

# Standard Operating Procedures for Massachusetts Text-to-9-1-1 Solution

## CALL HANDLING PROTOCOL FOR TEXT-TO-9-1-1 SESSIONS

**Policy for Public Safety Answering Points  
within the Commonwealth of Massachusetts**

**2018**

**The Commonwealth of Massachusetts  
Executive Office of Public Safety and Security**



**Administered by the  
Massachusetts State 911 Department**

# Call Handling Protocol for Text-to-9-1-1 Sessions in the Commonwealth of Massachusetts

## Overview

The purpose of this document is to outline the standard operating procedure (SOP) for answering and handling text-to-9-1-1 sessions received in Massachusetts. Specific training and awareness about the texting technology will help each telecommunicator understand the critical role he or she plays in the receipt of text communications from individuals involved in an emergency. This document will enhance the training telecommunicators receive and provides guidance when a handling a text-to-9-1-1 emergency.

## Definitions

**Callback** – The process performed by a telecommunicator to attempt to reconnect with a wireless telephone after an unsuccessful receipt of a text-to-9-1-1 session or for any other any reason.

**Coarse Location** – The location information, specifically latitude and longitude, received during a text-to-9-1-1 session. The latitude and longitude received is the center point for the area the caller may potentially be in, using commercial obtained location services. It is not the exact latitude and longitude, as is seen with Phase 2 wireless calls. Telecommunicators will use this information as they verify address/location information with the texter to confirm the dispatchable location.

**Dispatchable Location** – The verified or corroborated street address of the reporting party plus additional information such as floor, suite, apartment or similar information that may be needed to adequately identify the location of the reporting party or incident.

**Exigent Circumstance** – The totality of a situation that would cause a reasonable person to believe that relevant immediate action is necessary to prevent physical harm to life or prevent some other consequence that would otherwise jeopardize public safety.

**Message Idle Timer:** A timeframe set by the carriers when there is no message activity occurring between the texter and the telecommunicator for an active text session. This timer limit varies for each carriers. A standard message is sent automatically by the carrier to the texter when this timer is met.

**Non-Service Initialized Device (NSI Device)** – A mobile device for which there is no valid service contract with any cellular provider. As such, NSI devices have no associated subscriber name and address, do not provide a call-back number, and may not provide location. Phones not registered for service still have the ability to contact 9-1-1 by voice. It is not possible to send a text message to 9-1-1 from a NSI device for which there is no valid service contract with any cellular provider. As such, NSI devices have no associated subscriber name and address, do not provide a call-back number, and may not provide location.

**Probable Location Circle** – The circle displayed around a geographical location (i.e. latitude and longitude) on the mapping application, which has been provided for a text. The size of the circle surrounding the coordinates is in direct relation to the distance of uncertainty provided at the time a text is answered or a Retransmit is performed. For example: the larger the uncertainty, the larger the circle; the smaller the uncertainty, the smaller the circle.

**Retransmit** – The process of manually requesting an Automatic Location Identification (ALI) refresh or rebid through the NG9-1-1 system in an attempt to obtain more accurate location information of a texter.

**Ring No Answer Timeout:** A timeframe set by the TCC where delivery of a text-to-9-1-1 session is withdrawn by the carrier because it goes unanswered by the PSAP, referred to as “Ring No Answer” (RNA). This timer limit is consistent for all carriers. A standard message notifying the texter that text-to-9-1-1 is currently unavailable is sent automatically by the carrier to the texter when the “ring no answer” timer is met.

**Silent Text/No Response** - A text-to-9-1-1 session initiated by a texter and received by a PSAP wherein there no productive two-way communication between the texter and telecommunicator. The telecommunicator’s handling of a non-responsive texter will depend upon the initial text received. The basic silent text /no response scenarios are as following:

- **Initial need for emergency assistance** - If there is language within the initial SMS messages indicating the need for emergency assistance.
- **Misdialed or accidental text** - If the language within the text is garbled and/or might indicate a “misdialed or accidental text”.
- **Inactive or “gone dark”** - If the texter was actively communicating, but has now “gone dark”, meaning the texter is no longer actively sending text messages or responding to the efforts of the telecommunicator.

**Telecommunicator** – Any PSAP personnel certified and in compliance, according to the State 911 Department standards, for answering emergency 9-1-1 requests for service.

**Text-to-9-1-1 Session** – The answering and handling of a text-to-9-1-1 emergency request received through SMS technology using the provided NG9-1-1 application.

**Texter** – Any person initiating a text-to-9-1-1 session with a PSAP, whether actively or inactively communicating via text.

**Text Control Center (TCC)** – The center that functions to interface between a carrier-originated wireless 9-1-1 text user and the PSAP environment.

**Trace Procedure** – The process by which a telecommunicator may obtain subscriber information when an exigent public safety need for subscriber information from the cellular provider of record exists.

**Unintentional Text** - A text-to-9-1-1 session initiated received by a PSAP that is determined to be accidental or inadvertent in nature after it 1) shows no immediate need for emergency services; and 2) does not indicate an emergency situation after being thoroughly investigated by a telecommunicator; or 3) is confirmed as a test of the text-to-9-1-1 solution or misdial by the texter.

## What is Text-to-9-1-1?

An estimated six billion SMS messages are sent daily in the United States. While the overall best way to contact 9-1-1 will continue to be voice communications whenever possible, the 9-1-1 community strives to meet the evolving needs of the public. With the deployment of Next Generation 9-1-1 (NG9-1-1) in Massachusetts, text-to-9-1-1 is now available.

Text-to-9-1-1 refers to the ability to send text messages to PSAPs during an emergency. The purpose of text-to-9-1-1 is to provide means of communications between the caller and emergency responders in lieu of voice communications. Text-to-9-1-1 may be used by those unable to make a voice 9-1-1 call; the deaf, hard of hearing, or speech-impaired individuals; and callers who find themselves only able to text.

