T-Mobile 9-1-1 Service

- 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.
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.
- **TTY Method** ~ 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 / ESI nets / 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.
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

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<td>ALI Database &amp; 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</td>
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### Interim Text to 9-1-1 ~ NENA i3 ESInet Tasks

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<tr>
<td>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</td>
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<tr>
<td><strong>TCC Network Configuration</strong></td>
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<td>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</td>
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Interim Text to 9-1-1 ~ Network Design

TTY Over Existing Trunks

PSAP with TTY

PSAP with CPE

PSAP with GEM 9-1-1 Web Portal

PSAP connected via ESINET

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

New Incoming Messages

Active Sessions

Other Call Takers’ Sessions

Drop-down with Canned Responses, or Free Type

HUNC is Graphically Represented by the Size of the Circle

LAT/LON and HUNC Values

The MDN and the call taker’s username are shown in each message next to the timestamp
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 Issues:

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

Technical Issues (during ET business hours):

Jenni McMahon, 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.