



Arelion Achieves World's First Live 1.6 Tb/s Wave Data Transmission with Ciena's WaveLogic 6 Extreme

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STOCKHOLM & HANOVER, Md.--(BUSINESS WIRE)--Aug. 29, 2024-- [Arelion](#) and [Ciena](#) (NYSE: CIEN) today announced the successful completion of the world's first 1.6 terabits-per-second (Tb/s) wavelengths data transmission in a live network field trial. Powered by Ciena's state-of-the-art WaveLogic 6 Extreme ([WL6e](#)), this milestone occurred on Arelion's 470km route between its existing Points-of-Presence (PoPs) in Ashburn, Virginia ([Equinix](#)) and Telxius' ([Telxius-CLS](#)) Virginia Beach cable landing station, increasing capacity between two critical locations in Arelion's North American network. Following this trial, Arelion will deploy WL6e across its network to increase its ability to serve the surging bandwidth demands of 5G, Artificial Intelligence/Machine Learning (AI/ML) applications, cloud services, content delivery and more for wholesale and enterprise customers.

Ciena's [WL6e](#) leverages coherent digital signal processing (DSP) innovations to improve energy efficiency and performance, providing Arelion with a 50% space and power per bit reduction and 15% higher spectral efficiency compared to previous generations. WL6e will enable Arelion to deliver multiple 400 / 800 gigabits-per-second (Gb/s) services optimized using 1.6 Tb/s line capacity, supporting higher traffic volumes and faster connectivity speeds across its existing network footprint.

The trial also leveraged Ciena's open, programmable 6500 Reconfigurable Line System ([RLS](#)), a solution designed to simplify and automate network service provisioning and reconfiguration. The milestone reinforces Arelion's early investments in open optical networking and next-generation coherent optic solutions to improve performance, energy efficiency and cost savings.

"This new benchmark reflects our ongoing investment in cutting-edge optical networking technologies that increase capacity and performance while reducing energy consumption to benefit our customers," said Dariusz Solowiej, VP Network Technology & Customer Operations at Arelion. "Our collaboration with Ciena is crucial in supporting global enterprises' capacity needs amid rising power and colocation costs, helping us provide the reliable connectivity companies need to transfer massive data volumes at the fastest speeds available today."

"This significant milestone with Arelion serves as a template for service providers striving to improve the energy efficiency and scalability of their optical networks amid mounting bandwidth demands," said Jamie Jefferies, Vice President & General Manager, International at Ciena. "As the industry's first 1.6 Tb/s coherent optic solution, WaveLogic 6 Extreme brings forth new innovative capabilities for optical transport, with forward-thinking service providers like Arelion leading the charge."

This achievement enhances the performance of Arelion's leading optical transmission services, including high-speed [Managed Optical Fiber Services](#) and [Wavelengths](#) for service providers, content providers and enterprises.

Ciena's WL6e is the industry's first high-bandwidth coherent transceiver using state-of-the-art 3nm silicon technology to drive significant economic benefits for operators, including a 50% reduction in space and power per bit.

About Arelion

Arelion solves global connectivity challenges for multinational enterprises whose businesses rely on digital infrastructure. On top of the world's #1 ranked IP backbone and a unique ecosystem of cloud and network service providers, we provide an award-winning customer experience to customers in more than 125 countries worldwide. Our global Internet services connect more than 700 cloud, security and content providers with low latency. For further resilience, our private Cloud Connect service connects directly to Amazon Web Services, Microsoft Azure, Google Cloud, IBM Cloud and Oracle cloud across North America, Europe and Asia. Discover more at [Arelion.com](#), and follow us on [LinkedIn](#) and [Twitter](#).

About Ciena

Ciena (NYSE: CIEN) is a global leader in networking systems, services, and software. We build the most adaptive networks in the industry, enabling customers to anticipate and meet ever-increasing digital demands. For three-plus decades, Ciena has brought our humanity to our relentless pursuit of innovation. Prioritizing collaborative relationships with our customers, partners, and communities, we create flexible, open, and sustainable networks that better serve all users—today and into the future. For updates on Ciena, follow us on [LinkedIn](#), [Twitter](#), the [Ciena Insights blog](#), or visit [www.ciena.com](#).

Note to Ciena Investors

You are encouraged to review the [Investors section](#) of our website, where we routinely post press releases, SEC filings, recent news, financial results, and other announcements. From time to time we exclusively post material information to this website along with other disclosure channels that we use. This press release contains certain forward-looking statements that are based on our current expectations, forecasts, information, and assumptions. These statements involve inherent risks and uncertainties. Actual results or outcomes may differ materially from those stated or implied, because of risks and uncertainties, including those detailed in our most recent annual and quarterly reports filed with the SEC. Forward-looking statements include statements regarding our expectations, beliefs, intentions or strategies and can be identified by words such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "should," "will," and "would" or similar words. Ciena assumes no obligation to update the information included in this press release, whether as a result of new information, future events or otherwise.

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