SMS texting is the most common texting technology available to all carriers. SMS service is a national service provided by the carrier, and is available on nearly all mobile devices. In order to reach 9-1-1 via text, however, the emergency caller's wireless device must be connected to a cellular network and must have texting capability.<sup>1</sup>

A text-to-9-1-1 service allows wireless subscribers to send SMS text messages to PSAPs by using the single code "911" as the destination address of the SMS message. The subscribers will receive text replies from PSAPs in SMS format.

As text-to-9-1-1 is not yet available in all areas of the United States, texters in those areas or any areas without service, or who are "roaming", will receive an automatic "bounce-back" message indicating that text-to-9-1-1 is not yet available, and advised to use another method to contact emergency authorities.<sup>2</sup> In the context of SMS text-to-9-1-1, roaming means the subscriber is receiving wireless service from any carrier other than his/her home carrier, regardless of the subscriber's current location.

**SMS only allows for one recipient of the text message, and does not support photos, videos, or multiple recipients.** Messages sent with multimedia are referred to as Multimedia Messaging Service (MMS) messages. Multimedia Messaging Emergency Service (MMES) messaging may, in the future, allow for simultaneous use of multimedia content, including pictures, videos, text, and voice between an emergency caller and a PSAP.

**Please Note:** This call handling protocol and standard operating procedure is created, in part, from information provided by the National Emergency Number Association (NENA) and the Alliance for Telecommunications Industry Solution (ATIS) as part of J-STD-110.01, Implementation Guidelines for JSTD- 110. [Note: J-STD-110 is entitled: Joint ATIS/TIA Native SMS to 9-1-1 Requirements and Architecture Specification]. In addition, specific details have been included regarding the Massachusetts Next Generation 9-1-1 network and application.

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<sup>1</sup> Intrado TXT29-1-1®Sales FAQs; Nicole Leonard Senior Product Manager; Intrado Inc. 2013

<sup>2</sup> Interim SMS Text-to-9-1-1 Information and Planning Guide Version 1 February 2014; Produced by the Ad Hoc National SMS Text-to-9-1-1 Service Coordination Group (SCG)

# PROTOCOL FOR PSAPS RECEIVING TEXT-TO-9-1-1 SESSIONS

Subject Matter:	Text-to-9-1-1 Policies for Text 9-1-1 PSAPs in Massachusetts		
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## 1.0 Purpose

This protocol is to establish guidelines that serve as a model standard operating procedure for efficient and effective handling of text-to-9-1-1 emergency sessions for Public Safety Answering Points (PSAPs) receiving text-to-9-1-1 sessions using carrier native Short Message Service (SMS).

It shall be the policy of the Massachusetts State 911 Department that all **Primary, Regional PSAP, or Regional Emergency Communications Center (RECC)** accept the report of the emergency incident using SMS technology using Next Generation 9-1-1 technology and through established routing guidelines.

In accordance with the Massachusetts State 911 Department, all PSAPs will use the policies and procedures set forth in this document in developing internal standard operating procedures for handling Short Messaging Service (SMS) text messages and for responding to the text notification of an emergency.

## 2.0 Policy Statement for Text 9-1-1 Public Safety Answering Points

When an emergency occurs, callers may opt to contact emergency services via SMS text messaging, also called Texting, in lieu of voice communications. Any incoming text delivered to a **Primary, Regional PSAP, or RECC** on the 9-1-1 equipment, provided by the State 9-1-1 Department, shall be processed as an emergency call for service, and all appropriate actions taken regarding the reported incident.

Emergency incidents received through SMS text messaging will arrive at the PSAP on the NG9-1-1 application. When a text-to-9-1-1 session is received, the telecommunicator shall:

- Answer and greet the texter.
- Accept the report of the emergency incident, and take all appropriate actions regarding the reported incident.
- Process the report using emergency call handling procedures.
- Determine the dispatchable location and retransmit for updated location.
- To the extent practical, ensure that the texter is provided appropriate emergency service, which may include relaying the request for assistance to another jurisdiction.
- To the extent practical, ensure that the session remains connected until such time as the nature of the incident and dispatchable location of the caller is ascertained.
- To the extent practical, ensure that the session remains connected until emergency services are confirmed to have reached the texter/incident location.

If the incident reported is outside of the PSAP/RECCs jurisdiction, the telecommunicator will establish voice communication with the local PSAP of jurisdiction and operate as a “relay service” between the texter and the PSAP of jurisdiction regarding all matters related to the emergency incident.

Due to unknown reasons that can include physical disability, domestic violence, home invasion, language barrier, medical condition, this individual has chosen to request emergency assistance using a method other than conventional spoken word. In compliance with Public Law 101-336, also known as the *Americans with Disabilities Act Title II Section 202*, procedures outlined herein will allow anyone using SMS technology to communicate with a telecommunicator.

It is not uncommon for a telecommunicator to receive an emergency notification in which the device inadvertently texted and the individual is not seeking emergency assistance. It is most important to ensure that all efforts are made to determine if a texter needs assistance. Until the procedure below is completed, all text-to-9-1-1 sessions are to be regarded as legitimate emergencies and processed in accordance with this policy.

