

FAQ for Interim Text-to-9-1-1 Solution

Purpose: The purpose of this document is to provide additional information to 9-1-1 authorities/PSAPs when deciding when and how to accept interim solution SMS text-to-9-1-1 calls. This document is intended as a companion to the *SMS Text-to-9-1-1 PSAP Considerations* document; it is not intended to be a detailed instruction manual on how to implement or handle text-to-9-1-1 calls.

Each 9-1-1 authority/PSAP will need to consult with their wireless texting providers on the solutions offered for texting to ensure the proper solution is selected for their PSAP(s). The deployment of text-to-9-1-1 will vary from jurisdiction to jurisdiction, much like wireless deployment. Also, depending on the texting solution chosen, the texting capabilities may differ. The answers below are intended as guidance to some of the frequent questions the committee has received in relation to texting-to-9-1-1.

OVERVIEW OF SOLUTION

The interim text-to-9-1-1 solution will be for the most commonly utilized texting technology, Short Message Service (SMS), texting only. The interim solution will have three options in order to allow PSAPs that have not begun deploying NG9-1-1 services the capability to receive text messages.

Text to TTY/TDD – this option will allow the PSAP to receive incoming text messages via their current TTY/TDD system. The text would display on the 9-1-1 equipment exactly like a TTY call. A proposal has been made to deliver a different class of service that would allow the calltaker to differentiate between a TTY call and a text-to-9-1-1. The Automatic Location Information (ALI) display will show the caller's text number in the location where the wireless caller's Call Back Number is displayed on voice calls, and the x/y coordinates of the cell site centroid where the person is texting. The text messages will be delivered via the existing 9-1-1 trunks, which would mean that once a text came in via this method the 9-1-1 trunk would be tied up and unable to accept another call or text session.

Web Portal – this solution would require a PSAP to have internet access. A separate web portal would be opened at the beginning of the shift and would need to be monitored for incoming text messages. This solution currently requires a separate monitor for the web portal; however, some equipment manufacturers are working to incorporate the portal into the 9-1-1 display. The ALI will display the number associated with the device used for texting, and x/y coordinates of the cell site centroid of the person texting.

NG9-1-1 Interface – this solution would require the PSAP to have IP capable equipment and IP connectivity to the carrier. The text message will be delivered directly into the 9-1-1 equipment. This solution should be compatible with a full NG9-1-1 I3 solution. The ALI display will contain information similar to a wireless caller today including the x/y coordinates of the cell site centroid. As standards are approved, the Class of Service will likely display as "TEXT".

OPERATIONAL

Can the location of the “caller” differ from the location of the incident?

As with a traditional 9-1-1 call, the location of the incident may be different then the location of the “caller” so you will need to ask or confirm location of incident.

PSAP should always query “caller” immediately to obtain location.

How will misroutes be handled?

Some solutions allow you to transfer texts as you do today with traditional 9-1-1 calls; you will need to check with your texting provider. However, if not able to transfer you will stay anchored to the text and then relay information to the appropriate PSAP following your current SOP’s.

How can we communicate quickly and efficiently with the “caller”?

PSAP should use plain English language with no short codes; and as needed, PSAP should request texter do the same

You will utilize your keyboard to type back to the “caller”

You may use pre-programmed condensed questions. PSAPs should review SOP’s in relation to these messages.

PSAPs should review their SOP’s and determine prioritization of questions to ask

How many text conversations can be handled at one time?

The NENA Guidelines for Text Message Calls OID recommends no more than three text message sessions at a time.

PSAPs will need to consult with their text provider on solutions they offer as this will be dependent on the solution, Example:

If you chose a text to TTY solution, this will be determined on the number of the E9-1-1 trunks

If you chose the Web Portal or delivery via NG9-1-1 Interface, thresholds can be set for the number of text sessions per agency/positions, etc.

PSAPs will need to consult with their text provider on how to place texts on hold, if you can place texts on hold, etc. as this will depend on your solution.

