Metro Region
9-1-1 Standards, Protocols, Procedures

Section 3 – Metro 3.6.0 SMS Text-to-9-1-1 Call Processing
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1. Purpose or Objective

To establish an operational standard for processing short message service (SMS) text-to-9-1-1 calls in the metro region. The purpose of text-to-9-1-1 is to provide a means of communication between the caller and the public safety answering point (PSAP) when it is not feasible for callers to make a traditional voice call. Callers who find themselves in a situation where they are only able to text, or individual who are hard of hearing or unable to speak may opt to utilize text-to-9-1-1. Voice communications is still the preferred medium to reach 9-1-1 and will be promoted as such throughout the region.

2. Background

Capabilities:

PSAPS that have a 9-1-1 answering application capable of handling text-to-9-1-1 calls and are directly connected to the statewide Emergency Services IP Network (ESInet) will be allowed to take text-to-9-1-1 calls after submission of a 9-1-1 Plan change letter through the Metropolitan Emergency Services Board (MESB) and to the Minnesota Department of Public Safety's Division of Emergency Communication Networks (ECN).

Constraints:

Text-to-9-1-1 does have limitations compared to traditional voice calls with caller location accuracy. Text-to-9-1-1 provides the geo coordinates of the center of the cell site centroid to the PSAP.

Once a text session is ended by the call taker a text session cannot be restored or initiated unless the caller messages 9-1-1 again in a new session.

Text messaging to 9-1-1 is a best effort service that utilizes the public SMS text network. As with any SMS texts, there is no guarantee on the speed of delivery, or if the SMS message will be delivered at all. SMS messages may also appear out of order. Accordingly, it may take longer for a call taker to process an SMS text to 9-1-1 request than a traditional 9-1-1 voice request, which in turn may lengthen the public safety response time.

Due to limitations with SMS messaging, messages are limited to approximately 160 characters.

When the caller's phone is in roaming mode, the text will not be delivered to the PSAP. The caller will receive a bounce back message advising them to dial 9-1-1.

If a text call is not answered in the PSAP within 30 seconds, the TCC will drop the call and send a message to the caller advising them to call 9-1-1. This may vary depending upon local PSAP equipment and settings.

3. **Definitions:**
Cell site centroid – Center point of a single cell sector. There are typically 3 sectors around a tower.
Emergency medical dispatch (EMD) **–** systematic program of handling medical calls in which call takers use established protocols to classify the nature of the call, dispatch responders and provide pre-arrival instructions.
ESInet – A managed Internet Protocol (IP) network that is used for emergency services communications, and which can be shared by all public safety agencies. Used for carrying voice plus large amounts of varying types of data using IP protocols and standards.
PAI - Pre-arrival instructions (PAI) are instructions the call taker provides to the caller before responders arrive on scene.
SMS – Short message service (SMS) is commonly referred to as "text message". This type of messaging service is a component of most mobile telephone systems.
TTY – A text telephone (TTY) is a device that allows the deaf, hard of hearing and speech impaired to communicate via telephone.
TCC – The text control center (TCC) routes the wireless call to the correct PSAP for handling.

4. Recommended Protocol:

A) General

1. Due to limitations with SMS messaging, the location information provided by a text message is unreliable and the call taker should not rely on the location information for dispatching text-to-9-1-1. The carriers use a different methodology for text calls than they do wireless calls. XY coordinates will be provided with the text that represent the centroid of the cell sector. The call taker can rebid the location information if necessary. Location information may or may not improve with a rebid. To rebid, the call taker must enter the command #L into the text box and send it.
    1.1 Local PSAP equipment setting may be configurable to automatically rebid.

2. Text messages are expected to be processed using the same standards for processing emergency and non-emergency voice calls for service.

3. Call takers should avoid the use of "texting" lingo, shortcuts, emoji characters and/or acronyms. All correspondence from the call taker should be in plain language.

4. If the call taker is unable to explain to the caller that they need to call 9-1-1 due to language or communication barriers, the call taker will initiate a voice call to the originating number and attempt to make contact to provide Language Line interpretation services. Language Line is not currently capable of translating text.

5. The use of preset messages is available and configurable according to agency protocol. The use of preset messages is recommended.

6. A caller should not be called back in cases where their safety, or the safety of another, is in question unless directed otherwise.

B) Text to 9-1-1 Call Processing

1. The call taker will answer 9-1-1 text messages as they do with all other 9-1-1 calls,

(i.e 9-1-1 where is your emergency?). If the PSAP is accepting texts for other jurisdictions, a generic opening message should be used to avoid confusion versus one that identifies the agency.

2. The call taker will confirm that the caller can be reached at the same number the text is originating from and verify the address/location of the incident. The caller's location information provided to the PSAP by the carrier may not be accurate, and/or a mistyped or auto corrected street name by the caller may provide the call taker with a wrong address, so every address/location (including city and state) must be verified.

3. The call taker will ask the caller if they are able to call in by voice (if it is safe to do so), unless it is made clear at the onset of the call.

