*T-Mobile Text to 9-1-1 Services* 

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Wireless 9-1-1
Interim Text to 9-1-1
Resources



# Wireless 9-1-1 ~ Current Status in Florida

T-Mobile has completed Phase I & II service deployment for all Florida PSAPs that have requested service to date. Still awaiting a Phase I & II request letter from Franklin County.

Florida Counties with no T-Mobile coverage at this time: Gilchrist and Union.

The T-Mobile network processes about 90,000 wireless voice 9-1-1 calls per day, currently providing Phase I & II service to 3,600 PSAPs nationwide.
Important that the PSAP calltaker perform a rebid/retransmit if the wireless 9-1-1 call arrives at the PSAP as Phase I (WPH1) to provide the Phase II data (WPH2).

 T-Mobile continues to meet the required location accuracy benchmarks set by the FCC on a county-by-county level.
 T-Mobile generates daily reports from its GMLC and reviews network performance reports to determine if there are any technical issues that need to be investigated and mitigated with the PSAP.



# Interim Text to 9-1-1 ~ Voluntary Commitment

AT&T, Sprint, T-Mobile & Verizon voluntary commit to offer Interim Text to 9-1-1 services:

The wireless carriers signed a voluntary commitment letter on December 6, 2012 to offer text-based emergency communication services nationwide by May 15, 2014.

The service will be accordance with the Alliance for Telecommunications Industry Solutions (ATIS) industry standard solution: ATIS/TIA J-STD-110 entitled "JOINT ATIS/TIA NATIVE SMS TO 9-1-1 REQUIREMENTS AND ARCHITECTURE SPECIFICATION".

The carriers are committed to provide an interim "best-efforts service" to meet the near term objective of providing text-based emergency communications as the Next Generation 9-1-1 network is developed and deployed.

The wireless carriers have provided quarterly status reports of their progress on this initiative in July, October, and January.

## Interim Text to 9-1-1 ~ 3 Methods

Interim Text to 9-1-1 service will be delivered via one of the following ways:

Web Services Method ~ The PSAP will receive SMS message via an Internet portal, which requires a computer(s) with Internet access.

✤ <u>TTY Method</u> ~ The PSAP will receive SMS messages (converted to ASCII) via existing 9-1-1 facilities, which may require additional trunking to the PSAP.

NENA i3 / ESInets / MSRP Method ~ The PSAP will receive SMS messages via Message Session Relay Protocol to an Emergency Services IP Network.

Once the PSAP has decided on a SMS delivery method, and has procured any necessary equipment to receive SMS data, they should send a Text to 9-1-1 request letter to the wireless carriers (CMSP = Commercial Mobile Service Providers) which will work with their vendor (TCCP = Text Control Center Provider) to implement the service.

# Interim Text to 9-1-1 ~ PSAP Requirements

#### **PSAP** Requirements for the Web Services Method:

- -Public Internet Access
- -Bandwidth: At least 1.5 Mb/s / Business class
- -Provide public IP addresses (Static IP's for access to TCC's 9-1-1 sites)
- -Web browser capability (Internet Explorer 8, Chrome or Firefox)
  - If a firewall in place, PSAP must allow access to TCC IP addresses
- -Verify/Provide GIS boundary for PSAP
- -Sign End User License Agreement & Create user logins

#### **PSAP** Requirements for the **TTY Method**:

- -Existing Selective Router and ALI connectivity
- -Customer Premise Equipment with TTY capability
- -Public Internet Access
- -Provide public IP addresses (Static IP's for access to TCC Admin site)
  - Web browser capability (Internet Explorer 8, Chrome or Firefox)
  - If a firewall is in place, PSAP must allow access to TCC IP addresses and websites
- -Verify/Provide GIS boundary for PSAP
- -Augment trunking from Selective Router?

