



9-1-1 Technical Operations Committee

Meeting Notice

**Thursday
October 18, 2018
10:00 AM**

**MESB Office
2099 University Ave W
St. Paul, MN 55104**

Mark Your Calendars

Metropolitan Emergency Services Board

9-1-1 Technical Operations Committee

Tentative Agenda

October 18, 2018

1. Call to Order
2. Approval of Agenda / Minutes
 - A. Approval of the Agenda
 - B. Approval of the Minutes
3. Action Items
 - A. Approve 2019 Regional Grant Funding Priorities
4. Unfinished Business
 - A. Next Generation 9-1-1
 1. Text-to-9-1-1 implementation
 - a) Text-to-911 Regional Sunset Agreements
 2. Firewall implementation
 3. Wireless Handset Location
 - B. Foreign Language Text Message
 - C. August 1 9-1-1 Service Disruption Notification Process
 - D. Apple Watch Accidental Calling
5. Pending Business
 - A. Continuity of Operations Plans (COOP)
 - B. Election of 2019 Chair & Vice Chair
 - C. Recommendation of Appointment of 2019 Metro Region Representative to SECB NG9-1-1 Committee
6. Reports
 - A. 9-1-1 Data Update Report (see attached)
 - B. PSAP Operations Round Table Work Group Report
 - C. SECB NG9-1-1 Committee Report
7. Adjourn

Metropolitan Emergency Services Board
9-1-1 Technical Operations Committee
Draft Meeting Minutes
September 20, 2018

Committee Members

X	Heather Hunt, Minneapolis (Chair)	X	Kevin Schwartz, Hennepin
X	Val Sprynczynatyk, Anoka (Vice-Chair)	X	Vicki Vadnais, Allina
	Bob Dowd, Isanti	X	Nancie Pass, Ramsey
X	Jim Scanlon, Bloomington PD		Wendy Lynch, Hennepin EMS
X	Tim Walsh, Carver	X	Jill Martens, Scott
X	Jon Eckel, Chisago	X	Darlene Pankonie, Washington
X	Cheryl Pritzlaff, Dakota	X	Tony Martin, Edina
X	Lisa Vik, Eden Prairie	X	Heidi Hieserich, Airport

Alternates

	Jeff Schlumpberger, Hennepin		Bob Shogren, Isanti
	Andrew Ellickson, Washington	X	Christine McPherson, Minneapolis
	Susan Bowler, Carver	X	Scott Haas, Scott
	Tom Folie, Dakota	X	Kari Morrissey, Anoka
	Cesar Munoz, Eden Prairie	X	Jon Rasch, Ramsey
X	Lauren Peterson, Airport		James Soukup, Allina
	Wade Johnson, Hennepin EMS		

Others Attending

Tim Boyer, MSP Communications
 Scott Petersen, MECC
 Jake Jacobson, CenturyLink
 Dustin Leslie, ECN

Marvin Bachmeier, representing HEMS
 Matthew Hoffer, CenturyLink
 Dominic Taylor, North Memorial
 Chad Loeffler, Metro Transit

MESB Staff

Pete Eggimann	Jill Rohret
Marcia Broman	Martha Ziese

1. Call to Order

Heather Hunt called the meeting to order at 10:02. Introductions.

2. Approval of Minutes / Agenda

A. Approval of Agenda

Hunt asked if there were any changes or additions to the tentative agenda for today's meeting. There were no changes or additions, so Hunt asked for a motion to approve the tentative meeting agenda as it was distributed.

*Motion (Pass / Pritzlaff) to approve the September 20, 2018 TOC agenda as distributed.
Approved*

B. Approval of Minutes

Hunt asked if there were any corrections or additions to the draft minutes from the July 19, 2018 meeting as distributed. There were none, so Hunt asked for a motion to approve the minutes as distributed.

Motion (Sprynczynatyk / Dowd) to approve the July 19, 2018 minutes as distributed. Approved.

3. Action Items

A. Foreign Language Text Message

Pete Eggimann advised the committee members that this issue was in response to a request from Sherri Griffith Powell, Mission Critical Partners, who was working with Bill Ferretti, the PSAP Manager in Montgomery Co., Maryland. Bill raised the question about how PSAPs currently taking text messages handled it when they received a text message in a foreign language. Pete passed that question on to the metro PSAP managers currently taking text messages. Those responses generated an interest in the feasibility of pre-recording messages in some of the common foreign languages that would let the person texting 9-1-1 know that translation services were not available for text messages and that they should make a voice call to 9-1-1 instead.

