

Nokia, Windstream Wholesale and Colt Technology Services join forces to complete world's first ultra-fast 800GbE optical and IP service trial connecting London and Chicago

Press release

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- Transatlantic partnership extends potential for capacity, speed and latency while reducing power usage on popular Europe/US route.
- Service trial spanned 8500km subsea and terrestrial route over live production network.
- 800GbE can support advanced network applications like AI data center networking, content delivery networks, and financial data hub connections.

14 Oct 2024

Espoo, Finland – Nokia, [Windstream Wholesale \(WW\)](#), an optical technology leader in advanced network solutions, and [Colt Technology Services \(Colt\)](#) today announced the successful completion of a world-first 800 Gigabit Ethernet (800GbE) service trial connecting London, UK with Chicago, US across an 8500km subsea and terrestrial route over the production network. The trial showcased innovative power-saving networking technologies from the three global tech businesses to test the boundaries of next-generation wavelength, capacity, speed and latency between two of the world's largest financial trading hubs.

The field trial involved connecting one of Colt's five powerful transatlantic subsea cables and part of its extensive terrestrial fiber optic network with Windstream Wholesale's domestic U.S. low latency, optical fiber Intelligent Converged Optical Network (ICON) monitoring speed and performance. Together, Colt and Windstream Wholesale have partnered to demonstrate the world's first transoceanic 800 gigabit ethernet (GbE) end-to-end service transport from router to router over 1Tbps optical transport. The trial was successfully delivered using Nokia's

pioneering sixth-generation Photonic Service Engine (PSE-6s) coherent optics and 7750 Service Router (SR) high-performance routing platforms boosting internet service speeds and supporting ultra-high wavelength capacity, while maintaining power efficiency.

800G marks a breakthrough in service bandwidth, doubling capacity to support advanced network applications like AI data center networking, content delivery networks, and financial data hub connections.

Buddy Bayer, Chief Operating Officer of Colt Technology Services, said: “Pushing the boundaries of technology innovation is a fundamental part of our customer commitment: it means we stay a step ahead of the market, so we’re ready when our customers ask, “What’s next for us?” This trial has seen us build a powerful industry collaboration to explore the ‘what’s next?’. It’s tested the limits of infrastructure performance and capability across thousands of miles of land and sea with incredible networking technologies, and it’s demonstrated the power and potential of what can be achieved, without skipping a beat.”

Joe Scattareggia, President of Windstream Wholesale, said: “Our latest innovation represents a true game-changer for global connectivity. By partnering with two extraordinary leaders in the industry, we’re enabling unprecedented bandwidth capabilities that are essential for driving AI-powered applications worldwide for our customers. As an optical technology leader, Windstream Wholesale and our partners are establishing 800GbE as the next evolutionary advancement increase for wave services. This collaboration has pushed the boundaries of what’s possible, creating a network solution like no other. Together, we’re not just meeting the demands of the future—we’re shaping it.”

Federico Guillén, President of Network Infrastructure at Nokia, said: “Such an ambitious project — to link two of the world's most important financial hubs — sets the bar very high for network capacity, speed, security and reliability. This demonstration would simply not have been possible without the commitment of Nokia and our partners to the highest standards of innovation in networking technology. Together, we are redefining the art of the possible for IP and optical networks enabling cross-continental subsea and terrestrial communications.”

Following the successful completion of the trial, the organizations are currently exploring options to bring 800GbE connectivity services to market for global business customers.

Resources and additional information

Webpage: [Nokia PSE-6s](#)

Webpage: [Nokia Optical Networks](#)

About Nokia

At Nokia, we create technology that helps the world act together.

As a B2B technology innovation leader, we are pioneering networks that sense, think and act by leveraging our work across mobile, fixed and cloud networks. In addition, we create value with intellectual property and long-term research, led by the award-winning Nokia Bell Labs.

With truly open architectures that seamlessly integrate into any ecosystem, our high-performance networks create new opportunities for monetization and scale. Service providers, enterprises and partners worldwide trust Nokia to deliver secure, reliable and sustainable networks today – and work with us to create the digital services and applications of the future.

About Colt Technology Services

Colt Technology Services (Colt) is a global digital infrastructure company which creates extraordinary connections to help businesses succeed. Powered by amazing people and like-minded partners, Colt is driven by its purpose: to put the power of the digital universe in the hands of its customers, wherever, whenever and however they choose.

Since 1992, Colt has set itself apart through its deep commitment to its customers, growing from its heritage in the City of London to a global business spanning 40+ countries, with over 6,000 employees and more than 80 offices around the world. Colt's customers benefit from expansive digital infrastructure connecting 32,000 buildings across 230 cities, more than 50 Metropolitan Area Networks and 250+ Points of Presence across Europe, Asia, the Middle East, Africa and North America's largest business hubs.

Privately owned, Colt is one of the most financially sound companies in the sector. Obsessed with delivering industry-leading customer experience, Colt is guided by its dedication to customer innovation, by its values and its responsibility to its customers, partners, people and the planet.

For more information, please visit www.colt.net

About Windstream Wholesale

Windstream Wholesale is an innovative optical technology leader that delivers fast, flexible, and customized wavelength and dark fiber solutions to carriers, content providers, and

hyperscalers in the U.S. and Canada. Windstream Wholesale is one of three brands managed by Windstream. The company's quality-first approach connects customers to new opportunities and possibilities by delivering a full suite of advanced communications services. Windstream also offers fiber-based broadband to residential and small business customers in 18 states as well as managed cloud communications and security services to mid-to-large enterprises and government entities across the U.S. Windstream is a privately held company headquartered in Little Rock, Ark. Additional information about Windstream Wholesale is available at [windstreamwholesale.com](https://www.windstreamwholesale.com). Follow us on X (Twitter) @Windstream and LinkedIn at @Windstream.

To view the Windstream Wholesale network map, visit

<https://www.windstreamwholesale.com/wp-content/uploads/2022/05/Windstream-Wholesale-National-Network.pdf>

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