



## **NXP and Nokia's Bell Labs Jointly Demonstrate Industry-First Converged 5G Wireless and Wireline Access Technology**

February 22, 2016

Research and collaboration between industry leaders on advanced prototype is on display at Mobile World Congress 2016

BARCELONA, Spain--(BUSINESS WIRE)--Feb. 22, 2016-- NXP Semiconductors™ N.V.(NASDAQ: NXPI), a worldwide leader in advanced systems solutions for the world's new virtualized networks, and Bell Labs, the industrial research division of Nokia, today announced they are the first to create and demonstrate a universal access device that can be used to combine wireline and wireless access support. The device is capable of supporting wireline (cable, DSL/copper) and wireless (LTE, 5G) standards with a single modem.

In 2015, the companies announced plans for their collaboration in this area, and with this demonstration at Mobile World Congress 2016, achieved their goal one year ahead of schedule.

The research demo on display at the Nokia booth (3B10/3D10) will incorporate two platforms using the same system on a single multicore processor integrated with parallel fixed and wireless channels, using common hardware components for both wireless and wireline functions.

Leveraging Bell Labs' groundbreaking "XG-FAST" 10G DSL fixed line technology and a high capacity 5G millimeter-wave radio interface, the advanced prototype is capable of addressing future operator needs for converged, ultra-high capacity and connectivity to support any device and location.

The collaboration paired NXP's deep understanding of advanced networking silicon and software with Bell Labs' unmatched knowledge of fixed and wireless encoding technologies to develop the converged technology. The result is a disruptive, highly configurable access device that supports both high speed wireline and 5G wireless processing in a single NXP architecture. The technology is intended to speed and simplify the deployment of next-generation networks for service providers, dramatically reducing CAPEX and OPEX. It efficiently handles wireline and wireless 5G systems to meet L1 requirements for power efficiency, flexibility and performance. It also creates greater flexibility and agility in scaling converged networks to meet evolving user access, feature and application demands.

"As the world's networks move to converged fixed and wireless communications, and as access channels reach 10G speeds, this technology provides an architecture that will enable our customers to deploy fully configurable systems capable of connecting clients at the speeds they expect and over virtually any access technology. Our close partnership with NXP, and the expertise they bring in silicon design and architecture, has been critical in achieving this milestone," said Tod Sizer, Mobile Radio Research Lab Head, Bell Labs.

"This convergence of wireless and wireline remote access technology shows an efficient 'path to product' for 5G, while giving NXP, Bell Labs and their customers a head start in designing next-generation networks," said Noy Kucuk, vice president of Product Management for NXP's Digital Networking business. "Our longtime partnership with Bell Labs continues to bear fruit, for the ultimate benefit of our customers and the larger industry."

### **About Nokia**

Nokia is a global leader in the technologies that connect people and things. Powered by the innovation of Bell Labs and Nokia Technologies, the company is at the forefront of creating and licensing the technologies that are increasingly at the heart of our connected lives. With state-of-the-art software, hardware and services for any type of network, Nokia is uniquely positioned to help communication service providers, governments, and large enterprises deliver on the promise of 5G, the Cloud and the Internet of Things. <http://www.nokia.com>

### **About NXP Semiconductors**

NXP Semiconductors N.V. (NASDAQ: NXPI) enables secure connections and infrastructure for a smarter world, advancing solutions that make lives easier, better and safer. As the world leader in secure connectivity solutions for embedded applications, NXP is driving innovation in the secure connected vehicle, end-to-end security & privacy and smart connected solutions markets. Built on more than 60 years of combined experience and expertise, the company has 45,000 employees in more than 35 countries.

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Source: NXP Semiconductors N.V. and Bell Labs

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