### 3.0 Standard Operating Procedures for Handling Text-to-9-1-1 Sessions

#### A. Session Processing

1. **Answer and Greet the Texter:** The telecommunicator will answer the session using the NG9-1-1 application and greet the texter with a standard greeting below:

“9-1-1, this session is recorded. What is the address and town of your emergency”

**Text-to-9-1-1 sessions have a unique type, identified with “SMS” on the NG9-1-1 application.**

*If you receive no response, refer to Step 7 for specific procedure details.*

2. **Verify ANI:** The telecommunicator will verify information with the texter, as compared to the ALI display, to be used if a callback is necessary. *If there is no immediate response, continue to the next step.*
3. **Determine the Dispatchable Location:** The telecommunicator will **verify address/location information** provided by the texter, compared to the incident tile and ALI display, to determine a dispatchable location. *Please refer to the Text-to-9-1-1 Locations section for specific details.*
  - a. If you are unable to verify the location, retransmit the location information according to step 3i below, then continue with Step 3b or 3c.
  - b. **If the dispatchable location is within your PSAP’s jurisdiction, determine and confirm the nature of the incident with the texter, process the session using known emergency call handling procedures, and follow your PSAPs associated procedures.**
  - c. If the dispatchable location is determined to be outside of your PSAP jurisdiction, proceed to Step 4.

- i. **Retransmit:** The telecommunicator shall perform a Retransmit to obtain the most accurate ALI data possible. This activity can occur concurrently with normal session processing. Upon receipt of a text-to-9-1-1 session a telecommunicator shall continue to Retransmit for updated ALI information at least once every twenty (20) seconds, until one of the following occurs:
  - Coarse location data is present AND the indicated location is somewhat consistent with the information provided by the caller, or
  - Coarse location data is present AND the size of the Probable Location Circle decreases with subsequent Retransmits, or
  - The session is terminated by the PSAP or by the carrier after reaching its message idle timer.
  - In instances where no coarse location data is received after multiple rebids, the certified 9-1-1 telecommunicator will contact the GDIT NOC 855-626-4911. This can be done after the incident has been handled.

4. **Contact Local Jurisdiction:** If after following Step 1 thru 3, the telecommunicator determines the dispatchable location for the reported emergency is outside of their PSAPs jurisdiction, the telecommunicator will place a **voice call** to the appropriate local Primary or Regional PSAP, RECC, or out-of-state agency of jurisdiction using available means. The preferred method would be the PSAP Directory or speed dial options on the NG9-1-1 equipment. However, other communication means are also acceptable.

- a. Upon connection to the appropriate local PSAP of jurisdiction, the telecommunicator will identify themselves, explain that there is an active text-to-9-1-1 session, relay the dispatchable location and nature of the incident reported by the texter. Standard phrasing such as the example below can be used.

Example: "This is (operator #/name) calling from the (name) PSAP  
with an active text-to-9-1-1 session.

The emergency is located at \_\_\_\_\_. The texter reports \_\_\_\_\_.

- b. **The telecommunicator will keep the text session connected and remain on the voice relay call** simultaneously to continually 1) provide updates between the involved participants, and/or 2) to assist with performing Retransmits for updated location, and/or 3) provide such location information to the out of state PSAP.

5. **Confirmation:** Once confirmed that dispatch has occurred to the incident location, the telecommunicator will inform the texter that the requested assistance has been sent to address the texter has identified.

Example: "Help is on the way. (Police) (Fire) (Ambulance) is being sent to (address)."

6. **Information Gathering:** When possible and as call volume permits, the telecommunicator will maintain two-way communications with the texter to collect pertinent information regarding the incident. *Please refer to the Information Gathering section for specific details.*

7. **Silent Text/No Response:** Handling of a non-responsive texter will depend upon the initial message received or no response from the texter once the session is connected. If any of the following silent text/no response scenarios exist, the telecommunicator shall handle this as a silent text/no response:

- **Initial need for emergency assistance** - If there is language within the initial SMS messages indicating the need for emergency assistance.
- **Misdialed or accidental text** - If the language within the text is garbled and/or might indicate a “misdialed or accidental text”.
- **Inactive or “gone dark”** - If the texter was actively communicating, but has now “gone dark”, meaning the texter is no longer actively sending text messages or responding to the efforts of the telecommunicator.

The following procedures should be followed in the case of a silent text/no response:

- a. If, **after receiving one of the scenarios outlined above**, the standard message below will be sent TWICE:

“Do you need Police Fire or Ambulance”

- b. If there is still no response, the standard message below will be sent:

“Text to 911 is available. Call if you can - Text if you cant”

- c. The telecommunicator must afford the texter the opportunity to make a positive response to the requests. Telecommunicators shall wait a **minimum of ten (10) seconds** without receiving a response to before sending subsequent messages or proceeding to additional steps.
- d. If dispatchable location information is available and confirmed, the telecommunicator will follow the procedures of Step 3, retransmitting as needed.

If the coarse location information available indicates that this text session/incident may be located outside of the PSAPs jurisdiction, the telecommunicator will use any available location information to contact the PSAP of jurisdiction and follow the procedures of Step 4.

- e. **If the telecommunicator believes this session to be an exigent circumstance at any time, the procedures outlined in the Exigent Circumstance and Trace sections will be followed.**
- f. If the text messages indicate that the text was an Unintentional Text or otherwise states there is no emergency, AND based on the totality of the circumstances the telecommunicator has also determined that this is a non-emergency text session, the telecommunicator may release the session after the necessary actions of this procedure have been completed.
- g. **After 15 minutes of no response from the texter, the telecommunicator may release the session.** Please remember that the carrier will terminate the call when the message idle timer limit is reached.

**IMPORTANT NOTE:** Due to the limitations of service plans for some deaf, hard of hearing and speech impaired individuals, as well as the safety of the texter or others involved in the incident, **a voice callback to a texter should not be attempted** until all other resources for communicating have been exhausted. At the discretion of the PSAPs local policies, exceptions are acceptable, such as when no other communication option is available and/or it is believed that texter’s safety, or the safety of another, is in question.



