

VERIZON, JUNIPER, NEC AND FINISAR RAISE THE BAR WITH NEXT-GENERATION 100G FIELD TRIAL

First Real Traffic Demonstration Using Native 100G Router Interfaces and All Standards-Based Transport Optics

NEW YORK, March 8, 2010 — Verizon, Juniper Networks, NEC Corporation of America, and Finisar Corp. announced on Monday (March 8) the successful completion of the first real traffic 100 gigabits per second (100G) optical fiber transmission field trial applying standards-based optics end-to-end and using the latest in 100G native router interfaces.

Following Verizon's announcement in December 2009 of 100G deployment on a portion of its European network, this 100G accomplishment — which occurred on Feb. 25 — used emerging network technology to transmit data over a 1,520-kilometer optically amplified section of the Verizon network in the north Dallas area. This multivendor demonstration validates the maturity of the standard supporting 100G transfer rates, which is scheduled to be ratified by the IEEE and ITU-T in June.

"With IP traffic on the Verizon network growing year over year, 100G is critical to continuing to satisfy customers' demands, which drive the capacity requirements of our core network," said Mark Wegleitner, senior vice president of technology at Verizon. "Verizon has already deployed 100G on a segment of our European network, and trials such as this allow us to refine relevant technologies and push 100G closer to widespread deployment."

This Verizon trial demonstrated end-to-end traffic flow, including live video traffic, through a 100G interface on the Juniper T1600 Core Router to the NEC SpectralWave DWDM system, which was equipped with 100G real-time coherent transponders. The connection between the router and the DWDM system was achieved through an IEEE standard-compliant 100GBASE-LR4 client interface, using 100G CFP optical transceiver modules from Finisar Corp.

"Juniper's vision for the new network naturally includes 100G services, supported on an open, flexible and secure network infrastructure," said Stefan Dyckerhoff, executive vice president and general manager, infrastructure products group at Juniper. "Trends such as cloud computing, data center consolidation and virtualization are making the need for 100G more acute and urgent than ever before. Building on over a decade of innovations, Juniper continues to lead the industry in high-speed networking, and we are excited to work with Verizon, NEC and Finisar to deploy 100G in a realistic customer environment."

Dr. Milorad Cvijetic, vice president and chief technology strategist at NEC Corporation of America, said, "NEC's research, as well as development, have been relentless in accelerating deployment of advanced optical networking technology to help carriers meet the growth in

network traffic. This exciting achievement demonstrates the feasibility of delivering real traffic over 100G Ethernet and successful interoperability between the IP and optical layers."

Joe Young Sr., vice president of research and development and operations at Finisar, said, "Finisar is ready to make 100G optics a reality today. I think this early demonstration confirms that our vertical integration strategy makes it possible for us to be at the forefront of these new markets, backed by the volume manufacturing capability to enable large-scale deployments for our customers."

This field trial marks an important step toward advancing 100G transmission, which is vital to the continued growth of IP-based services and applications. As traffic from wireless and wired broadband devices continues to grow, communications carriers and equipment providers must continually innovate to expand and enhance the capability of core networks with technologies such as 100G connectivity.

Verizon has already achieved several industry accomplishments regarding 100G technology, dating back to November 2007 when it conducted the industry's first field trial of 100G optical network transmission on a live system. In 2008 Verizon announced two trials, one setting a new record for 100G optical-transmission distance and another validating 100G signal quality when compared with standard 10G signals. In December 2009, Verizon deployed the first 100G ultra-long-haul optical system in its European network.

Verizon Communications Inc. (NYSE: VZ), headquartered in New York, is a global leader in delivering broadband and other wireless and wireline communications services to mass market, business, government and wholesale customers. Verizon Wireless operates America's most reliable wireless network, serving more than 91 million customers nationwide. Verizon also provides converged communications, information and entertainment services over America's most advanced fiber-optic network, and delivers innovative, seamless business solutions to customers around the world. A Dow 30 company, Verizon employs a diverse workforce of approximately 222,900 and last year generated consolidated revenues of more than \$107 billion. For more information, visit www.verizon.com.