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## **TeleCommunication Systems Receives Four U.S. Patents for Advancements in Mobile Location Technology and Applications**

### **New Patents Focus on Location-Based Social Networks**

#### **Note: Comtech Acquired TCS on 2/23/2016**

ANNAPOLIS, MD, Jun 14, 2011 -- TeleCommunication Systems, Inc. (TCS) (NASDAQ: TSYS), a world leader in highly reliable and secure mobile communication technology, today announced that the U.S. Patent and Trademark Office has issued four patents to TCS related to mobile location technology:

- | "Method and System for Saving and Retrieving Spatial Related Information" (U.S. Patent No. 7,903,001)
- | "Method and Apparatus for Sending, Retrieving and Planning Location Relevant Information" (U.S. Patent No. 7,913,179)
- | "Wireless Network Location-Based Reference Information" (U.S. Patent No. 7,904,100)
- | "Location Sensitive Messaging" (U.S. Patent No. 7,899,468)

**"Method and System for Saving and Retrieving Spatial Related Information"** - As location-based services continue to gain in popularity, there is a corresponding interest in industry to analyze users' location data. Such analysis improves services such as location-based advertising, navigation route planning, location-based gaming, and mobile workforce-management solutions. One advantage of the invention is that it enables an automated solution that records location and associates a timestamp with events. Aspects of the system allow relevant data to be provided to users when they are at or near a specified location to further augment the time-based location data. Examples of relevant data include pictures, coupons, and user reviews.

**"Method and Apparatus for Sending, Retrieving and Planning Location Relevant Information"** - Location-based applications are increasingly relying on social communities of users of location-enabled devices to disseminate information to other users or groups. Aspects of the invention provide a means for sending and receiving relevant location-based information using a graphical interface. In light of the explosive growth of touch-based mobile devices and tablets, this patent enables a graphical solution for sending relevant information between wireless users based on their location or their position within a spatial map. The information can be sent between two users, within a group of users, or between mobile phones, automobiles, or other connected devices and machines. Examples of the types of information that can be sent include navigation directions, address information, messages, and points of interest. The patent also discloses methods that allow privacy controls to be set before any information is sent or received.

**"Wireless Network Location-Based Reference Information"** - Many wireless service consumers are familiar with 4-1-1 directory assistance services, which allow consumers to call or text message 4-1-1 to retrieve information. One shortcoming of current directory assistance is that a users' location is not automatically provided, requiring users to manually input their location information or inform the operator of their whereabouts. Aspects of the invention disclose a method and system whereby a wireless user sends a text message to 4-1-1 and the user's location is automatically provided to the service. Another advantage of the invention is that, after dialing 4-1-1, the user may enter additional digits that correspond to the type of information requested, such as nearby gas stations, restaurants, or ATM machines.

**"Location Sensitive Messaging"** - Text messaging among friends in social networks is one of the most popular forms of wireless communication. The advent of a location determination function on wireless phones enhances the functionality of messaging among community members when they wish to congregate at a given location. One aspect of the invention describes a method whereby a text message sent by a user is received by friends on a buddy list or in a social network based on the friends' proximity to the sender. Thus, a wireless user who checks in at a local restaurant can send a message that alerts nearby friends that he or she has arrived. Customized directions to the user's location may also be sent to his or her friends using each individual friend's current location as the starting point.

"Location-based services are enabling members of social networks to interact in ways that were unimaginable even a few years ago," said Drew Morin, TCS senior vice president and chief technology officer. "TCS is at the forefront of helping wireless users to engage with friends, access and share information, and create entirely new communities in real-time -- all

based on users' and their friends' locations."

TCS holds 170 issued patents worldwide and has more than 300 patent applications pending. To learn more about TCS patents and licensing opportunities, please visit: <http://www.telecomsys.com/about/ip-licensing/patents.aspx>

### **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, hyper-local 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' cyber security expertise, professional services, and highly secure deployable satellite solutions for mission-critical communications. Headquartered in Annapolis, MD, 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).

*Except for the historical information contained herein, this news release contains forward-looking statements as defined within Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities and Exchange Act of 1934, as amended. These statements are subject to risks and uncertainties and are based upon TCS' current expectations and assumptions that if incorrect would cause actual results to differ materially from those anticipated. Risks include without limitation those detailed from time to time in the Company's SEC reports, including the reports on Form 10-K for the year ended December 31, 2010, and on Form 10-Q for the quarter ended March 31, 2011.*

*Existing and prospective investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. The Company undertakes no obligation to update or revise the information in this press release, whether as a result of new information, future events or circumstances, or otherwise.*

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