8. **Ending a Session:** Ending a session is accomplished once confirmation is received that continued communication with the texter is no longer needed. A text-to-9-1-1 session should remain active as long as is needed to handle the request for assistance, when possible and as call volume permits.

A session can be released upon confirming the one of the following:

- The dispatchable location is within your PSAP jurisdiction, the nature of the incident is confirmed with the caller, the request for assistance is processed following the PSAPs associated procedures.
- The texters request for assistance is successfully relayed to the PSAP of jurisdiction.
- The previously listed and necessary actions of this procedure have been completed, and the session can be classified as a Silent Text/No Response session or Unintentional Text session.

**Every text session is concluded by the telecommunicator sending the texter the standard message below and then releasing the session:**

**“Ending text session, if you need more help contact 9-1-1”**

The texter will also receive a message automatically from the carrier’s Text Control Center (TCC) advising that the text session has ended. This message will not be displayed on the NG9-1-1 application.

## **B. Information Gathering**

Using the basic call handling techniques as with a voice caller, the telecommunicator will gather pertinent information regarding the incident. The telecommunicator will maintain two-way communications with the texter to collect pertinent information regarding the incident, when possible and as call volume permits.

If the telecommunicator does not understand the caller’s question or a response, the Telecommunicator should seek clarification. Telecommunicators will ensure that all scene-safety information is obtained to ensure that bystander and responder safety issues have been addressed.

If the incident is outside of the PSAP’s jurisdiction, the telecommunicator will maintain written communication with the texter, and voice communication with the PSAP of jurisdiction operating as a **“relay service”** between the texter and PSAP of jurisdiction regarding all matters related to the emergency incident. The preferred method for making the voice call to the PSAP of jurisdiction is using the “Town Name” entry within the PSAP Directory of the NG9-1-1 application. The local Primary or Regional PSAP, or RECC will receive the voice call on the designated emergency line of their NG9-1-1 application. If contact with an out-of-state agency is necessary, the voice call is made using unique destination entries preprogrammed in the NG9-1-1 application, as applicable, or by manually dialing the appropriate phone number.

## 4.0 Special Considerations and Procedures

Please see each category below for special considerations and procedures that should be followed.  
*This section is organized in alphabetical order.*

### **Alternate Routing of Text-to-9-1-1**

When delivery of a text-to-9-1-1 session is attempted to a PSAP, and all positions are unreachable over the network or no one is logged in, the texter will receive a bounce back message indicating that text is not available.

There is no alternate routing under a Ring No Answer. If the text goes unanswered or text-to-9-1-1 is unavailable, the carrier will terminate the request after 30 seconds. **This will NOT create an abandoned call.**

If text-to-9-1-1 is not available, a standard message notifying the texter that text-to-9-1-1 is currently unavailable is sent automatically by the carrier's TCC.

### **American Sign Language**

It is important to remember that individuals with a disability may utilize American Sign Language. American Sign Language (ASL) is formally recognized as a unique and visual independent language. ASL is "visual grammar" and does not have a written form. **ASL has rules for sentence structure, time references, and use of grammar.** ASL must "borrow" written English words to express ideas, thoughts and comments. In addition, the use of punctuation is not needed.

### **Americans with Disabilities**

Text-to-9-1-1 will be very important and useful to anyone who is deaf, hard of hearing, or speech-impaired, by broadening their access to emergency services and limiting the need to use equipment such as a TTY, ancillary equipment connected to wireless devices for TTY capability, or seeking a third party for access to 9-1-1.

### **Duplicate Text Session Handling Procedures**

If multiple texts are ringing, have been answered and are indeed confirmed to be reporting the same incident, the messages can be deemed "duplicates". The same or similar local policy and procedures should be followed for duplicate reports through a text session that are used for voice calls.

If a relay call has been placed to another PSAP, and duplicate texts are received, the PSAP of jurisdiction should be made aware of any additional information being reported from all texters.

### **Emergency Medical Dispatch**

Telecommunicators will follow the same protocol for Emergency Medical Dispatch (EMD) as is established for voice calls by 1) gathering the information, dispatching the appropriate units and providing the pre-arrival instructions; and/or 2) contacting a Certified EMD Resource/Emergency Medical Services (EMS) and operating as a "relay center". Use of EMD protocols for pre-arrival instructions with a texter is a best effort action taken by the telecommunicator and/or the certified EMD Resource.

**Exigent Circumstances**

If the telecommunicator believes this text session to be an exigent circumstance, meaning that an emergency situation which requires swift action to prevent imminent danger to life or property, the telecommunicator shall initiate a Trace. ***Please see the Trace Procedures section for specific procedure details.***

If the telecommunicator does NOT believe this is an exigent circumstance and the PSAP has active 9-1-1 calls or additional text-to-9-1-1 sessions pending, which have not been answered telecommunicators may temporarily proceed to answer calls/text sessions, until such time that pending calls have been answered and processed. Once pending calls have been serviced, previous Silent Texts/No Response texts should be re-examined, when possible and as call volume permits.

**General Communication Guidelines**

***For the telecommunicator:*** At no time should a telecommunicator use 'texting' lingo, shortcuts, or acronyms. All correspondence from the telecommunicator will be in full simple words, using either predefined text messages or through typing within the texting interface. The following can be considered standard acronym exceptions:

**St** for Street

**Hwy** for Highway

**US** for United States

**Rd** for Road

**MA** for Massachusetts

**I-##** for Interstate Highways

***For the texter:*** The texter should be encouraged to not use 'texting' lingo, shortcuts, or acronyms so as to help eliminate any confusion on behalf of both parties; however, callers are not required to oblige. A standard message may be sent helping to explain this.

“Do not use abbreviations Please use full simple words”

Predictive text and auto correct may also change words the caller did not intend to type so clarification is only necessary if the meaning of the message cannot be determined.

