Preparing for the Explosion of Connected Devices – Impact on access technologies

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New revenue opportunities are emerging for mobile operators through the delivery of machine-tomachine (M2M) and consumer-device connectivity services, which add value for enterprises and consumers. Maximizing revenues in this area demands a cost-efficient, flexible approach that enables a high degree of differentiation and customization.

The world is already highly connected and it's about to get even more so: today, there are about five billion mobile subscriptions worldwide. As devices of all kinds become connected, there will be more mobile subscriptions than people on the planet. Ericsson envisions an increase in the number of connected devices by a factor of 10 over the coming decade.

Market analysts Strategy Analytics estimate that the mobile M2M communications market will grow from the 2008 level of about USD 16 billion to more than USD 57 billion in 2014. Technology market research firm ABI Research forecasts that the overall mobile M2M connectivity market will grow from just more than 70 million connections globally in 2009 to nearly 300 million by 2015 – a compound annual growth rate of about 27 percent.

Solutions for connecting devices have been available for many years, but now we are entering a new phase of rapid growth in M2M services and consumer-device connectivity. The cost of connecting devices is falling and the value of connectivity is rising for individuals, businesses and society in general.

Regulation is a strong driver of growth in connected devices. In Europe, the eCall initiative – expected to be implemented by 2014 – will see all vehicles fitted with a 'black box' that will transmit location and other relevant information automatically to public safety services in the event of an accident or airbag deployment anywhere in the European Union. In addition, many countries have introduced regulations for remote utility metering. The US government is using funds to stimulate the deployment of smart grids that will rely on automated meter reading and, ultimately, demand management.

The presentation will reflects on the following questions: What are the pros and cons of available fixed and wireless access technologies and the additional requirements imposed by different M2M traffic patterns? How to enable efficient M2M communication, under the pressure to be cost efficient in this a low ARPU business? Will today's access network be able to support mix of M2M typically narrow band traffic complemented by bandwidth hungry video applications, like video surveillance? How to be ready for everything connected? Will M2M prolong the life of 2G, or 3G and specially low latency/high bandwidth 4G mobile networks will become the preferred choice for M2M and Internet of Things?