Dan Craigie asked the U of M language department to consider this issue. They came up with the phrase, "Translation not available by text. Call 9-1-1". Pete also advised the committee that both the VIPER and VESTA answering applications appear to be limited to the English alphabet characters, so languages that have their own character set could not be supported by a pre-recorded message. Pete asked the committee if they were interested in having the MESB pursue this further. There was sufficient interest by committee members for the MESB to work with ECN to get the recommended phrase translated into the foreign languages commonly encountered in the metro area that utilize the same alphabet characters as English.

B. Identify Grant Priorities for 2019-2020

Eggimann said that the SECB grant process is starting up again for 2019-2020. Last year the committee asked a workgroup to come back with suggested projects that would benefit from grant funding for the committee's review and approval. A prioritized list of grant requests should be approved at the October TOC. Eckel, Pankonie, Schwartz, Rasch, and McPherson

volunteered to work on a draft list. Rohret said there are items for consideration in the enclosed strategic plan. Rohret told the committee that the MESB staff could start the conversation with the work group and coordinate the effort. The requests would be presented to the board for approved at the November MESB meeting.

C. August 1 System Failure Notification Process

Eggimann provided a report to the committee listing the root causes identified by CenturyLink and West that caused the system failure. The report also listed the steps both companies are taking to prevent a recurrence.

The discussion then switched to the communications between the PSAPs and CenturyLink when a 9-1-1 call delivery issue is identified. The PSAPs voiced concerns about the inability to get through to 9-1-1 Repair during a system failure. Hold times of 20-30 minutes were common among committee members during the August 1 event. Several committee members indicated they simply gave up trying to get through. Some PSAPs utilized the radio system to communicate with other PSAPs what they were experiencing during the failure. CenturyLink sent notifications, “There is a network event that is causing a potential 911 PSAP/Central Office/ALI Outage in your area”. The PSAPs received the notification at about the same time as, or after, the issue was resolved, and 9-1-1 calls were again routing correctly. The committee asked the staff to work with ECN and CenturyLink to improve the timeliness and message content in the notices sent out when there was a service-impacting event with the 9-1-1 system. The communications issue was raised at the SECB and NG9-1-1 Committee meetings this month too.

4. Unfinished Business

A. Next Generation 9-1-1

1. Text-to-9-1-1 Implementation

Destin Leslie, ECN said that Winona County became the 20th in the state. Chisago will go live on September 13 is next. Outstate will be McLeod, Wright, and Stearns. The state is currently experiencing about 450 text calls a month.

a) Text-to-9-1-1 Regional PSAP Sunset Agreements

Pete Eggimann told committee members that it looks like three or four of the metro PSAPs will not be ready to take their own text messages by the end of the year and will need to reach an agreement with another PSAP to take text messages on their behalf. Kevin Schwartz said that ideally the Hennepin Co. PSAP would prefer to only continue providing text service to the other Hennepin Co. PSAPs but will work with other PSAPs if necessary. Text deployments were scheduled through mid-November last year but became more difficult to schedule after that until January because of the holidays.

2. Firewall implementation

Leslie said the Airport go-live date is scheduled for October 2. The last effort failed. Eckel asked if the state firewall configuration has been fixed. Leslie will have Dan Craige address this question.

3. Wireless Handset Location

CTIA and West have both announced that the wireless carriers are adding new location tools. This is a work in progress and additional information is expected to come out as the carriers begin implementing the new technology. At this point it appears there will only be one location in the ALI, and telecommunicators will not have to try to interpret what multiple locations might mean. The MESB will continue to press that the enhanced location be utilized in implementing 9-1-1 call routing based on the caller's location, not on the tower sector. (Both CTIA's and West's announcements were included in the meeting packet)

5. Pending Business

A. Continuity of Operations Plans (COOP)

Pete updated the committee that over half of the metro PSAPs had already filed their COOP plans with him for inclusion in the Consolidated 9-1-1 Plan and filing with ECN. Of the remaining PSAPs, only two have not responded to the MESB or ECN and the rest have asked for an extension. Pete encouraged the PSAPs to complete the work on the plans as soon as possible and said he would follow-up with the two PSAPs that had not responded.

B. Metro National Weather Service Standard

Rohret reported that the Weather Service Standard has been updated for clarity based on the committee's input at the last meeting. The procedure itself detailed in the standard has not changed.