If a caller uses emoji’s it may appear in the form of skewed or random characters or symbols. Emoji’s are discouraged with SMS technology, as they cannot be interpreted correctly.

**Language Interpretation**

Presently language translation for text-to-9-1-1 is unavailable limited. If such translation is available, it shall be utilized. If sufficient location information is available, consideration should be given to starting an initial response for any unknown emergency or open 9-1-1 communication.

If the telecommunicator experiences a language barrier with the texter, it should first be determine if the communication barrier is due to the use of “texting lingo” by stating to the texter,

“Do not use abbreviations Please use full simple words”.

When appropriate, non-English text-to-911 messages should be handled in the same manner as voice calls. If possible and safe to do so, the caller may be advised to make a voice call to 9-1-1 for an interpreter. At the discretion of the PSAP, alternative translations methods may be used to aid the telecommunicators when a non-English text session is received.

### **Misdirected Text**

**PSAPs will not have the ability to transfer the text-to-9-1-1 session to another PSAP. All incident information is relayed through a voice call to the proper agency.**

Should a texter be directed to contact 9-1-1 by another method, such as a voice call, the voice call may be routed to a PSAP different than the text session. PSAPs should be aware of jurisdictional boundaries for wireless 9-1-1 voice calls within their area and have available contact numbers for those PSAP locations.

### **Multiple Session and Call Handling Procedures**

The NG9-1-1 application allows more than one text-to-9-1-1 session and/or voice call to be connected simultaneously. **Text sessions will take longer to complete. Text sessions cannot be placed “on hold”. Text sessions may require both an active text session and a voice call to another PSAP for relay. In addition, voice 9-1-1 calls will continue to be received.**

Once the telecommunicator confirms the **incident location** and the **nature of the incident** reported by the texter, the text session should remain the telecommunicator’s priority until it is no longer considered active, or as call volume permits. An **active text-to-9-1-1 session** is defined as “A text session where the texter is responding to questions and messages of the telecommunicator in a consistent manner, and/or, as applicable, the telecommunicator is verbally relaying between a local PSAP of jurisdiction and texter.”

If no other telecommunicators are available to handle additional incoming text sessions or voice calls, the telecommunicator will handle additional requests for assistance in accordance with local procedures.

**ACD PSAPs PLEASE NOTE:** If the telecommunicator is as part of a dispatch group that enables the processing of both voice calls and text sessions, both types will be received within the NG9-1-1 application.

Text sessions will appear to all telecommunicators logged into the dispatch group simultaneously and the session will need to be manually answered. Voice calls will continue to be automatically delivered by the ACD when the call taker is in a “Ready” status. The telecommunicator can enter a “Not Ready” status, but manually answer calls from the queue.

If a text session is no longer active or as local procedures indicate, the telecommunicator can continue to answer calls voice calls simultaneously with text sessions in an effort to maintain the operations of the center.

### **Non-Emergency, Unintentional or Nuisance Texting**

If a text request comes in which is believed to be a non-emergency, unintentional or could be considered nuisance texting, the telecommunicator will confirm that there is no need for emergency services with the texter and may release the session.

If additional text request are received from the same device within 30 minutes after the session has been released, the original SMS conversation will be restored on the position answering the session.

If more than 30 minutes has passed, the original text session conversation can be accessed in the call history for review, similar to that of voice calls.

### **Out-of-State Incidents**

If the PSAP of jurisdiction is outside of Massachusetts, the telecommunicator shall, in addition to the steps outlined in the session processing section of this document, and to the extent practical, remain on the line and assist the out-of-state PSAP with retransmits for updated location, and provide such location information to the out-of-state PSAP.

### **Priority of Incidents**

The highest priority text-to-9-1-1 session will be determined, in part, by the nature of the incident. PSAPs will process the text session under the same prioritization guidelines as voice calls, and with the same priorities.

### **Retention**

All text-to-9-1-1 session conversations that are part of the text string are retained in accordance with the standards of the Massachusetts State 911 Department.

Audio of calls associated with text-to-9-1-1 sessions, such as relay calls between the PSAP receiving the text session and any local PSAP of jurisdiction, are retained in accordance with the standards of the Massachusetts State 911 Department.

### **Retransmitting**

Where possible, the telecommunicator shall attempt to obtain an updated coarse location for the texter using the "Retransmit" feature of the NG9-1-1 application. This activity can occur concurrently with normal text session processing.

Upon receipt of a text-to-9-1-1 session, the telecommunicator shall continue to Retransmit for updated coarse location information, at least once every twenty (20) seconds, until one of the following occurs:

- Coarse location data is present AND the indicated location is somewhat consistent with the information provided by the caller, or
- Coarse location data is present AND the size of the Probable Location Circle decreases with subsequent Retransmits, or
- The call is terminated by the PSAP or by the carrier after reaching its message idle timer.

The telecommunicator will continue to maintain the text session as long as is necessary and relay information to the appropriate agency, when applicable.

Text-to-9-1-1 is only available within the subscriber's wireless service provider area of coverage. "Roaming" means that the subscriber is receiving wireless service from any carrier other than his/her home carrier. Due to SMS service limitations, a subscriber could receive a bounce back message explaining that SMS text-to-9-1-1 service is not available and to contact 9-1-1 by another method, such as a voice call or relay service.<sup>3</sup>

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<sup>3</sup> NENA Interim PSAP Interim Text-to-9-1-1 Support Documents, ATTACHMENT 2 - Interim Texting Policy SOP

### **Ring No Answer**

When delivery of a text-to-9-1-1 session is attempted, and then withdrawn by the carrier because it goes unanswered by the PSAP after a set period of time, it is known as “Ring No Answer” (RNA). A standard message notifying the texter that text-to-9-1-1 is currently unavailable is sent automatically by the carrier to the texter when the “ring no answer” timer is met. This timer limit is consistent for all carriers.