4. If the request is of a medical nature and the caller confirms they cannot make a voice call, every effort will be made to process the request in the same way that a voice or TTY call would be processed, recognizing that typing questions and instructions is much slower than providing pre-arrival instructions on a voice call.

5. Before ending the call, the call taker will inform the caller what action will be taken. The call taker should consider keeping the session open until responders have made contact with the caller/victim. This will allow for additional texting and the ability to obtain additional information if necessary.

6. Once a call is deemed ready for dispatch, the call is to be processed and dispatched according to the procedure for the specific incident. If pertinent the responders may be advised that the call is being received by text message.

7. Prior to ending the session, a message should be sent to the caller indicating that the session will be closed. Unless the PSAP's CPE has the capability of initiating a text, a SMS Messaging session cannot be restored/initiated by the PSAP unless the caller messages 9-1-1 again in a new session. For PSAPs that do not have CPE text initiation capability, they choose to have an alternative option for initiating outbound text in situations where additional information may be needed, and the text session was terminated, such as a PSAP cellular telephone.
    7.1.1 If the call taker initiates an outbound text from a PSAP cellular phone, a general "do not reply" disclaimer should be used. (i.e. CAUTION – DO NOT REPLY TO THIS NUMBER – Please call 9-1-1 if assistance is needed. This telephone is not monitored or used to reach 9-1-1).

8. The caller will receive a "Dialog has been closed by 9-1-1" message when the call taker releases the call.

9. If the PSAP does not answer the call within 30 seconds, the TCC will terminate the call and send the caller a message advising them to place a voice call and that 9-1-1 text service is unavailable at this time.
    9.1.1 Local PSAPs equipment may be configured differently and override/change this automatic disconnect message.

C) No response from caller

1. If there is no response from the caller, the call taker will attempt to contact the caller by sending a text message back. If there is still no response, the call taker will leave the text session open and allow it to expire.
   1.1.1 Indicated emergency: If the initial message indicated an emergency with an unknown location, the call taker will attempt to use other methods to locate the caller. This includes, but is not limited to, rebidding the location and may also include placing a voice call to the caller to obtain critical information; however, if the initial message indicated an emergency where a callback could compromise the safety of the caller, the call taker will exhaust other methods, in an attempt to locate the caller first.

2. If there is still no response, the call taker will follow specific agency policy for hang-up abandoned or silent calls.

3. After 30 minutes of no activity in the session, the TCCC will close the 9-1-1 text session and send the caller a message advising that the 9-1-1 dialog has been closed.
   3.1 Local settings in the PSAPs equipment may be configured differently.

D) Tracing anonymous text

1. It is not currently possible to receive an anonymous text. Any traceable information provided should be handled as it would for voice calls. If there is no information, no action can be taken.

E) Transfers and misdirected text

1. If the PSAP receives a text or request for service in another jurisdiction, the PSAP will transfer the text using the #T command directly through the TCC to the designated text capable PSAP for the jurisdiction.
   1.1 When transferring a text call, the transferring agency will advise the caller what agency they are being transferred to and relay pertinent details to the receiving PSAP in order to insure a successful transfer.
      1.1.1 Text Control Center (TCC) transfers using the #T command deliver a preemptive message that identifies the transferring agency and the previous text dialog to the receiving PSAP. The receiving PSAP will also receive the caller's location and telephone number information.
      1.1.2 The PSAP should use the private chat (#P) feature PSAP to PSAP to communicate sensitive information without the caller's knowledge. This feature is only available for transfers completed through the TCC.

2. If the PSAP is not able to transfer the text, the call taker will take pertinent information and relay to the appropriate PSAP. Once the initial response information has been exchanged, the agencies involved may choose to designate a talk group for continued incident communication or use telephone to relay incident updates.

3. If PSAP equipment is configured to send a call closure message to the caller after transferring to another agency, it is recommended that the PSAP three-way conference be maintained to avoid confusing the caller that their 9-1-1 session has been terminated. As an alternative to the three-way conference, the PSAP may also choose to advise the caller that they will receive a false disconnect message.

F) Text Transcripts

1. If the PSAP is unequipped to get their own transcripts for text calls, the call taker or supervisor should create a request to the West TCC to get that information.

5. Management:

The 9-1-1 Technical Operations Committee of the MESB is responsible for oversight of the standard. PSAP management will train their personnel in accordance with this standard and ensure staff maintain a proficiency with text call processing. PSAP management will ensure personnel comply with the procedures detailed in this standard.

6. References:[1]

"Interim Texting Policy Standard Operating Procedure". National Emergency Number Association International, Alexandria, VA, 2014.
Retrieved from http://www.nena.org/?text training docs.

"Text to 9-1-1 100-015". Red River Regional Dispatch Center Standard Operating Procedures Manual, Red River Regional Dispatch Center, Fargo, ND, 2015.

[1] Disclaimer: Portions of this document contain text taken verbatim from the references listed.