**Press Release**
**Espoo, Finland - December 10, 2009**

## Nokia Siemens Networks rings up another first in LTE with 3GPP standardized voice calls

Successful IMS-compliant voice calls and SMS messaging using standardized LTE equipment marks an important step towards commercial voice over LTE deployments

**Nokia Siemens Networks has carried out the world's first voice calls in LTE networks using commercial, 3GPP-standardized user and network equipment. The success of the voice calls and SMS texting demonstrate the viability of the One Voice approach to voice over LTE (VoLTE).**

A standards-compliant voice call in LTE was recently made by Nokia Siemens Networks at its R&D centers in Germany and Finland. While the focus of most LTE trials and deployment plans are on data service, LTE also has important benefits for voice service as it offers the highest spectral efficiency for voice. Also, the delivery of voice over LTE networks means operators will in the future be able to provide all services over the same all-IP network, driving down the expense of operating parallel legacy and LTE networks.

The call conducted by Nokia Siemens Networks used a configuration of commercially ready LTE equipment fully 3GPP-compliant from end to end. The call was made from a laptop equipped with the Nokia Siemens Networks Communication Suite "softphone" application and an LG Electronics LTE USB Datacard. The network used for the call included commercial versions of Nokia Siemens Networks' Flexi Multiradio Base Station with 3GPP-compliant software, Evolved Packet Core (EPC) and Fast Track VoLTE solutions.

The EPC provides data connectivity for LTE networks, while the Nokia Siemens Networks Fast Track VoLTE solution provides fully 3GPP-standardized IP Multimedia Subsystem (IMS) functionality to handle call control for mobile voice traffic in LTE networks. Fast Track VoLTE is fully aligned with the One Voice initiative recently announced by Nokia Siemens Networks and other industry stakeholders.

To further demonstrate the viability of 3GPP-standardized voice, Nokia Siemens Networks' will also soon conduct VoLTE test calls with a fully implemented IMS system. In a separate related development, Nokia Siemens Networks recently conducted a voice call using TD-LTE equipment in Hangzhou, China.

"Voice will continue to be an important application in mobile networks now and in the future," said Jürgen Walter, head of converged core, Nokia Siemens Networks. "This successful LTE voice call takes us a step closer to realizing commercial voice over LTE services. And the fact that we can now demonstrate this functionality with both FDD and TDD variants of LTE means that we are well on track to successfully introduce standardized LTE voice and SMS to all parts of the world."

Nokia Siemens Networks is committed to driving the commercialization of LTE services, including standardized LTE voice and SMS. The company offers operators the most suitable evolution path towards an LTE based all-IP network, with a choice of introducing voice over LTE by means of its award-winning Fast Track VoLTE solution or its leading IMS solution.

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Nokia Siemens Networks recently conducted the world's first LTE call and handover using commercial base station and fully standards-compliant software, and is conducting end-to-end interoperability testing with four device vendors in different frequency bands. It recently announced completion of the first interoperability tests with LG Electronics in the 2100 MHz band.

**About Nokia Siemens Networks**
Nokia Siemens Networks is a leading global enabler of telecommunications services. With its focus on innovation and sustainability, the company provides a complete portfolio of mobile, fixed and converged network technology, as well as professional services including consultancy and systems integration, deployment, maintenance and managed services. It is one of the largest telecommunications hardware, software and professional services companies in the world. Operating in 150 countries, its headquarters are in Espoo, Finland. www.nokiasiemensnetworks.com

Engage in conversation about Nokia Siemens Networks' aim to reinvent the connected world at http://unite.nokiasiemensnetworks.com and talk about its news at http://blogs.nokiasiemensnetworks.com
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**Note to Editors:**

- Nokia Siemens Networks was the first to demonstrate LTE technology with data speeds in the 160Mb/s range as well as a successful handover between LTE and HSPA as early as 2006.
- In 2007, the company demonstrated LTE leadership with multi-user field trials in urban environments with peak data rates of 173 Mb/s.
- Launched in February 2008, Nokia Siemens Networks' LTE capable Flexi Multiradio base station has already been shipped to more than 100 customers globally.
- In 2008 Nokia Siemens Networks conducted the world's first demonstration of LTE-Advanced Relaying technology.
- In February 2009, Nokia Siemens Networks introduced the "Fast Track" approach to implementing fully standardized Voice over LTE service ahead of full IMS deployments
- In September 2009, Nokia Siemens Networks made the world's first LTE call using commercial base station and fully standards-compliant software.
- In October 2009, Nokia Siemens Networks made the world's first LTE handover test using a commercially available base station and fully standards-compliant software.
- In October 2009, Nokia Siemens Networks completed a successful call with end-to-end LTE network infrastructure and LTE terminals.
- In October 2009, Nokia Siemens Networks announced that it is conducting end-to-end LTE interoperability testing with four leading device vendors across several frequency bands required in different regions.
- In November 2009, Nokia Siemens Networks and LG announced completion of the first end-to-end LTE interoperability tests in the 2100 MHz frequency band.

- Nokia Siemens Networks is a founding member of the One Voice initiative providing a blueprint for the early deployment of IMS-based Voice over LTE service. The company's Fast Track VoLTE approach is fully compliant with One Voice.
- Nokia Siemens Networks is also one of the key contributors for standardization of both LTE modes in 3GPP and one of the driving forces in the LTE/SAE trial initiative (LSTI).
- Nokia Siemens Networks is a market leader in flat architectures, a precursor to LTE, with over 10 I-HSPA customers and over 65 Direct Tunnel customers.

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