Will the text conversation drop as the person texting moves between jurisdictional boundaries?

The “caller” is anchored to the originating PSAP until the call taker ends the conversation. Depending on the provider delivering the text to the PSAP for the wireless carrier, there may be a time limit between gaps in the communication. Consult with your wireless provider and their vendor to determine if that is the case.

How many texts are anticipated to come into the PSAP?

The studies thus far have shown that the call volume is low and training is necessary to keep the skill sets fresh.

How will a PSAP handle a volume of texts during a disaster?

This again depends on the solution you choose on how you are able to process the texts. Each PSAP has the ability to determine how many texts will be presented to the PSAP at one time.

PSAPs may want to consult with their legal counsel and review their SOP's

How will Pre-Arrival EMD instructions being handled?

PSAPs may want to work with their EMD vendor to find out if they are working on this, and determine what their solution is

PSAPs will have to review SOP's and make adjustments to them in regards to pre-arrival as well as quality assurance purposes

TECHNICAL

Will the telecommunicator know where the text originates?

This is incumbent upon how your texting provider delivers location. You will need to consult with your texting provider to determine what level of location is delivered.

How will the text message be delivered to the proper PSAP?

With texting, the routing is not done by tower location, however by Centroid location. (The centroid is the geographic center of the cell sector's RF footprint).

If there are multiple sectors, there are multiple centroids. If the “caller” is between 2 sectors, they could go to either sector and possibly be delivered to a different PSAP than they need to be, depending on the routing plan in place for the site. You will need to consider your routing plan and it will be necessary to work with the wireless carriers in the area in reference to this.

How will these messages be recorded?

PSAPs will need to understand their obligation on how long they need to keep these records via their States Record Retention laws.

Archiving of text messages will depend on the texting solution chosen by the 9-1-1 Authority/PSAP. 9-1-1 Authorities/PSAPs should discuss with their call logging vendor the possible solution for archiving text.

The text vendor solution may archive the messages, however the telecommunicator will need to note the date, time, phone number in order to obtain the information so PSAPs will have to review their SOP’s in relation to this.

Is it possible to print these messages?

This will need to be discussed with your texting provider. This feature will depend on the texting solution chosen by the 9-1-1 Authority/PSAP. At this time we are not aware that this capability is available to the PSAP for the web portal option unless a printer is connected to the workstation. The PSAP will have to keep a manual log of each text for their reference in order to receive a printout from their texting provider.

Will we be able to receive text on texting devices with no data plan?

Any phone that doesn’t have an active subscription that includes text capability will not be able to send a text-to-9-1-1. Non-service Initialized (NSI) phones will not be able to send text-to-9-1-1. (For example, if using WiFi on an IPAD/PHONE with no data package, and the user attempts to send a text message to 9-1-1, it will not reach 9-1-1.)

Only SMS anchored to a wireless carrier will be delivered to 9-1-1. In the future, video, pictures, or multiple recipients will be sent as a MMS message, not SMS.

Will pre-paid wireless consumers be able to send text-to-9-1-1?

Pre-paid consumers will have to consult with Pre-Paid phone vendors to determine if they are able to text-to-9-1-1. This may depend on the package that is purchased by the consumer.

Are there time delays?

This is dependent on the solution your agency chooses. For the PSAP's information, the SMS Interim Text solution redirects 9-1-1 SMS text messages through a text control center (TCC) which only processes text messages, with message delivery in less than a minute.

If the text message isn't delivered, the TCC system continues to attempt delivery.

Text messages require less bandwidth, thus text messages can be sent with lower wireless signal strength.

How will texting work with call queues?

If the PSAP is using the text to TTY solution, the text message will come through your E9-1-1 trunks, and tie that trunk up for the duration of the conversation.

If the PSAP is using a web portal solution, each agency will set the thresholds for the volume of texts.

Texts in excess of the threshold may receive the bounceback message or be alternate routed to another PSAP