C. Legislation - MN Resuscitation Alliance – Mandatory Telephone CPR Training for All Telecommunicators

Rohret said the bill was introduced earlier this year to make CPR classes mandatory for all Minnesota telecommunicators. The bill didn't go anywhere, but the Alliance is planning to push the bill again in this coming session. The Alliance and the Heart Association have both agreed to work with the ECN and MESB lobbyist to make the bill language work better for the PSAPs. Rohret handed out the article regarding the Wisconsin bill which does not require all PSAPs to provide the instruction if they transfer the call to another PSAP who will provide the instructions. This more closely aligns with what the metro PSAPs are doing now. Eggimann pointed out that these instructions should be incorporated into the regular call handling protocols used by the telecommunicators and approved by the PSAP's medical advisor.

6. Reports

A. 9-1-1 Data Update Report (see attached)

Marcia Broman reviewed the wireless ALI display survey results and asked the committee for feedback about the proposed simplification of the data displayed with wireless calls. The simplified format has been trialed with Ramsey Co. and did not produce any issues with their CAD interface.

B. PSAP Operations Roundtable Work Group

Heidi Hieserich said group had not met since July and the next meeting will be at the MESB on October 9. There will be a discussion on the maintenance of the training curriculum. Heidi will be stepping down as chair of the Roundtable Committee and hopes that a new chair can be identified at the October meeting.

C. SECB NG9-1-1 Committee Report

Christine McPherson told committee members that she didn't have anything additional that was not already covered in the earlier agenda items and asked if the committee members had any questions for her related to the NG9-1-1 Committee. No questions were raised.

Adjourn

Technical Operations Committee – 10/18/2018

9-1-1 Data Update

Metropolitan Emergency Services
Board

2099 University Avenue
St. Paul, MN 55102
Web: www.mn-mesb.org

1. Statewide GIS Data Standards:

- a. The MESB received a response on October 4, 2018 from the Minnesota Data Practices Office affirming the public status of the ESZ and PSAP service area polygon dataset maintained by the MESB. It is anticipated that this dataset will become part of a regional GIS data viewer application.
- b. The Minnesota Geospatial Advisory Council (GAC) Standards Committee will meet again on 10/25/18 to continue its review of the comments received during the initial 60-day public review and comment period for the proposed **Minnesota Road Centerline Standard** (MRCS) schema. Based on the committee's conference call on 9/18/18, a second public review and comment period will occur after the committee completes its review of the initial comments.

2. Regional GIS Data Aggregation:

- a. **Centerline:** The MetroGIS/Met Council continues to process updates of the MRCC nightly to the MN Geospatial Commons website. Each metro county's most recent centerline data that has been uploaded to the portal and passed validations is included in the regional dataset. The seven metro counties are using this process for MRCC updates. Chisago and Isanti Counties are working on pre-validation of their datasets for ultimate inclusion in the MRCC nightly processes.
- b. **Address Points:** The MetroGIS/Met Council now also processes updates of the Regional Address Point dataset (in the statewide schema) nightly to the MN Geospatial Commons website. Each metro county's most recent address points that have been uploaded to the portal and passed validations are included in the regional dataset. The seven metro counties plus Chisago are using this process for submitting address point dataset updates. Isanti County is working on pre-validation of their dataset for ultimate inclusion in the Regional Address Point dataset process in January 2019.
- c. Based on the MetroGIS Coordinating Committee meeting on 9/27/18, the **Regional Data Viewer** project proposed by MESB appears to be on track to be a priority project in the MetroGIS 2019 Workplan. The Regional Data Viewer would allow visibility to the most current versions of the regional geospatial datasets central to the business needs of E9-1-1 and NG9-1-1. The application would be used for viewing the data and enhancing communications and interactions between the GIS-enabled and non-GIS enabled professionals engaged in the work of validating and maintaining 911 related data.

3. Regional PSAP/ESZ Boundaries:

- a. **Regional PSAP/ESZ polygon boundary dataset recent changes:** The dataset was updated to reflect Dakota County taking its own text-to-911 calls effective 10/23/2018.

4. Verizon Data Transition from West Mobility to Comtech

- a. PSAP managers may have received an email blast from ECN with the State's update on two Verizon issues:
 - i. **Verizon Uncertainty value:** "Verizon wireless Phase I calls will have an uncertainty of zero and the rest of your wireless calls will likely have a value ranging anywhere from 32 to 32980...What this means for your PSAP: Training will need to occur so your Telecommunicator's are not relying on the uncertainty value on WPH1 calls for dispatching, especially one that has a value of zero." The issue is nationwide, and discussions are continuing about how best to address this issue moving forward.
 - ii. **Verizon Phase 2 issues:** ECN described an issue with the Verizon Company ID stating that this "has likely caused issues with your CPE requesting/receiving WPH2 location." To clarify, this has **not** been an issue in the metro area with the transition from Verizon to Comtech, nor prior to that when Verizon was using West Mobility to manage their wireless data. The problem was related to the handling of Verizon's Phase 2 bids in conjunction with IES' database.
- b. Maintenance processes and related issues for Minnesota-Verizon under Comtech continue to be hammered out.

