs, Bexar Metro 9-1-1 and Texas 9-1-1 Alliance
- John Snapp, Vice President of Technology, WEST

Moderators

- Nellie Foosaner, Attorney, and Rasoul Safavian, Senior Engineer, Public Safety and Homeland Security Bureau, FCC
WHAT IS RTT?
WHY IS RTT IMPORTANT?

Consumer Perspective

PSAP Perspective

Technology Perspective

[Images of people using devices and technology]
WHAT ABOUT SHORT MESSAGE SERVICE (SMS) TEXT? WHAT’S THE DIFFERENCE?
WHAT’S HAPPENING WITH RTT TODAY?
Differences apparent when comparing keyboards:
- Samsung took a “look forward” approach where “Enter” key closes the bubble and text suggestions are provided below the entry window
- LG models their keyboard after TTY and includes “SK” and “GA” keys
Different manufacturers envision end user enablement of Real Time Text differently. Some common elements include:

- Text “bubbles” as a common method to capture text in “thoughts”
- Keys to create/access emoji’s
How will PSAPs Receive RTT?

- Legacy Emergency Services Network
- Next Generation Emergency Services Network
- Next Generation Emergency Services Network in a Legacy PSAP
- PSAP call back in Legacy PSAPs
WHAT WILL A RTT CALLER SEE TODAY?
9-1-1, WHAT IS THE ADDRESS OF YOUR EMERGENCY Q GA
9-1-1, WHAT IS THE ADDRESS OF YOUR EMERGENCY Q GA
9-1-1, WHAT IS THE ADDRESS OF YOUR EMERGENCY Q GA
9-1-1, WHAT IS THE ADDRESS OF YOUR EMERGENCY Q GA
9-1-1, WHAT IS THE ADDRESS OF YOUR EMERGENCY Q GA
9-1-1, WHAT IS THE ADDRESS OF YOUR EMERGENCY Q GA
9-1-1, WHAT IS THE ADDRESS OF YOUR EMERGENCY Q GA
9-1-1, WHAT IS THE ADDRESS OF YOUR EMERGENCY Q GA
WHAT WILL A PSAP SEE TODAY?
9-1-1, what is the address of your emergency Q GA

What city Q GA

What is the closest intersection Q GA
What is your emergency Q GA
Do you need police, fire, or ambulance Q GA
What is your phone number Q GA
What is your name Q GA
What is the problem Q GA
Stay next to your TTY...
Figure 3

AT&T WPH2 911 Call versus Wi-Fi 911 Call – PSAP Display Example

Wireless Phase 2 911 Call ANI Display at the PSAP

Wi-Fi 911 Call ANI Display at the PSAP when in proximity of registered 911 address
(210) 415-1017

A4- 115 ESN=010 99
(210) 415-1017 15:15 09/26/2018
24618
ARROW CANYON
(210) 211-3542 VMBL
SAN ANTONIO TX

JAMES MCDANIEL
ALT#= TELCO=ATTSP
X=-98.4960150 CNF=068
Y=29.63701486 UNC=21

SAN ANTONIO POLICE
SAN ANTONIO FIRE
SAN ANTONIO EMS
(210) 415-1017

A4- 115  ESN=287  70
(210) 415-1017 09:26 09/28/2018 04014
AT&T-N SECTOR-QF 482D6
(830) 511-4214 WPH2
WIRELESS-SAN ANTONIO  TX

ATTMO
ALT#= TELCO=ATTMO
X=-98.4961867 CNF=090
Y=29.63682174 UNC=19

WIRELESS CALLER
VERIFY CALLER'S NUMBER
VERIFY CALLER'S LOCATION
RTT THROUGH AN ESINET
Additional Complexity

- Legacy Network Gateway – Non i3 Carriers
- Legacy PSAP Gateway – Non i3 PSAPs
- Mid-call RTT Upgrades
- TTY / RTT Transfers
- Dialogs on transfers
- UE/CPE Compatibility / Testing
RTT AND TTY
INTERWORKING TODAY
RTT VS. TTY
Real Time Text

Let's CELEBRATE. What time

@ noon

do you want to meet?

TTY

LET'S CELEBRATE.
WHAT TIME DO YOU WANT
TO MEET QQ GA

NOON GA
RTT-TTY INTERWORKING WITHIN ESINET
RTT to TTY Interworking

- Allows all RTT-capable wireless phones to dial 911 today and have successful text communications.
- Allows wireless carriers, ESInet providers, and PSAPs to “phase out” RTT to TTY Interworking incrementally
- Not intended as a long term industry solution, as end-to-end RTT provides a better consumer experience, and RTT to TTY Interoperability can add complexity to the communication
- Challenges arise when an ESINet has to manage both Legacy PSAPs and i3 PSAPs
What Should PSAPs Do?

- Talk to your vendors about their plans for RTT integration.
- Consider implementing text solution that includes support for direct RTT.
- The goal of RTT is to make 9-1-1 directly accessible to everyone.
Volunteers Sought for Real-Time Text Readiness Work Group

Sunday, September 16, 2018  (0 Comments)
Posted by: Chris Nussman

The FCC provided its Report and Order (R&O) regarding the transition to Real-Time Text (RTT) in late 2016 identifying a requirement for Tier 1 wireless carriers to provide at least one RTT capable handset option by December 31, 2017. In general, traffic generated by RTT capable handsets will be converted by the wireless carrier to TTY so legacy PSAPs can receive the call using legacy TTY devices through either E9-1-1 or transitional NG9-1-1 systems. As a service to be requested, currently there is no process to determine if a wireless carrier is RTT capable in a serving area, to verify that a NG9-1-1 PSAP is capable of receiving native RTT, and there is no criteria or method for the PSAP to notify the wireless carriers of their readiness.

Volunteers are sought to participate in the PSAP Guidelines for RTT Readiness Work Group. While no specific knowledge is necessary to join the work group, subject matter experts from the PSAP, carrier, accessibility, CPE, and network provider communities are desired to ensure the best understanding of industry needs for the creation of proper implementation guidelines.

The PSAP Guidelines for RTT Readiness Work Group plans to meet Fridays at 11AM Eastern, starting on October 5. Click here to join.