



NEWS RELEASE

Adtran and BT Group achieve Europe's first live network trial with coherent 100ZR

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News summary:

- Metro and edge aggregation networks need to increase speed and energy efficiency
- BT Group completes field trial over a live research fiber network with Adtran's pluggable 100ZR transceiver
- With high spectral efficiency and low power consumption, the trial showcases new options for sustainability and scale

LONDON--(BUSINESS WIRE)-- Adtran today announced that together with BT Group it has conducted Europe's first successful field trial of optical transport in a live research network, using Adtran's **Coherent 100ZR** pluggable transceiver. Achieving high levels of spectral efficiency and low power consumption, the trial demonstrated the transceiver's ability to enable the transport of 100Gbit/s wavelengths, over longer distances, across routes at metro and edge aggregation networks, offering scalable and efficient solutions for the future.

Adtran's Coherent 100ZR pluggable transceiver can be used to quickly scale networks without major infrastructure changes. (Photo: Business Wire)

With demand for speed and bandwidth growing, there is a need to increase the transport

capacity of access and edge aggregation networks. As such, operators need cost-efficient solutions that can be easily deployed to upgrade certain routes without making major changes to existing infrastructure.

About the size of a memory stick, the Adtran Coherent 100ZR transceiver can be plugged directly into an operator's transmission unit. Featuring a purpose-built digital signal processor (DSP) co-developed with Coherent Corp that is



optimized for data rates of 100Gbit/s and designed for easy integration with deployed infrastructure, the QSFP28-compatible transceiver facilitates the adoption of 100ZR coherent technology at the network edge.

“Adtran’s plug-and-play solution has enabled us to demonstrate the feasibility of boosting capabilities within existing networks and doing so in a cost-effective and scalable manner,” said Andrew Lord, senior manager of optics research at BT. “As we continue to innovate and push boundaries, technologies like this will be instrumental in achieving our goals for a greener, more efficient telecommunications landscape.”

The trial with BT Group was conducted across a complex network infrastructure, spanning 90km over a third-party optical line system, incorporating four ROADM nodes and six amplifiers. Utilizing a tight 50GHz ROADM channel, the trial achieved enhanced spectral efficiency. Operating at less than 5 watts, the trial also set new benchmarks for energy efficiency.

“Together with BT Group, we’ve showcased a method for transforming network infrastructure with highly efficient, low-power solutions. It’s a strategy that requires significantly less equipment and fewer sites. The demo also proves the advantages of deploying one amplifier in the optical line system rather than multiple amplifiers within each transceiver module. This streamlined approach helps boost network performance, reduces operational spending and shrinks carbon footprint. As well as big potential savings – as much as 50% in some cases – this strategy offers a clear path to more sustainable network development,” commented Ryan Schmidt, GM of optical transport at Adtran. “This demo also highlights the exceptional performance of our outdoor-hardened Coherent 100ZR transceiver. Despite its relatively low optical launch power, it excelled within a complex, real-life ROADM network.”

About Adtran

ADTRAN Holdings, Inc. (NASDAQ: ADTN and FSE: QH9) is the parent company of Adtran, Inc., a leading global provider of open, disaggregated networking and communications solutions that enable voice, data, video and internet communications across any network infrastructure. From the cloud edge to the subscriber edge, Adtran empowers communications service providers around the world to manage and scale services that connect people, places and things. Adtran solutions are used by service providers, private enterprises, government organizations and millions of individual users worldwide. ADTRAN Holdings, Inc. is also the largest shareholder of Adtran Networks SE, formerly ADVA Optical Networking SE. Find more at [Adtran](#), [LinkedIn](#) and [X](#).

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BT Group is the UK's leading provider of fixed and mobile telecommunications and related secure digital products, solutions and services. We also provide managed telecommunications, security and network & IT infrastructure services to customers across 180 countries.

BT Group consists of three customer-facing units: Consumer serves individuals and families in the UK; Business covers companies and public services in the UK and internationally; Openreach is an independently governed, wholly owned subsidiary wholesaling fixed access infrastructure services to its customers - over 650 communications providers across the UK.

British Telecommunications plc is a wholly owned subsidiary of BT Group plc and encompasses virtually all businesses and assets of the BT Group. BT Group plc is listed on the London Stock Exchange.

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