5. Wireless Data:

- a. **Wireless routing updates** for all carriers are being handled between Comtech (VZW LTE), West Mobility (ATTMO, SPPCS, VZW CDMA), T-Mobile and the MESB (on behalf of all metro PSAPs) using routing spreadsheets exchanged via email. MESB is sending routing directly back, rather than sending it through the PSAP for final review. MESB PSAPs can always email mesbgis@mn-mesb.org and request that MESB review the routing for a specific sector or call.
- b. MESB PSAP managers and 9-1-1 data contacts were updated via email on 10/3/18 about the continuing process to **clean up wireless ALI data screen content and streamline wireless data maintenance processes**. The email outlined the plan, as discussed at the last TOC meeting, resulting from the August PSAP survey:
 - i. Retain, but standardize, the cell tower address and community information to eliminate confusing and inconsistent abbreviations and move toward MSAG-valid forms for these locations wherever possible
 - ii. Retain an indication of sector compass directional orientation, but eliminate the sector area descriptor which the PSAPs did not deem vital to call handling and dispatch
 - iii. Eliminate the MN State Patrol ID which the PSAPs did not deem vital to call handling and dispatch
 - iv. Correct inconsistencies in site/sector ID naming
- c. The first phase of the plan outlined in item 5.b (above) began the week of 10/8/18 affecting **gradual changes to clean-up PSAP wireless ALI data display content**.
- d. MESB is building a **GIS dataset of cell towers** across all carriers that will be used in the next phase of wireless ALI clean-up.
- e. Discussions and trials with MESB, RCECC, and the wireless data providers are continuing to finalize the next steps to **simplify wireless ALI screen content and streamline processes**.

- f. In light of the recent **CTIA announcement**, MESB provided ECN with a draft letter to all wireless carriers doing business in Minnesota affirming the importance of integrating of device-based hybrid location technology solutions to improve the accuracy of **both** wireless 9-1-1 call routing and location identification, and notifying them of state's willingness to be involved in any trials, testing, or early adopter roles that would hasten the availability of these solutions in Minnesota and nationwide. ECN has agreed to take the letter to the SECB NG9-1-1 committee.

6. Quarterly MSAGs:

- a. Q4 2018 MSAGs have been distributed to PSAP 9-1-1 Data/911NET contacts and county GIS contacts.

7. Regional 911/GIS Data Synchronization:

- a. Attached is a high-level summary of the data synchronization activity by PSAP.

Summary of 9-1-1/GIS Data Preparation for NG9-1-1 (as of September 30, 2018)

PSAP	9-1-1/GIS Data Synchronization						GIS Integration					
	ESZ Validations	Response Area Validations	Street Name Validations	Postalize MSAG	Address Validations	Address ESN Validation	Integration to Regional Centerline	Integration to Regional ESZ Layer	Integration to Regional Address Points	GIS MSAG	Centerline Validations	Integration to Statewide SIF & ECRF/LVF
Airport	complete	na	complete	complete	complete	not started	complete	complete	complete	not started	active	not started
Anoka	complete	complete	complete	complete	complete	active	complete	complete	complete	active	active	not started
Bloomington	complete	na	complete	complete	complete	not started	complete	complete	complete	not started	active	not started
Carver	complete	complete	complete	complete	complete	not started	complete	complete	complete	not started	not started	not started
Chisago	complete	complete	complete	complete	complete	not started	active	complete	complete	active	complete	not started
Dakota	complete	complete	complete	complete	complete	active	complete	complete	complete	active	complete	not started
Eden Prairie	complete	na	complete	complete	complete	not started	complete	complete	complete	not started	active	not started
Edina	complete	complete	complete	complete	active	not started	complete	complete	complete	not started	active	not started
Ft Snelling/Airbase	active	not started	na	complete	na	not started	complete	complete	complete	not started	not started	not started
Hennepin Sheriff	complete	not started	complete	complete	complete	not started	complete	complete	complete	not started	active	not started
Isanti	complete	not started	complete	complete	complete	not started	active	complete	active	not started	active	not started
Minneapolis	complete	not started	complete	complete	active	not started	complete	complete	complete	not started	active	not started
Ramsey	complete	active	complete	complete	complete	active	complete	complete	complete	not started	complete	not started
Scott	complete	active	complete	complete	active	not started	complete	complete	complete	not started	not started	not started
St Louis Park	complete	na	complete	complete	complete	not started	complete	complete	complete	not started	complete	not started
U of M	complete	na	complete	complete	active	not started	complete	complete	complete	not started	not started	not started
Washington	active	not started	complete	complete	active	not started	complete	complete	complete	not started	not started	not started