There is no alternate routing text-to-9-1-1 sessions under a RNA scenario, as text is a best effort service. **This will NOT create an abandoned call.**

Retrieval of the ANI and voice callback is not required by the Massachusetts State 911 Department, due to the limitations of service plans for some deaf, hard of hearing and speech impaired individuals, as well as the safety of the texter or others involved in the incident. Exceptions can be made at the discretion of the Text 9-1-1 PSAP, such as when it is believed that texter’s safety, or the safety of another, is in question.

A record of the text session and ANI is retained in the NG9-1-1 application.

### **Shift Change**

The status of all text-to-9-1-1 sessions should be checked at shift change. The passing on of text sessions at shift change between operators must include information related to the open sessions. Technical limitations may exist.

### **Silent Text/No Response**

Handling of a non-responsive texter will depend upon the initial message received or no response from the texter once the session is connected. **Refer to Step 7 of the Session processing section for specific procedure details.**

### **Tracing Text**

A trace can only be performed in exigent circumstances. *Please see the Exigent Circumstances section for specific details.*

A device initiating a text session may or may not have the ability to be traced. In order to be traced, the text must be sent over a carrier network, and not through Wifi. Wifi is a facility allowing computers, smartphones, or other devices to connect to the Internet or communicate with one another wirelessly within a particular area.

All text messages will be accompanied by a callback number. Currently no anonymous texts can be sent, such as those voice calls originating from Non-Service Initialized (9-1-1 only) devices.<sup>4</sup> NSI devices have no associated subscriber name and address, do not provide a call-back number, and may not provide location. Phones not registered for service still have the ability to contact 9-1-1 by voice. It is not possible to send a text message to 9-1-1 from a NSI device for which there is no valid service contract with any cellular provider. As such, NSI devices have no associated subscriber name and address, do not provide a call-back number, and may not provide location.

Subscriber information may be limited when performing a trace, especially on some pre-paid devices that have an active text plan. If carrier information is received with the text session, any traceable information provided should be used in the same fashion it would for a voice call.

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<sup>4</sup> Intrado TXT29-1-1®Sales FAQs; Nicole Leonard Senior Product Manager; Intrado Inc. 2013

## **Trace Procedures**

If the telecommunicator believes this text session to be an exigent circumstance as previously defined, the telecommunicator shall initiate a Trace. To the extent possible, a second telecommunicator may assist with completing the Trace.

- a. Call the appropriate carrier to request the subscriber billing information and, if necessary, an active “ping” of the device.
  - If displayed, the carrier/Telco ID and contact information received on the ALI Display may be use during a trace. This carrier may NOT be the subscriber’s actual cellular carrier however. Contact information for many carriers can be found under the Special Services Directory of the NG9-1-1 application.
  - If the carrier is unknown, the PSAP may contact the Number Portability Administration Center (NPAC) through the FCC’s Local Number Portability Administrator (LNPA).<sup>5</sup>
- b. The procedure for obtaining tower or subscriber information differs for each wireless carrier. Carriers may require a written documentation to accompany the request. However, not all wireless carriers require this documentation. Please follow the policies of the carrier as advised.
- c. The subscriber information provided by the cellular carrier when contacted [including name, billing address, alternate phone number(s), and cellular carrier name] may be added to the record of the call using the notes feature of the NG9-1-1 applications. Information entered is associated with that call and may not apply to future calls. It is considered pertinent to the call it is listed with. Telecommunicators requiring subscriber information on subsequent calls will be required to initiate a new exigent trace procedure.
- d. Trace data associated with a NSI Device is, by default, is the last available information associated with that handset, and may not require initiation of a new exigent call trace procedure.
- e. In conjunction with the current call data, if a location of the texter can be positively determined and is outside the PSAP’s jurisdiction, the local Primary or Regional PSAP, RECC or out-of-state agency of jurisdiction will be notified and all pertinent information will be relayed to that agency.

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<sup>5</sup> Each Public Safety and Law Enforcement agency must be registered with the FCC’s Number Portability Administration Center (NPAC) through the FCC’s Local Number Portability Administrator (LNPA). For more information, please reference the State 911 Department’s website at [www.mass.gov/orgs/state-911-department](http://www.mass.gov/orgs/state-911-department).

### **Technical Limitations**

Telecommunicators and texters will have a character limitation of approximately 150 characters per SMS message. Messages containing more than 150 characters may be divided automatically, and will be sent as separate messages. Please note that spaces between words are considered characters.

It is possible for the text messages to arrive out of order.

The NG9-1-1 application allows more than one text-to-9-1-1 session to be connected simultaneously. However, text sessions are not placed “on hold” and will remain connected while processing other voice and text sessions until manually released. Text sessions may also be released by the carrier if the message idle timer limit is reached due to inactivity.

Outbound text sessions cannot be initiated through the NG9-1-1 application.

### **Text-to-9-1-1 Locations**

The initial location provided is the **coarse location**, as defined previously. The coordinates (x,y) on the NG9-1-1 system will then be plotted on the mapping application to display the area of the coarse location.

Telecommunicators will verify address/location information provided by the texter, compared to incident tile and AII display, to confirm the dispatchable location.

If the dispatchable location is within your PSAP jurisdiction, determine and confirm the nature of the incident with the texter, process the call using known emergency call handling procedures, and follow your PSAPs associated procedures.

If the dispatchable location is determined to be outside of your PSAP jurisdiction, contact the local jurisdiction using the procedures outlined in this document.

If you are unable to verify the location, retransmit the location information according to the details in Retransmitting section.

