

# **Trials of super-fast mobile broadband on track for success**

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The first phase in a trial of an evolved version of today's mobile phone radio access technology designed to deliver much higher wireless data rates has proven a success.

The LTE/SAE (Long Term Evolution/System Architecture Evolution) Trial Initiative (LSTI) launched in May this year has reported the successful delivery of the first in a series of test results aimed at proving the potential and benefits of LTE. LTE is being standardized by the Third Generation Partnership Project (3GPP) as a next generation mobile broadband technology.

The Initiative was founded by leading telecommunications companies Alcatel-Lucent, Ericsson, France Telecom/Orange, Nokia, Nokia Siemens Networks, Nortel, T-Mobile and Vodafone, and was recently expanded with China Mobile, Huawei, LG Electronics, NTT DoCoMo, Samsung, Signalion, Telecom Italia and ZTE joining as new members.

Initial results have confirmed that the technology will deliver high levels of data throughput both for stationary and mobile devices. In more detail, the group has confirmed that the LTE physical layer performance targets in terms of stationary and on-the-move peak data rates can be met. This confirmation was achieved using an agreed set of common transmission profiles, test procedures, and analysis methods. The joint tests were performed using prototype single and multi-antenna radio systems in both lab and urban field environments.

As mobile devices become increasingly sophisticated and handle more and more complex multimedia applications, the LTE/SAE technology is designed to give end users wireless access to growing levels of data throughput on the move.

From a technical perspective, 3GPP LTE technology aims to provide improved spectral efficiency, increased radio capacity, lower latency, lower operating costs for operators, and ultimately new high-performance mobile broadband end-user services. 3GPP LTE is specified to enable downlink/uplink peak data rates above 100/50 Mbps in initial deployment configurations.

The LTE/SAE Trial Initiative is divided into three main phases; Proof of concept, Interoperability and Trial. Joint testing, and reporting of ongoing results will continue out to the end of 2009, with initial LTE system deployments planned for the 2010 timeframe.

An LSTI spokesperson commented: "These early results show great promise for 3GPP LTE technology, and are a tangible early validation of the reality of 3GPP LTE systems and services. The collective and cooperative performance test work accomplished to date by this pioneering group is a testimony to the group's leadership and determination to accelerate the availability of commercial and interoperable LTE systems."

Source: Nokia

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