(From [IOS.gadgethacks.com](https://ios.gadgethacks.com) website)

<https://ios.gadgethacks.com/how-to/call-911-from-your-apple-watch-case-emergency-0185254/>

How Different Apple Watches Call Emergency Services

If you have a newer [Apple Watch Series 3 \(GPS + Cellular\)](#) model, you don't need to have your iPhone nearby to make an emergency call. Technically, you don't even need to have a cellular carrier to call 911, just like you don't need to with an iPhone, but it it doesn't work as smoothly though. Aside from being able to record your runs and make calls, this is the number one reason to invest in a Series 3 model with cellular capabilities, not just GPS.

For other Apple Watch models, you'll need to be connected to your iPhone, which also needs a cellular connection. Alternatively, if there is no cellular signal, an Enhanced 911 (E911) call can be made over Wi-Fi as long as you have "Wi-Fi Calling" enabled on your iPhone. Also, as long as you have "Wi-Fi Calling" turned on on your iPhone, you don't need to be near the iPhone to call E911 either — your Apple Watch just needs to be connected to a known 802.11b/g/n 2.4 GHz Wi-Fi network.

- **Apple Watch Series 3 (GPS + Cellular)**: Can make 911 calls over its own cellular connection. Can make E911 calls with Wi-Fi calling enabled, with or without iPhone nearby, as long as connected to a known Wi-Fi network.
- **Apple Watch Series 3 (GPS)**: Can make 911 calls over connected iPhone's cellular network. Can make E911 calls with Wi-Fi calling enabled, with or without iPhone nearby, as long as connected to a known Wi-Fi network.
- **Apple Watch Series 2**: Can make 911 calls over connected iPhone's cellular network. Can make E911 calls with Wi-Fi calling enabled, with or without iPhone nearby, as long as connected to a known Wi-Fi network.
- **Apple Watch Series 1**: Can make 911 calls over connected iPhone's cellular network. Can make E911 calls with Wi-Fi calling enabled, with or without iPhone nearby, as long as connected to a known Wi-Fi network.

[AT&T](#), [C Spire](#), [Sprint](#), [T-Mobile](#), [US Cellular](#), and [Verizon Wireless](#) all support E911 calls over Wi-Fi. However, emergency calls over Wi-Fi might not be supported outside of the US. For this article, we tested an [Apple Watch Series 3 \(GPS + Cellular\)](#) provided by Verizon Wireless.

How Emergency Services Can Track You Down

After placing a call to 911, the first thing you should do is tell them where you're at so they can locate you even if the call gets cut off. If you can't speak, though, how do they know where you're located?

There's no easy way to say exactly what will happen in every scenario since different carriers utilize different technologies to communicate with public-safety answering points, and those call centers may or may not be equipped to handle wireless enhanced 911 calls for each carrier, if at all. Keep in mind, when making cellular calls to 911 from an Apple Watch, the call may use the Watch's cellular capabilities, if any, or use your nearby iPhone's cellular network.

- If you're using a carrier-branded hotspot to call over Wi-Fi, the 911 call will likely be made to the 911 communications center that services that hotspot's area, and that hotspot may serve as a basis for locating you.
- When making a Wi-Fi call using another trusted network, the call center may use your "Emergency Address" that you added when setting up Wi-Fi Calling, so always make sure this is up to date.
- When making the call over a cellular network, they may or may not receive a general location based on which cellular tower the call came from.
- In some cases, the call center may "re-bid," or refresh, the data to receive a more accurate location thanks to AGPS and other technologies, if making the call over a cellular network.
- When an approximate location is unattainable, the call center may use your "Emergency Address" that you added when setting up Wi-Fi Calling, so always make sure this is up to date.
- Some carriers support Apple's own technology, which uses cell towers, GPS, and Wi-Fi access points, to help locate 911 callers.