### **Timed Out Text Session:**

Text sessions may be released by the carrier if the message idle timer limit is reached due to inactivity. If neither the telecommunicator or the texter have sent a message and inactivity meets the message idle timer limit of the carrier transmitting the text session, the session will be automatically released. This timer limit varies for each carriers. Carriers may send a standard message automatically to the texter when this timer is reached. *Please see Appendix C for specific details about carriers and messages.*

### **Voice Callbacks**

A text-to-9-1-1 session **cannot** be restored unless the caller messages 9-1-1 again in a new session.<sup>2</sup> Nor can the Text 9-1-1 PSAP initiate an outbound session. **Only a voice call can technically be placed back to the texter.**

Due to the limitations of service plans for some deaf, hard of hearing and speech impaired individuals, as well as the safety of the texter or others involved in the incident, **a voice callback to a texter should not be attempted** until all other resources for communicating have been exhausted. At the discretion of the PSAPs local policies, exceptions are acceptable, such as when no other communication option is available and/or it is believed that texter’s safety, or the safety of another, is in question.



Text-to-9-1-1 may be the communication method of choice for the reporting party, and therefore a voice callback may not be welcomed. Based on the nature of the incident, the telecommunicator may request that the texter contact 9-1-1 by phone. **Extreme caution should be used whenever requesting a texter to make a voice call.** It should be noted that this may not be an option for all texters, based on a possible disability or the capabilities of their wireless service. However, if the initial message received indicates an emergency where a callback could compromise the safety of the texter or safety of another, the telecommunicator will exhaust other methods in order to locate the texter first.

In addition, depending on the location of the texter, a text-to-9-1-1 session may be routed to a different PSAP than a voice 9-1-1 call would route. Wireless Call Routing guidelines within the State of Massachusetts may cause a voice 9-1-1 call and text-to-9-1-1 session to be routed differently.

If performing a relay service and the local PSAP of jurisdiction is requesting a voice callback be made, the telecommunicator may provide the local jurisdiction the telephone number of the texter.

## Appendices

### A. Predefined Message List for Text 9-1-1 PSAPs

#### Initial Response Messages

9-1-1, this session is recorded. What is the address and town of your emergency

Is there an apartment floor suite or room number

What is your telephone number

What is your emergency

Do you need Police Fire or Ambulance

Help is on the way

Do not use abbreviations please use full simple words

Ending text session, if you need more help contact 9-1-1

Text-to-9-1-1 is available. Call if you can - Text if you can't

#### Subsequent Messages

Emojis pictures and videos cannot be received by text-to-9-1-1

Are you in a vehicle

Do not text and drive please pull over

Get out now if it is safe to do so

Wait outside for First Responders if it is safe to do so

Secure or put away your animals

Unlock the door if it is safe to do so

Turn the outside light on if it is safe to do so

Are you driving

Are you traveling on foot

Are you on public transportation

What is the location of suspect

Are there any weapons

Is anyone hurt

What does the person look like

What is the person wearing

What kind of house

Where is the fire

What floor is on fire

Are there any people inside

Please call our non-emergency number to report this non-emergency

## B. Acronyms and Abbreviations

<b>ANI</b>	<b>Automatic Number Identification</b>	<b>NENA</b>	<b>National Emergency Number Association</b>
<b>ALI</b>	<b>Automatic Location Identification</b>	<b>NSI Device</b>	<b>Non-service Initialized Device</b>
<b>CAD</b>	<b>Computer Aided Dispatch</b>	<b>PSAP</b>	<b>Public Safety Answering Point</b>
<b>FCC</b>	<b>Federal Communications Commission</b>	<b>SMS</b>	<b>Short Messaging Service</b>
<b>IP</b>	<b>Internet Protocol</b>	<b>TAP</b>	<b>Text Access Plan</b>
<b>LAT/LON</b>	<b>Latitude/Longitude</b>	<b>TCC</b>	<b>Text Control Center</b>
<b>MMES</b>	<b>Multimedia Messaging Emergency Service</b>	<b>TTY</b>	<b>Teletype</b>

## C. Timers Limits by Carrier and TCC

There are four main cell phone providers who are managed by two different Text Control Centers (TCC) for Text-to-9-1-1 sessions. The TCC that manages the carriers text-to-9-1-1 sessions helps determine the timer settings and messages automatically sent throughout the process.

Listed below are the providers, their TCCs, the ring no answer and idle timers for each TCC, as well as the automatic response messages that is be sent by the TCC to the texter during various stages of the session.

<b>Provider</b>	<b>TCC</b>	<b>Ring No Answer Timer</b>	<b>Message Idle Timer</b>
AT&T	West	30 seconds	30 minutes
Sprint	West	30 seconds	30 minutes
T-Mobile	Comtech	30 seconds	24 hours
Verizon	Comtech	30 seconds	24 hours

## D. Automatic Text Messages Sent

Listed here are the providers and the automatic response messages that is be sent by the TCC to the texter during various stages of the session. *These messages are the latest known verbiage.*

### **When the RNA Timer Limit is met:**

**AT&T:** Make a voice call to 911 for help; text to 911 is not available. Message 01.

**Sprint:** The text was not delivered to the 9-1-1 Call Center.

**T-Mobile:** Please make a voice call to 911. There is no text service to 911 available at this time in this area. This is a free message.

