

# smsExpress™ Mobile Broadband Delivery



## smsExpress Mobile Broadband Offers Comprehensive Benefits

- Simultaneous support of emerging and legacy networks GSM/UMTS/HSDPA, CDMA/EV-DO, LTE, IMS
- Relieves capacity needs for SS7 Traffic
- Intelligent dual-mode delivery
- Enables new premium broadband services triggered via SMS
- Guaranteed message delivery and receipt confirmation forwarding
- Prepaid account balance verification to avoid leakage for insufficient funds
- Complete end-to-end interoperability with all core network components

## Key Features

- **All-IP SMS Delivery Solution** – SIP and Diameter protocols used for querying, online charging, and message delivery.
- **Delivery** – Performance engineered to withstand high volume traffic bursts commonly associated with interactive TV, marketing promotions or mass alerts.
- **Billing** – Sophisticated system and billing techniques for SMSCs, prepaid, and voice mail, thereby avoiding leakage.
- **Flexible deployment options** – First Delivery Attempt (FDA) and televoting routing options in addition to high performance, high availability store/forward SMS delivery engine.
- **Geographically redundant** – Shares load and provides 99.999% reliability.
- **Cost relief** – Save money and resources by offloading text messaging from expensive circuit switched legacy networks.
- **Embedded promotions** – Enabling premium services allows the carrier to increase ARPU.

## One Messaging Solution for All Interfaces

Carriers are launching next generation mobile broadband networks, including LTE and IMS, to offer enhanced services to their customers and offload widely used applications, such as SMS, from today's more expensive and congested circuit-switched networks.

TeleCommunication Systems, Inc.'s (TCS) smsExpress™ Mobile Broadband Delivery features intelligent dual-mode SMS delivery over next generation mobile broadband networks as well as over legacy networks. This capability provides a seamless user experience during carriers' migrations to 4G networks where legacy and next generation networks must coexist.

See TCS' complete line of products and services at [www.telecomsys.com](http://www.telecomsys.com).

### Your Established Partner

TeleCommunication Systems, Inc. (TCS) (NASDAQ: TSYS) is a world leader in high availability 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. Federal government agencies depend on 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).

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### The TCS Solution

TCS' smsExpress™ Mobile Broadband solution delivers messages using the Session Internet Protocol (SIP). The SMS message is encapsulated within the SIP payload and delivered to the handset, with full query and delivery capabilities on the mobile IP network. If the handset is not registered on the IP network, smsExpress Mobile Broadband will retry the message over the legacy network.

To allow for full services convergence across all access technologies, carriers are deploying complimentary IP Multimedia Subsystem (IMS) networks. TCS' next generation smsExpress application is an IMS-ready, cost effective solution that provides a smooth SMS migration path to IMS. This solution enables SMS delivery over next generation access networks and allows operators to save money and resources by offloading text messaging from expensive circuit-switched, legacy networks.

### Intelligent Routing

The TCS smsExpress solution utilizes both the Diameter and SIP protocols for SMS delivery over the mobile broadband network. The Diameter protocol is used to allow the SMSC to query the HSS for the location of the mobile on the mobile IP network. If the destination handset is registered on the IP network then the smsExpress application delivers the message over SIP to the Call Session Control Function (CSCF).

In the instances where the handset is not available on the mobile broadband network, the smsExpress application will retry the message on the legacy network. By having one messaging platform handle short messages on two networks, retries and failovers are handled seamlessly, while subscribers enjoy a similar look and feel for all of their messaging, regardless of the interface used by the operator. This approach is depicted below.

### Get Started Now

For information on the smsExpress Mobile Broadband Solution, call 1.800.307.9489 or e-mail us at [sales@telecomsys.com](mailto:sales@telecomsys.com). See TCS' complete line of products and services at [www.telecomsys.com](http://www.telecomsys.com).