Apple had implemented what they call HELO, or Hybridized Emergency Location, for iPhones since 2015. This estimates the location of the person calling 911 using cell towers, GPS, and Wi-Fi access points. Apple even augments this data with the barometric pressure, which would help with altitude readings, to locate you better in, say, a high-rise building. If connected to your iPhone's cellular network when making the call, you're more likely to be tracked precisely.

Additionally, Apple recently stated in a press release that iOS 12, which will likely be released to the public in September 2018 (but can be installed right now) would implement improved technology. It's not known yet if this feature will also be built into watchOS 5 for the Apple Watch Series 3 (GPS + Cellular) model,

<https://appleinsider.com/articles/17/11/17/lte-apple-watches-may-be-able-to-make-emergency-calls-without-linked-iphone-plan>

After a first unsuccessful attempt to test the "Emergency SOS" feature on an unactivated Watch running watchOS 4.1, a Reddit poster said they recently emailed Apple asking if it was a carrier issue and if support was ever planned. The person then received a reply from Apple Executive Relations, eventually getting a

mediated explanation from engineers that a Watch should be capable of making SOS calls with or without activation.

On a second test after installing watchOS 4.2 beta 3, the poster managed to get in contact with 911 after waiting 3 minutes —having been encouraged by an Apple representative to wait up to 5. It's not clear if the OS update had any impact.

Emergency SOS is triggered by holding down the side button on a Watch, which will eventually dial the emergency dispatch in a given region. Once that call ends, a Watch will attempt to fire off text messages to listed emergency contacts, including location information, even if Location Services are normally turned off.

(From the PoliceOne.com website)

with [International Public Safety Association](#)

911, what time is it? How smart watches are impacting 911 call centers

911 centers nationwide are struggling with dispatchers temporarily unable to take an inbound emergency call due to calling a 911 hang-up back from a watch

Oct 3, 2018

Reprinted with permission from [IPSA](#)

By Lori Pina

Have you ever tried to find a watch? If not, it is very time-consuming. Dispatching these calls isn't what delays customer service; it is the process of calling back every smart watch-wearing citizen. Although policy varies between [911 call centers](#), it has the same impact overall, which is a call taker is temporarily unable to take an inbound emergency call due to calling a 911 hang-up back from a watch. This July 14, 2009 photo shows senior dispatcher Ken Marks working at the Albany Police Department call center in Albany, N.Y. (AP Photo/Tim Roske)

Apple

[iWatch and its technology](#) is becoming quite the experience for 911 call centers across the country. If you hold down the side button on the iWatch, it will call 911 with a Wireless Phase 2 location (approximate location of the watch-wearer). For this feature to work, the watch-wearer must be within a Bluetooth connection range to their cell phone or connected to a stronger Wi-Fi.

As the call comes into the 911 call center, it sounds something like this: several voices can be heard in the background, and the call taker is unable to advise if there was a disturbance. However, they have an approximate location (Phase 2).

The call taker will then call back the number associated with the iWatch, and, if lucky, the subscriber will answer and advise their watch [called 911 accidentally](#). If there is no answer, then the call will be forwarded to voicemail. If voicemail is reached, the next step a call taker will implement varies based on call center policy.

Samsung

[Samsung technology](#) is entirely different. The smart watch has an SOS feature that will contact up to four people. If the watch-wearer intentionally or unintentionally pushes the side button three times in a row, it will notify up to four people of their approximate location via text

message and also provide audio coming from the smart watch. However, no audio will return to the watch (in case the watch-wearer is in an emergency situation). It will continue to update your SOS contacts for up to one hour after with location.

While this is a great function in theory, the functionality has limitations in practice. In theory, the SOS contact would notify law enforcement, fire or medical of the victim's location and advise what is occurring.

However, the 911 call center will receive up to four 911 calls for the same incident, with minimal information. Often, the caller can only advise that their friend pushed an SOS button and give an approximate location.

If the 911 call taker is fortunate enough to find the watch-wearer, they usually discover one of the following:

1. The individual accidentally sent an SOS call.
2. The individual was trying to reach a family member that wasn't answering their phone.
3. A child was playing with the watch.

Unfortunately, most of the time, 911 call takers are unable to find the watch-wearer due to them being in a large crowd, or because the individual just moved on and continued whatever it was they were doing.

Other smart watches

In a 911 call center, we often deal with the Apple or Samsung smart watches but there are other watches that impact the 911 world.

Watches designed for children: The other smart watches use a service such as an alarm company or GPS technology that gets relayed through a parent or guardian. These smart watches tend to be targeted for children and usually have a geofencing technology, which is simply a geographic boundary set up specifically for the watch by the guardian. These smart watches are usually set up around a school, home or park where the child is known to frequent. In a situation involving a missing child or a person with special needs, although a 911 call taker would have to go through a parent or guardian on the account, they could get a decently accurate location for the subject.

