NEWS RELEASE

TOHKnet and Adtran conduct Japan's first 50G PON trial on a live network

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News summary:

- TOHKnet is exploring next-generation PON to meet enterprise demand while maintaining continuity across its regional fiber network
- Using Adtran technology, the trial validated 50G PON, XGS-PON and EPON operating together on a single fiber network
- Results show a practical path to evolve networks, enabling phased upgrades while maximizing fiber assets and avoiding service disruption

SENDAI, Japan--(BUSINESS WIRE)-- Adtran today announced that TOHKnet has completed Japan's first live network trial demonstrating the coexistence of 50G PON, XGS-PON and EPON on a single fiber. Conducted in Sendai using Adtran's SDX 6400 Series OLT, the demo showed how the platform enables three generations of PON technology to operate together in a live service environment. The results highlight a realistic path for operators to introduce 50G PON capacity while maintaining continuity for existing services, maximizing the value of deployed fiber assets and reducing the complexity and disruption typically associated with network upgrades.

Adtran's SDX 6400 Series is helping TOHKnet demonstrate how Japan's operators can migrate to 50G PON without disrupting existing PON services.

"As demand for digital services continues to grow, this trial is a key milestone for the future of fiber access in Japan," said Toru Suruga, executive officer and GM of technical engineering department at TOHKnet. "It demonstrates how live networks can evolve from today's service requirements toward the next phase of digital infrastructure. Our relationship with Adtran has developed over many years through technical cooperation, trust and shared understanding. That foundation has enabled us to take an early and proactive role in advancing multi-PON coexistence in real network conditions. For us, it's about building a more adaptable network for our customers while continuing to support the digital growth of the Tohoku region."

The live trial used Adtran's SDX 6400 Series, a high-capacity, software-defined OLT designed to support next-generation PON evolution within established fiber networks. The platform integrates 50G PON, XGS-PON and EPON capabilities on a single fiber, enabling TOHKnet to assess how 50G PON can be introduced alongside deployed access technologies without requiring major changes to the optical distribution network. Its modular architecture gives operators control over performance, scale and deployment timing, enabling upgrades to align with customer demand. For regional providers serving enterprise customers, this approach supports service continuity, efficient aggregation and long-term capacity planning as bandwidth requirements continue

to expand.

“This demo represents an important step in the transition to higher-capacity broadband infrastructure,” commented Damian Deleard, head of APAC sales at Adtran. “What matters here is that 50G PON is being proven in the kind of environment operators actually run. Networks aren’t built from scratch each time a new technology arrives. They’re layered over years, supporting different systems and service needs. TOHKnet has shown real leadership in Japan by demonstrating how higher-capacity access can be achieved without disrupting existing services. Years of close collaboration have given us a shared understanding of practical network evolution: adding capacity while maintaining continuity and shaping upgrades around real customer needs.”

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 majority shareholder of Adtran Networks SE, formerly ADVA Optical Networking SE. Find more at Adtran, LinkedIn and X.

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