#### **PSAP** Requirements for the **NENA i3 / ESInets / MSRP Method**:

- -PSAP connectivity to the ESInet
- -Provide PSAP/ESInet Provider boundaries & IP addresses
- -IP capable CPE

## Interim Text to 9-1-1 ~ Web Browser & TTY Tasks

Web Browser Task Description	TTY Task Description
Initial Service Request	Initial Service Request
Request Letter to Carrier, Questionnaire	Request Letter to Carrier, Questionnaire
Project Kick-Off	Project Kick-Off
PSAP Boundaries, IP Address, End User License	PSAP Boundaries, ESGW-SR Connectivity ALI & ESN Information, End User License
TCC Network Configuration	TCC Network Configuration
Internet Connectivity, Provision PSAP with TCC, Verify/Update Boundaries in TCC GIS System, Open Firewall at TCC and PSAP, Set Alternate Routing Policy	ALI Database & SR Connectivity, Obtain ESRKs, Provision PSAP with TCC, Verify/Update Boundaries in TCC GIS System, Load ESRKs in TCC/SR/ALI, Set Alternate Routing Policy
Training	Training
Web Browser Admin/Call Taker Training	Create TTY Admin User, Admin/Call Taker Training
Field Testing & Deployment	Field Testing & Deployment
Network Cutover, Complete SMS to 9-1-1 Test Cases, PSAP Signoff, Public Education	Network Cutover, Complete SMS to 9-1-1 Test Cases, PSAP Signoff, Public Education

## Interim Text to 9-1-1 ~ NENA i3 ESInet Tasks

#### **i3 ESInet Task Description**

#### **Initial Service Request**

Request Letter to Carrier, Questionnaire

#### **Project Kick-Off**

Obtain PSAP/ESInet Provider Boundaries, Obtain IP Address, Design Peering Connectivity between TCC and ESInet Provider, Design Circuit Order Between TCC and ESInet Provider, Order Circuits End User License

#### **TCC Network Configuration**

Configure VPN for Pre-Production Testing (Between TCC and ESInet Provider), Validate Message Session Relay Protocol (MSRP) in Pre-Production Environment, Install Circuits, Configure and Test Circuits, Validate MSRP in Production Environment

#### Training

Admin Training / Call Taker Training

#### Field Testing & Deployment

Network Cutover, Complete SMS to 9-1-1 Test Cases, PSAP Signoff, Public Education

### Interim Text to 9-1-1 ~ Network Design



## Interim Text to 9-1-1 ~ Web Browser Solution



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### Interim Text to 9-1-1 ~ Web Browser Solution



# Interim Text to 9-1-1 ~ Consumer Education

Short Message Service (SMS) within the wireless network was designed as a "store-and-forward" mechanism of communication and therefore, was not designed to be used for time-sensitive communications:

SMS to 9-1-1 presents technological limitations, including the lack of Automatic Location Information of the handset.

Currently subscribers will receive a "bounce back" message to inform them when Text to 9-1-1 service is not available. 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.

♦Will not work on NSI phones (Non-Service Initialized Handsets).

↔Will only work on the "native" network, not while roaming.

This is an "interim" solution for texting to 9-1-1, for SMS. If a caller attempts to attach a file, photo or video to the text, or to send it to multiple people including 9-1-1, the network will view this as MMS (Multimedia Message Service), so the text will not be delivered to 9-1-1.

FCC website: "What You Need to Know About Text to 9-1-1"

http://www.fcc.gov/text-to-911



## Resources ~ T-Mobile Contact Information

General 9-1-1 Isssues:

Lynn Mell, Senior Manager Regulatory Affairs, lynn.mell@t-mobile.com, 425-383-4898

Technical Issues (during ET business hours):

Jenni McMahel, Senior E9-1-1 Analyst, jenni.mcmhael@t-mobile.com, 678-690-3544

Technical Issues (after hours):

T-Mobile NOC can be reached at 888-662-4662

Law Enforcement Relations Team (exigent requests for subscriber information):

T-Mobile Law Enforcement Relations Team can be contacted 24/7 at (877) 653-7911 Fax request for exigent subscriber information on agency letterhead to 813-801-8863 Those numbers are for PSAP exigent use only.