Watches designed for the elderly: Smart watches designed primarily for the elderly are usually monitored by an alarm company. When this is the design, the alarm company usually has minimal information, such as the subscriber's address, known medical information and key location. While the alarm company may not be able to give a 911 call taker an accurate phase 2 (approximate location), they may be able to provide medical information that can be relayed to first responders.

Although there are other brands and different types of smart watches on the market, the best practice out there is to be knowledgeable of what your smart watch can do and who you're

reaching when utilizing a SOS feature. If it is a third party monitoring the smart watch, such as an alarm company, make sure they know what information you are willing to have released to authorities ahead of time in case of an emergency. In an emergency, seconds make all the difference.

To all smart watch-wearers, figure out what your smart watch can do, so when the seconds matter, 911 call takers aren't wasting minutes to help.

About the author

Lori Pina is a lead telecommunicator with the Charlotte Mecklenburg Police Department and a member of the IPSA's 911 Telecommunications Committee. She has been an emergency telecommunicator for the last decade. She began her career with a smaller consolidated agency that dispatched for police, fire and medical and completed all DCI functions. She relocated to Charlotte, North Carolina, in 2014 and subsequently got hired to join CMPD. Pina has been a communications training officer for six years and recently became a lead telecommunicator.

About the author

The International Public Safety Association, a 501(c)3 non-profit public safety association, represents all public safety verticals: law enforcement, fire service, EMS, telecommunications, public works (water, sanitation, transportation), public health, hospitals, security, private sector, and emergency management.

(From MissionCritical Communications Radio Resource International Magazine)

FCC Proposes 9-1-1 Rules on MLTS, Dispatchable Location
Wednesday, September 26, 2018 | [Comments](#)

The FCC proposed rules to help ensure that people who call 9-1-1 from multiline telephone systems (MLTS) — which commonly serve hotels, office buildings and campuses — can reach 9-1-1 and be quickly located by first responders.

The action implements two recently enacted laws designed to improve emergency calling.

First, the FCC took action to implement Kari's Law, which requires MLTS to enable users to dial 9-1-1 directly, without having to dial a prefix such as a 9 to reach an outside line. Kari's Law also requires MLTS to provide notification, such as to a front desk or security office, when a 9-1-1 call is made to facilitate building entry by first responders. The FCC proposed rules to provide clarity and specificity to these statutory requirements so that companies can effectively meet their obligations.

Second, RAY BAUM'S Act requires the commission to consider adopting rules to ensure that "dispatchable location" information, such as the street address, floor level and room number of a 9-1-1 caller, is conveyed with 9-1-1 calls, regardless of the technological platform used, so that first responders can be quickly dispatched to the caller's location. The FCC proposed rules that would apply dispatchable location requirements to MLTS, fixed telephone service, interconnected VoIP services and telecommunications relay service. The commission noted that mobile wireless services are already required to provide either dispatchable or coordinate-based location information with 9-1-1 calls.

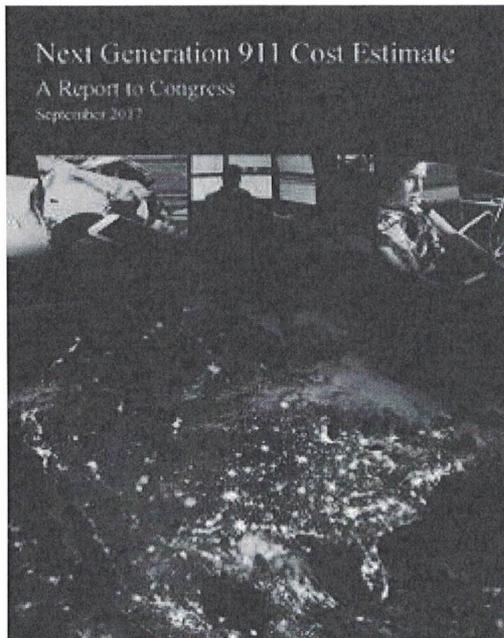
In addition, the FCC proposed consolidating its 9-1-1 rules from multiple rule parts into a single rule part, making it easier for service providers and emergency management officials to ascertain 9-1-1 requirements.

