O-RAN Global PlugFest Fall 2026 Showcased AI-Driven Solutions That Improve Network Operations and Enable New Use Cases

- O-RAN-based AI-driven solutions demonstrated energy savings, network fault detection, link adaptation for remote driving, sensing, physical AI and other innovative use cases
- The PlugFest furthered end-to-end interoperability across multi-vendor equipment, including a multi-operator shared radio unit, a 15 km Open Fronthaul link, and a full-scale 64x64 mMIMO system
- The O-RAN Global PlugFest Fall 2026 brought together 47 organizations across 16 labs, supported by 20 hosts

Bonn/Germany, November 26, 2026

The O-RAN ALLIANCE today announced the successful completion of the O-RAN Global PlugFest Fall 2026. It brought together operators, vendors, and research and academic institutions to test O-RAN-based solutions in a collaborative environment.

The PlugFest showcased how AI can improve mobile network performance and operational efficiency. Participants demonstrated AI-enabled solutions for network energy savings, AI-assisted detection of hardware faults, and AI-driven uplink adaptation for latency-sensitive remote-driving applications, among other advances. The PlugFest also evaluated the feasibility and performance of physical AI use cases and tested AI-based sensing applications.

Participants also conducted functional, performance and interoperability testing of multi-vendor equipment, including scenarios supporting O-RU sharing by multiple operators, long-distance Open Fronthaul connectivity over 15 km, and detection and performance testing of a full-scale 64x64 mMIMO system. Additional PlugFest activities covered security testing and test automation. Several scenarios utilized open-source software and contributed enhancements to existing open-source projects.

The O-RAN ALLIANCE plans to continue its global PlugFests to accelerate development, integration and adoption of O-RAN-based solutions while fostering collaboration across the O-RAN ecosystem.

“The O-RAN ALLIANCE has been laying the foundation for intelligent RAN since its founding moment,” said Chih-Lin I, Co-chair of O-RAN ALLIANCE’s Technical Steering Committee and CMCC Chief Scientist, Wireless Technologies, China Mobile Research Institute. “It is great to see the increasing focus of O-RAN PlugFests on AI-driven applications that improve RAN performance, increase operational efficiency and enable new use cases. O-RAN specifications enable these applications, and O-RAN PlugFests provide our ecosystem a framework and platform for agile validation of such capabilities.”

Participants in O-RAN ALLIANCE Global PlugFest Fall 2026

The O-RAN ALLIANCE appreciates the strong engagement from the industry in the O-RAN Global PlugFest Fall 2026 and would like to recognize the hosts, labs and participants including:

1Finity, AmpliTech, ANDREW - an Amphenol Company, Calnex Solutions, Chunghwa Telecom, DeepSig, Digital Catapult, EANTC, ETRI, EURECOM, G REIGNS, HFR, i14y Lab, Iowa State University (ARA), ITRI, JMA Wireless, Keysight Technologies, Korea Telecom, LG Electronics, LG Uplus, Metanoia Communications, NEC, Nokia, North Carolina State University (AERPAW), Northeastern University,

NTT DOCOMO, NVIDIA, Rakuten Mobile, Rakuten Symphony, Red Hat, Rimedo Labs, Rutgers University (COSMOS), Singapore University of Technology and Design (SUTD), SK Telecom, Software Radio Systems, SOLiD, Supermicro, SynaXG, Telecommunications Technology Association (TTA), University of New Hampshire Interoperability Labs (UNH-IOL), University of Texas at Dallas, University of Utah (POWDER), VIAVI Solutions, Vodafone, Wave Electronics, Wind River, YRP R&D Promotion Committee.

About O-RAN ALLIANCE

The O-RAN ALLIANCE is a world-wide community of mobile operators, vendors, and research & academic institutions operating in the Radio Access Network (RAN) industry. As the RAN is an essential part of any mobile network, the O-RAN ALLIANCE's mission is to re-shape the industry towards more intelligent, open, virtualized and fully interoperable mobile networks. O-RAN specifications enable a more competitive and vibrant RAN supplier ecosystem with faster innovation to improve user experience. O-RAN based mobile networks at the same time improve the efficiency of RAN deployments and operations by mobile operators. To achieve this, the O-RAN ALLIANCE publishes new RAN specifications and supports its members in integration and testing of their implementations.
For more information, please visit www.o-ran.org.

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