

Appendix E

Information to be supplied by Public Safety, and Guidelines for PSAPs or 9-1-1 Authorities (taken largely from ATIS material – see note below)

Beyond the information in the questionnaire (Appendix C), routing information is required:

When a PSAP or 9-1-1 Authority deploys SMS to 9-1-1, they must provide the wireless operator (and the TCC provider) with the coverage area that will be accepting SMS to 9-1-1 messages. That process can be similar to (or the same as) the method used to provide wireless Phase II information.

Background

PSAP boundaries, in the form of polygons, are provisioned in the (TCC) Routing Server (RS). Then, routing information (e.g., Route URI) is assigned to each polygon.

Although J-STD-110 [Ref 1] and the associated Supplement A [Ref 2] enable the RS to be queried with either civic or geodetic location, only a geodetic location will be used in the query from the TCC for the interim SMS to 9-1-1 solution. When the RS receives a routable location (either coarse or a more refined location) and a services urn (urn:service:sos), it correlates the location with one of the provisioned polygons and returns the Route URI associated with that polygon. That URI allows the TCC to determine the type of PSAP and to set up a dialogue with that PSAP. If inter-TCC communication is invoked, the URI allows the originating TCC to determine the terminating TCC, and the URI retrieved in the terminating TCC will determine the type of PSAP.

If the RS cannot correlate the location with a provisioned polygon, it returns an error. This allows the TCC to generate a bounce-back message indicating service not available. If inter-TCC communication has been invoked, and the Terminating TCC receives an error indication from the RS it notifies the Originating TCC, which generates a bounce-back message.

Guidelines for PSAPs or 9-1-1 Authorities

It is primarily the responsibility of PSAPs, 9-1-1 Authorities, and NENA to develop implementation guidelines that impact PSAP operations. However, the following subset of implementation guidelines related to PSAP operations is based on CMSP (carrier) and TCC provider implementation guidelines that also relate to PSAP operations. These guidelines are being provided to assist PSAPs, 9-1-1 Authorities, and NENA in their development of implementation guidelines for SMS to 9-1-1 service.

These guidelines are important to ensure the successful implementation of the SMS-to-9-1-1 service. PSAPs, 9-1-1 Authorities, and NENA should consider including these guidelines in their PSAP training material.

It is the PSAP's or 9-1-1 Authority's responsibility to work with CMSPs (or delegated TCC

service providers) in requesting an SMS to 9-1-1 interface from the TCC to the emergency services network or directly to the PSAP. J-STD-110 [Ref 1] and the associated Supplement A [Ref 2] defines the common set of interfaces that are available to the PSAP or 9-1-1 Authority.

A Public Safety Telecommunicator (PST) has direct control over a given SMS to 9-1-1 dialogue session. The emergency caller will not be able to end an emergency dialogue session. Only the PST can manually end a session. A PST's judgment as to when an SMS to 9-1-1 session should be terminated is a key factor.

If a PST does not take action to manually end an SMS to 9-1-1 session, a provision at the TCC has been made for a dialogue inactivity timer to automatically end the session. The TCC supports a single configurable dialogue inactivity timer [five (5) minutes minimum to a maximum of one (1) hour; thirty (30) minutes default] that applies to all PSAPs. APCO and NENA are expected to work directly with the TCC providers if the default setting of the single configurable dialogue inactivity timer value needs to be modified.

Upon receipt of each new message from a mobile device or from the PSAP, the TCC restarts the single configurable dialogue inactivity timer. Upon expiry of the dialogue inactivity timer, the TCC ends the dialogue.

When a dialogue inactivity timer value is updated, the updated value is only enforced for new SMS to 9-1-1 dialogues afterwards. The dialogue inactivity timer value for all ongoing SMS to 9-1-1 dialogues is not modified.

The PSAPs or 9-1-1 Authorities are responsible for communicating temporary suspension and resumption of SMS to 9-1-1 messaging to the TCC service provider. This suspension triggers a bounce-back message.

Any informational messages back to the emergency caller other than the bounce-back message needs to be set up directly by the PSAP and originated from the emergency services network or PSAP. The TCC provides bounce-back messages in situations where SMS to 9-1-1 is not possible, as required by the FCC First Report and Order [Ref 3].

PSAPs or 9-1-1 Authorities determine if text or call back procedures to the emergency caller are needed and, if so, establish and initiate set up such procedures outside of the TCC procedures that have been established for SMS to 9-1-1 messaging.

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