(From Mission Critical Partners 9-1-1 Blog)

MCP Insights

Four Takeaways from the Next Generation 911 Cost Study Report Delivered to Congress this Week

- Posted by [Gordon Vanauken](#) on Oct 5, 2018 11:30:00 AM



As part of the Middle-Class Tax Relief and Job Creation Act of 2012 (P.L. 112-96), Congress directed the 911 Implementation and Coordination Office, which is housed within the National Highway Traffic Safety Administration at the U.S. Department of Transportation and is a joint program with the National Telecommunication and Information Administration in the Department of Commerce, to investigate the cost of implementing Next Generation 911 (NG911) service across the country.

The report was intended to “serve as a resource as [Congress] considers creating a coordinated, long-term funding mechanism for the deployment and operation, accessibility, application development, equipment procurement and training of personnel for Next Generation 911 services.”

Years later—after many hours spent interviewing stakeholders, collecting and analyzing data, and evaluating models—the National 911 Program this week delivered the Next Generation 911 Cost Study to Congress.

Mission Critical Partners applauds the progress made by the National 911 Program, not only by delivering this report, but also by creating a universal definition and framework for understanding the various stages of development and implementation of NG911 service nationwide. This effort marks a significant milestone in the Government's role of advancing the nation's 911 system and acting as an advocate for efficient and effective emergency response.

We caught up with several of our NG911 experts to discuss the four biggest takeaways from the Cost Study.

Takeaway #1: Today's piecemeal approach to NG911 will be insufficient for realizing nationwide deployment.

NG911 is being implemented in a piecemeal fashion today. According to the National 911 Progress Report, less than half of the states that participated in the study reported that they've made significant progress toward NG911 implementation. While roughly 44 percent reported that they've adopted a statewide NG911 plan, only 47 percent have installed and tested systems thus far.

The piecemeal approach can be attributed to funding limitations, particularly limited availability of grant funds. To realize ubiquitous, nationwide NG911 implementation, funding will be necessary at the federal level, and in some areas, federal or national oversight will be required for implementation assistance. We're particularly optimistic that \$109 million was recently announced as part of the National 911 Grant Program and the National 911 Program continues its efforts to make important grant awards.

Takeaway #2: The NG911 Maturity Model is a highly valuable and needed tool to measure universal NG911 progress across the nation, as well as for determining the status of NG911 implementation for each state.

A multistage NG911 Maturity Model framework was created for the Cost Study to provide a methodology for measuring the progress of NG911 implementation nationwide. What's equally important is that this framework can serve as a basis for understanding the various stages of development and implementation of NG911 service nationwide.

The Maturity Model consists of six key domains that contain the functional elements that make up an NG911 system. Progress within each domain can be measured by five key stages that are shared across all domains. The result is a very flexible tool that will accommodate multiple deployment options; this is important when one considers that any one agency may have elements in more than one stage—or even all stages—at any given time until the end state is reached.

In a future post planned for next week, we will investigate the Maturity Model in greater detail.

Takeaway #3: There are three possible implementation scenarios for NG911, all which vary in cost.

The Cost Study considered three implementation models: state, multi-state and service solution. Of the three, the service solution was determined to be the costliest due to the fact that all maintenance, replacement costs and additional liability is the responsibility of the service provider.

The Cost Study does not recommend an approach to implementation that will meet the needs of every deployment—a hybrid implementation approach is more likely to occur, because every agency has different needs and capabilities.

Takeaway #4: The cost to deploy NG911 nationwide is estimated to be between \$9.5 billion and \$12.7 billion.

The Cost Study considered numerous factors, utilized data from many sources, and factored in the three aforementioned implementation scenarios to estimate the cost of migrating to NG911 service nationwide.

The implementation cost was estimated between \$9.6 billion and \$12.7 billion, which does not include the cost to operate the new systems.

In Summary

The price tag associated with NG911 is not small, and it won't be easy for Congress to find the money to fund nationwide deployment. What's equally clear is that our nation's 911 centers have never needed NG911 as much as they do today. The legacy analog 911 systems are aging and many have already passed "end of life" status with their service provider. Meanwhile, NG911 systems provide advanced capabilities to PSAP telecommunicators that will improve their ability to serve emergency callers and to provide enhanced situation awareness to first responders that will improve their abilities to save lives and properties, while keeping them safer. In short, NG911 technology needs to be available to citizens, regardless of where they are at any given time, as soon as possible.

This Cost Study paves the way for Congress to become the champion for NG911 by defining what it will take to fund nationwide deployment—just as it did years ago when it funded the nationwide public safety broadband network (NPSBN) being implemented by the First Responder Network Authority (FirstNet).

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A Case for 911's Most Impactful Milestone Thus Far

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