AT&T, NEC, AND CORNING RESEARCHERS COMPLETE ANOTHER RECORD-BREAKING FIBER CAPACITY TEST

Researchers Successfully Transmit Data at 32 Terabits Per Second On A Single Optical Fiber Over 580 Kilometers, Advancing Development of Next–Generation Broadband Network Technology

Middletown, Nj, Princeton, Nj, And Corning, Ny, May 11, 2008 – AT&T[1], NEC Corporation of America and Corning Incorporated today presented the results of another record–setting optical fiber transmission capacity test, using emerging network technologies to transmit data at 114 Gigabits per second over each of 320 separate optical channels on a single, 580–kilometer optically amplified link, resulting in a total bandwidth capacity of 32 Terabits per second.

The new result exceeds the bandwidth capacity of the previous record–setting test by 25 percent, and transmits it over more than twice the distance. The latest milestone, presented recently at the Optical Fiber Communication Conference & Exposition and National Fiber Optic Engineers Conference (OFC/NFOEC) in San Diego, Calif., advances development of 100 Gigabit technologies, which are expected to be finalized and ready for deployment within the next few years to boost capacity in carrier backbone networks.

Advancing the capacity of fiber–optic connections is vital to the continued growth of the Internet and 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 networking technologies like 100 Gigabit connectivity.

"IP traffic on the AT&T network is growing at about 45 percent year over year, so groundbreaking research efforts like this are critical to our ongoing efforts to stay ahead of our customers' rapidly evolving and expanding needs," said Peter Magill, executive director of optical systems research, AT&T Labs. "In setting this new bandwidth capacity record, we used a transmission method that enables better management of the interference that can result from operating 320 wavelengths over a single fiber–optic link. To do so, we used a new way to generate such signals and a new signal–processing algorithm to receive them again. We're looking forward to further testing of these techniques and the additional bandwidth advances that may come from it."

The laboratory link was composed of seven spans, each containing a single–stage Erbium–doped fiber amplifier (EDFA) for both the C– and L–band and a section of Corning® SMF–28® ULL fiber, an ITU G.652 compliant ultra–low–loss optical fiber.

"NEC has been relentless in pushing forward–looking research and development of advanced optical networking technology to help carriers meet the growth in network traffic," said Ting Wang, department head, Optical Networking, NEC Labs America. "This exciting achievement demonstrates the feasibility of packing 320 channels on one fiber with 25GHz spacing."

"There are still several challenges, including maturity and cost efficiency, to overcome before the deployment of such a high transmission rate over a single fiber, but we are definitely closer," added Milorad Cvijetic, vice president and chief technology strategist, Optical Network Systems Division, NEC Corporation of America.

"As the foundation of telecommunications networks, optical fiber innovation can help enable carriers to cost effectively keep up with ever–growing traffic demands", said Barry Linchuck, director of marketing, Corning Optical Fiber, Corning Incorporated. "Corning's recent innovation of ultra low–loss, high–performance fiber enables network operators to achieve higher capacities per fiber at the operating distances they need."

About AT&T
AT&T Inc. (NYSE:T) is a premier communications holding company. Its subsidiaries and affiliates – AT&T operating companies – are the providers of AT&T services in the United States and around the world. With a powerful array of network resources that includes the nation's fastest 3G network, AT&T is a leading provider of wireless, Wi–Fi, high speed Internet and voice services. AT&T offers the best wireless coverage worldwide, offering the most wireless phones that work in the most countries. It also offers advanced TV services under the AT&T U–verse℠ and AT&T | DIRECTV℠ brands. The company's suite of IP–based business communications services is one of the most advanced in the world. In domestic markets, AT&T's Yellow Pages and YELLOWPAGES.COM organizations are known for their leadership in directory publishing and advertising sales. In 2009, AT&T again ranked No. 1 in the telecommunications industry on *FORTUNE*® magazine's list of the World's Most Admired Companies. Additional information about AT&T Inc. and the products and services provided by AT&T subsidiaries and affiliates is available at http://www.att.com.

About NEC Corporation of America
NEC Corporation of America is a leading technology provider of network, IT and identity management solutions. Headquartered in Irving, Texas, NEC Corporation of America is a North America subsidiary of NEC Corporation, and delivers technology and professional services ranging from server and storage solutions, IP voice and data solutions, optical network and microwave radio communications to biometric security, virtualization and digital cinema solutions. NEC Corporation of America serves carrier and both ℠B and large enterprise clients across multiple vertical industries. For more information, please visit www.necam.com.

About Corning Incorporated
Corning Incorporated (www.corning.com) is the world leader in specialty glass and ceramics. Drawing on more than 150 years of materials science and process engineering knowledge, Corning creates and makes keystone components that enable high–technology systems for consumer electronics, mobile emissions control, telecommunications and life sciences. Our products include glass substrates for LCD televisions, computer monitors and laptops; ceramic substrates and filters for mobile emission control systems; optical fiber, cable, hardware & equipment for telecommunications networks; optical biosensors for drug discovery; and other advanced optics and specialty glass solutions for a number of industries including semiconductor, aerospace, defense, astronomy and metrology.

1. AT&T products and services are provided or offered by subsidiaries and affiliates of AT&T Inc. under the AT&T brand and not by AT&T Inc.

For additional information:

For AT&T Labs
Jason Hillery
(314) 982-9160
jhillery@attnews.us

For Corning
Monica Sofio
607.974.8769
sofioml@corning.com

For NEC
Rich Moran
For NEC Corporation of America
(703) 834-4145
rich.moran@necam.com

Chris Fallon
Ruder Finn for NEC Corporation of America
(212) 715-1691
fallonc@ruderfinn.com