



## News Release

### **4G Americas: Mobile Broadband Explosion Sparked by 3GPP Family of Technologies**

*Latest Research Report Outlines Success of 3GPP Mobile Broadband Evolution*

**BELLEVUE, Wash. – September 8, 2011** – “The mobile broadband market has exploded thanks to widespread adoption, powerful new networks, marvelous new handheld devices, and over a half million mobile applications,” stated Peter Rysavy, President of Rysavy Research and author of the newly published white paper announced today by 4G Americas. “Mobile broadband now represents the leading edge in innovation and development for computing, networking, Internet technology, and software.”

Rysavy’s report, *Mobile Broadband Explosion: 3GPP Broadband Evolution to IMT-Advanced*, discusses the evolution of EDGE, HSPA, LTE, the capabilities of these technologies and their position relative to other primary competing technologies. It explains how these technologies fit into the ITU roadmap that leads to IMT-Advanced.

Some of the important observations and conclusions of the white paper include the following:

- Exploding demand for data services is being addressed through a combination of technology advancements including HetNets, self-optimization, and improved spectral efficiencies. Ultimately, more spectrum is needed in most countries
- GSM-LTE has an overwhelming global position in terms of subscribers, deployment, and services
- HSPA+ provides a strategic performance roadmap advantage for incumbent GSM-HSPA operators even as most operators plan for a future that includes LTE
- 3GPP has spearheaded enhancements and innovation to both the Radio Access Network and Core Network to enhance customer experiences
- The wireless technology roadmap now extends beyond IMT-Advanced with LTE-Advanced being one of the first technologies defined to meet IMT-Advanced requirements. LTE-Advanced will be capable of peak throughput rates that exceed 1 Gbps

With a customer base of 5.2 billion connections today, the 3GPP family of technologies is available on 800 networks in 219 countries worldwide. Building on this base, the GSM-HSPA ecosystem has become the most successful communications technology family ever, with 412 commercial HSPA networks in 157 countries. 4G Americas expects the majority of all HSPA operators will upgrade their networks to HSPA+ which is already commercially deployed by 163 operators in 80 countries with current peak theoretical downlink data throughput speeds from 21 Mbps to 42 Mbps.

“HSPA and HSPA+ are the foundation for mobile broadband services around the world,” stated Chris Pearson, President of 4G Americas. “These technologies are at the forefront of providing ubiquitous high speed data services to customers. Yet, we are seeing tremendous new investment in LTE as operators secure new spectrum and make new investments for the future with LTE infrastructure.”

LTE is the global standard for the next generation of mobile networks supported by virtually every major operator in the industry. With 27 commercial networks launched in 19 and more than 250 operator commitments worldwide, LTE has become the global cellular-technology platform of choice for GSM-HSPA, CDMA/EV-DO and new operators. Also, WiMAX operators could have a smooth path to LTE-TDD.

“The cycle of mobile broadband demand is lead by tremendous devices, higher data speeds and more applications,” Rysavy added. “As device processing power increases and mobile broadband speeds

increase, customers utilize even more of the network. LTE will improve the efficiencies in the network, but more spectrum is needed to serve societies' growing appetite for connectivity."

The white paper, *Mobile Broadband Explosion: 3GPP Broadband Evolution to IMT-Advanced*, and its accompanying slide presentation, was created in collaboration with Rysavy Research by the member organizations of 4G Americas and is available for **free download** at [www.4gamericas.org](http://www.4gamericas.org).

### **Glossary of Terms**

3GPP – 3rd Generation Partnership Project  
CDMA – Code Division Multiple Access  
EDGE – Enhanced Data Rates for GSM Evolution  
EV-DO – Evolved Data Optimized  
Gbps – Gigabits per Second  
GSM – Global System for Mobile Communications  
HetNet – Heterogeneous Network  
HSPA – High Speed Packet Access (HSDPA with HSUPA)  
HSPA+ – HSPA Evolution  
IMT – International Mobile Telecommunications  
ITU – International Telecommunication Union  
LTE – Long Term Evolution  
LTE-TDD – LTE-Time Division Duplex  
Mbps – Megabits per Second  
UMTS – Universal Mobile Telecommunications System  
WiMAX – Worldwide Interoperability for Microwave Access

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### **About 4G Americas: *Unifying the Americas through Mobile Broadband Technology***

4G Americas is an industry trade organization composed of leading telecommunications service providers and manufacturers. The organization's mission is to promote, facilitate and advocate for the deployment and adoption of the 3GPP family of technologies throughout the Americas. 4G Americas contributes to the successful commercial rollout of 3GPP mobile broadband technologies across the Americas and their place as the No. 1 technology family in the region. The organization aims to develop the expansive wireless ecosystem of networks, devices, and applications enabled by GSM and its evolution to LTE. 4G Americas is headquartered in Bellevue, Wash., with an office for Latin America and the Caribbean in Dallas. More information is available at [www.4gamericas.org](http://www.4gamericas.org).

4G Americas' Board of Governors members include: Alcatel-Lucent, América Móvil, AT&T, Cable & Wireless, CommScope, Ericsson, Gemalto, HP, Huawei, Nokia Siemens Networks, Openwave, Powerwave, Qualcomm, Research In Motion (RIM), Rogers, Shaw Communications, T-Mobile USA and Telefónica.

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