

## **TeleCommunication Systems Supports Voluntary Consensus Wireless 9-1-1 Location Accuracy Plan**

### **Plan Addresses Heightened Location Accuracy for Indoor and Outdoor Wireless 9-1-1 Calls**

ANNAPOLIS, Md., Nov. 18, 2014 -- TeleCommunication Systems, Inc. (TCS) (NASDAQ: TSYS), a world leader in highly reliable and secure wireless communication technology, today announced that it supports the newly finalized voluntary consensus plan for providing heightened wireless 9-1-1 indoor and outdoor location accuracy, presented to the Federal Communications Commission (FCC) on November 14, 2014 by AT&T, Verizon Wireless, Sprint, T-Mobile, the Association of Public-Safety Communications Officials (APCO) and the National Emergency Number Association (NENA).

The plan advances wireless 9-1-1 location accuracy, including the use of newer technologies for giving a 'dispatchable location' to first responders. A dispatchable location adds details such as floor, suite, or apartment to the civic address of the calling party, helping to enable a quick, direct response by first responders.

Data from the millions of wireless 9-1-1 calls that TCS processes indicate that more wireless 9-1-1 calls are coming from indoor locations, so TCS supports the FCC's attention to this growing need and opportunity to apply new technology. TCS provides location-based routing and enhanced location delivery for about half of all wireless 9-1-1 calls in the United States. Approximately 40% of the general population now uses only wireless phones for their voice communication, and about 70% of all 9-1-1 calls come from wireless phones.

The voluntary consensus plan goes beyond the FCC suggestions because it explicitly includes the option to provide the dispatchable location of a wireless 9-1-1 caller. Under the consensus plan, wireless operators will be able to choose from a broad array of technologies that can provide an enhanced X/Y/Z location or generate a dispatchable location from deployed devices that leverage numerous indoor location techniques. TCS has invested aggressively in location technology for nearly two decades, and has recently publicly reported on steps taken to address the growing need for an indoor location solution for 9-1-1. The voluntary consensus plan creates the opportunity to accelerate our efforts to build upon proofs of concept already demonstrated to stakeholders in the public safety ecosystem.

### **News Facts:**

- The FCC called on the wireless industry and public safety community to develop a consensus plan to address the increasing number of wireless 9-1-1 calls that have moved indoors; indoor environments create challenges for outdoor-based technology solutions that the FCC began requiring in 1996. Approximately 70 percent of the nation's 500,000 daily 9-1-1 calls are placed from cellular phones,

underpinning the need for advancements to be made to wireless 9-1-1 indoor location accuracy so that frontline first responders are provided with the enhanced location information of the caller.

- AT&T, Sprint, T-Mobile and Verizon Wireless, APCO and NENA presented a consensus plan to the FCC on November 14 to address this issue.
- One way to achieve a dispatchable address and deliver a more accurate indoor location is to leverage the existing location information already being generated for commercial purposes. Since Wi-Fi coverage zones are becoming increasingly commonplace, by creating mechanisms that allow public safety to use existing location data such as Wi-Fi and other localized technologies, the information deliverable to public safety could include a dispatchable address.

The Consensus Plan involves an agreed upon timeline to:

- Verify technologies and vendor performance for indoor and outdoor technologies in a test bed;
- Accelerate the delivery of 'dispatchable location' using indoor technologies with ambitious milestones for demonstration, standards development, and implementation of database and handset capabilities;
- Improve existing location technologies for enhanced outdoor and indoor location fixes.

As part of the agreement, the wireless carrier signatories will obtain a location fix using heightened location accuracy technologies for the following percentage of wireless 9-1-1 calls from the date of the agreement based on live call data:

- 40% of all wireless 9-1-1 calls within two years;
- 50% of all wireless 9-1-1 calls within three years;
- 75% of all VoLTE wireless 9-1-1 calls within five years; and

TCS Senior Vice President, Tim Lorello, said: "The trend toward using wireless to dial 9-1-1 drives a need for advancements in indoor location accuracy. Since current GPS solutions are not fully capable of pinpointing an enhanced indoor location, especially in multi-level, multi-tenant buildings, it is vital that solutions for dispatchable location be deployed across the nation. Providing a dispatchable location of a 9-1-1 caller has long been viewed as the ultimate request from public safety. Together with the wireless carriers, APCO and NENA, TCS is in full support of the latest consensus plan which drives this bold initiative to provide a dispatchable location to first responders, helping them quickly and efficiently locate callers."

Since deploying the first U.S. wireless E9-1-1 solution in 1998, TCS has been leading public safety solutions for wireless Enhanced 9-1-1 (E9-1-1), NG9-1-1 and E1-1-2. TCS supports about half of all U.S. wireless E9-1-1 calls, serving more than 140 million wireless and IP-

enabled devices. TCS is leading the enablement of text-to 9-1-1, and TCS also leads the nation in emergency services IP network (ESInet) deployments. TCS is the only non-carrier TL 9000-certified company that supports E9-1-1 services. Its E9-1-1 and NG9-1-1 solutions ensure that a subscriber's emergency call is routed to the appropriate PSAP and automatically pinpoints the caller's location information.

### **About TeleCommunication Systems, Inc.**

TeleCommunication Systems, Inc. (TCS) (NASDAQ: TSYS) is a world leader in highly reliable and secure mobile communication technology. TCS infrastructure forms the foundation for market-leading solutions in E9-1-1, text messaging, commercial location, and deployable wireless communications. TCS is at the forefront of new mobile cloud computing services, providing wireless applications for navigation, hyperlocal search, asset tracking, social applications, and telematics. Millions of consumers around the world use TCS wireless apps as a fundamental part of their daily lives. Government agencies utilize TCS' cybersecurity expertise, professional services, and highly secure deployable satellite solutions for mission-critical communications. Headquartered in Annapolis, Maryland, TCS maintains technical, service, and sales offices around the world. To learn more about emerging and innovative wireless technologies, visit [www.telecomsys.com](http://www.telecomsys.com).