**Verizon:** Please make a voice call to 911. There is no text service to 911 available at this time.

**When Text-to-9-1-1 Unavailable:**

**AT&T:** Make a voice call to 911 for help; text to 911 is not available. Message 01.

**Sprint:** For emergency only. CALL 9-1-1. Text-to-911 not available.

**T-Mobile:** Please make a voice call to 911. There is no text service to 911 available at this time in this area. This is a free message

**Verizon:** Please make a voice call to 911. There is no text service to 911 available at this time.

**Messages Idle Timer Limit is met:**

**AT&T (30 Minutes):** *No message sent to handset.*

**Sprint (30 Minutes):** *No message sent to handset.*

**T-Mobile (24 Hours):** The 911 operator has ended your text session.

**Verizon: (24 Hours):** The 911 operator has ended your text session.

**Text Messages when Calltaker Releases Call:**

**AT&T:** The 911 operator has ended your text session. Message 03

**Sprint:** Emergency operator has ended this conversation.

**T-Mobile:** The 911 operator has ended your text session.

**Verizon:** The 911 operator has ended your text session.

**Text Messages when a Session is Internally Transferred:**

*This is only applicable to a small group of PSAPs, and the message is generated by the NG9-1-1 application not the TCC.*

**AT&T:** Your 911 conversation has been transferred.

**Sprint:** Your 911 conversation has been transferred.

**T-Mobile:** Your 911 conversation has been transferred.

**Verizon:** Your 911 conversation has been transferred.

**Reference(s) for this document:**

*Interim SMS Text-to-9-1-1 Information and Planning Guide Version 1 February 2014; Produced by the Ad Hoc National SMS Text-to-9-1-1 Service Coordination Group (SCG)*

*NENA Interim PSAP Interim Text-to-9-1-1 Support Documents, ATTACHMENT 2 - Interim Texting Policy SOP Intrado TXT29-1-1®Sales FAQs; Nicole Leonard Senior Product Manager; Intrado Inc. 2013*

*General Dynamics and Motorola Emergency Call Works*

# PROTOCOL FOR PSAPS RECEIVING A RELAY CALL FOR AN ACTIVE TEXT-TO-9-1-1 SESSION

Subject Matter:	Text-to-9-1-1 Policies for Local PSAPs in Massachusetts		
Effective Date:	July 2018	Version:	1.0
Supersedes:	Any Previous	Total Pages:	2

## 1.0 Purpose

This protocol is to establish guidelines that serve as a model standard operating procedure for efficient and effective handling of relay calls received regarding an active text-to-9-1-1 emergency sessions located in your PSAPs jurisdiction.

It shall be the policy of the Massachusetts State 911 Department that all **Primary, Regional PSAP, or Regional Emergency Communications Center (RECC)** shall accept the report that was received through text-to-9-1-1 by another PSAP as a **relay call** and handle the request for emergency services in a similar fashion to voice call. The telecommunicator will maintain communications with the relay PSAP as long as is necessary to collect pertinent information or until a response unit has arrived at the incident, when possible and as call volume permits.

## 2.0 Standard Operating Procedures for Relay Calls

If a telecommunicator determines the dispatchable location for the reported emergency received via text is outside of their PSAPs jurisdiction, the telecommunicator will place a **voice call** to the appropriate local Primary or Regional PSAP, RECC, or out-of-state agency of jurisdiction using available means.

The preferred method would be the PSAP Directory or speed dial options on the NG9-1-1 equipment. The voice call will be received by your PSAP on the NG9-1-1 equipment. However, other communication means are also acceptable.

The telecommunicator will identify them self, explain that an emergency incident in your jurisdiction is being processed with an active text session, and relay the **incident location** and the **nature of the incident** reported by the texter to the local PSAP of jurisdiction. The call will continue as a voice relay between the two PSAPs. **The telecommunicator will keep the text session connected and remain on the voice relay call** simultaneously to continually 1) provide updates between the involved participants, and/or 2) to assist with performing Retransmits for updated location, and/or 3) provide such location information to the out of state PSAP.

**The telecommunicator at your PSAP may, in accordance with local policy and procedure:**

1. **Verify** the location of incident, nature of emergency, timeframe in which incident occurred verbally with the relay PSAP and determine, as applicable, if medical attention is required/has been requested. ANI for the texter will also be provided.
2. **Dispatch** the appropriate emergency services for the incident type identified by the telecommunicator at the relay PSAP. Initial dispatch of emergency responders can include, but is not limited to, Law Enforcement, Fire Services and Emergency Medical Services. The relay PSAP will notify the texter when the requested assistance is being sent to the address the texter identified.

3. **Conference the voice call from the relay PSAP to the appropriate secondary PSAP (as applicable)** for dispatch of emergency services. Secondary PSAPs can include, but are not limited to, Law Enforcement, Fire Services, Emergency Medical Services and Certified Emergency Medical Dispatch (EMD) Resources.
4. **Maintain** the voice call with the relay PSAP and continue to gather pertinent information regarding the incident using basic call handling techniques. When possible and as call volume permits, the telecommunicator will maintain communications with the relay PSAP to collect pertinent information regarding the incident and allow communications to be typed to the texter.

When needed, and as call volume permits, the telecommunications may place the voice call with the relay PSAP on hold and answer additional calls, as not to hinder the operations of the PSAP.

5. **Terminate** the voice call with the relay PSAP once you determine that continued communications with the texter is no longer needed. This can include when assistance has arrived at the incident location. **You must advise the relay PSAP that they can release the text session.**
6. **Place a voice callback to a texter.** Due to the limitations of service plans for some deaf, hard of hearing and speech impaired individuals, as well as the safety of the texter or others involved in the incident, **a voice callback to a texter should not be attempted** until all other resources for communicating have been exhausted. At the discretion of the PSAPs local policies, exceptions are acceptable, such as when no other communication option is available and/or it is believed that texter's safety, or the safety of another, is in question.

The relay PSAP will follow the same procedures when there is a silent text/no response texters and it falls in your PSAPs jurisdiction. When possible, the telecommunicator at the PSAP which received the originating text session will relay any available information about the incident to the PSAP of jurisdiction to allow for follow-up. When necessary, the relay PSAP, and/or local Primary or Regional PSAP may follow the Trace Procedure.