EDGE AND EDGE EVOLUTION

Enhanced Data rates for Global Evolution (EDGE) has become the natural choice in upgrading Global System for Mobile communications (GSM). EDGE provides faster internet access to the mass market while serving as an important complement to networks based on Wideband Code Division Multiple Access (WCDMA), High-Speed Packet Access (HSPA) and Long-Term Evolution (LTE) technology.

With EDGE Evolution, performance and capacity are significantly improved on existing infrastructure, delivering true mobile broadband services over the GSM network.

- There are over 530 EDGE networks deployed in more than 190 countries
- Over 80% of GSM/GPRS networks are evolved to EDGE

Mobile Broadband provided over EDGE

EDGE and EDGE Evolution enables operators to provide profitable mobile broadband services and to increase Average Revenue Per User (ARPU) in locations where 3G networks have yet to be fully deployed.

Given that most GSM networks are already well established and that voice and data typically do not peak at the same time, it is possible to deploy such mobile broadband services with limited investment.

EDGE Evolution allows for competitive offerings in most markets and analysis suggests investments can be recouped within two years.

Operators with EDGE and EDGE Evolution can grasp the 3G/LTE market now, irrespective of whether the operator has a 3G license. Once 3G/LTE is deployed, the operator can concentrate on improving mobile broadband performance and capacity where it is needed.

EDGE complements 3G/LTE

Mobile broadband is successful in most 3G markets. The number of users with a bucket-plan data subscription has increased significantly since the introduction of HSPA in 3G networks. The mobile broadband service contributes to operators’ revenue and enables new business segments.

Almost all HSPA-enabled terminals have EDGE capability and WCDMA/HSPA/EDGE handsets tend to dominate the market. Therefore, EDGE enables operators to adopt a more flexible approach to their 3G/HSPA roll out.

Many operators have deployed EDGE nationwide to complement the 3G/HSPA coverage to optimize their profitability. With a combined HSPA/LTE and EDGE deployment, the operator
can truly offer full mobile broadband coverage to the users and still keep investments at a reasonable level.

Ericsson - the leader in EDGE technology

Since 2003, Ericsson has powered more than half of the world’s commercial EDGE networks. Ericsson EDGE is delivered as a software feature containing several innovative functions that improve the performance of packet data service over GSM. By activating this feature in the network, it is possible to achieve outstanding user data performance, beyond what other vendors on the market can provide.

With Ericsson EDGE, the maximum achieved user data bit rate is up to 236 kbps with 4 timeslots and 296 kbps with 5 timeslots. Ericsson EDGE latency is below 135ms and cell reselection time is under 1 second in live networks.

EDGE Evolution consists of a number of technical improvements, all standardized in 3GPP. A higher order modulation is introduced in both uplink and downlink, improving network capacity by more than 50%. With dual carrier functionality, the end-user bit rates over downlink can be doubled as two transceivers are used instead of one. Shorter Transmission Time Interval will reduce latency from today’s 135ms to below 80ms.

Ericsson has a future proof solution to secure operator investments. Since 1995, all GSM base stations delivered by Ericsson are compatible with EDGE and EDGE Evolution.

The first step of EDGE Evolution implementation is the introduction of Downlink Dual-Carrier (DLDC) and Reduced Latency. The measurements in a live network have verified an end-user bitrate of 560 kbps and end-to-end latency of 80 ms. This will significantly improve the user experience when using GSM/EDGE for internet access.

The next step is Higher Order Modulation, which in combination with downlink dual carrier will deliver data speeds up to 1Mbps, providing a true mobile broadband experience for all GSM users. The product will be commercially available in May, 2011.
Ericsson is the world’s leading provider of technology and services to telecom operators. Ericsson is the leader in 2G, 3G and 4G mobile technologies, and provides support for networks with over 2 billion subscribers and has the leading position in managed services. The company’s portfolio comprises mobile and fixed network infrastructure, telecom services, software, broadband and multimedia solutions for operators, enterprises and the media industry. The Sony Ericsson and ST-Ericsson joint ventures provide consumers with feature-rich personal mobile devices.

Ericsson is advancing its vision of being the “prime driver in an all-communicating world” through innovation, technology, and sustainable business solutions. Working in 175 countries, more than 90,000 employees generated revenue of SEK 203.3 billion (USD 28.2 billion) in 2010. Founded in 1876 with the headquarters in Stockholm, Sweden, Ericsson is listed on NASDAQ OMX, Stockholm and NASDAQ New York.

[Website links]

FOR FURTHER INFORMATION, PLEASE CONTACT

Ericsson Corporate Public & Media Relations
Phone: +46 10 719 69 92
E-mail: media.relations@ericsson.com

Ericsson Investor Relations
Phone: +46 10 719 00 00
E-mail: investor.relations@ericsson.com