

NTIA Announces the Full Roster of 5G Challenge Contestants

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CableLabs congratulates [Capgemini Engineering](#), [Fujitsu Network Communications](#), [Mavenir Systems Inc.](#), [Radisys Corporation](#) and [Signal System Management](#) for [being selected as contestants](#) in the [National Telecommunications and Information Administration's Institute for Telecommunication Sciences](#) (NTIA-ITS) [5G Challenge](#). The competition is hosted by [CableLabs](#). Including [Rakuten](#), the early bird contestant, this group of six participants highlights the diversity of vendors working to develop open and interoperable networks for 5G and beyond.

Collectively, nine subsystems will be tested from the contestants, which vary from well-established vendors in the telecom space to newer entrants in the

ecosystem of emerging technologies involving the Open Radio Access Network (O-RAN). The 5G Challenge prize competition aims to accelerate the adoption of open interfaces, interoperable components and multi-vendor solutions toward the development of an open 5G ecosystem.

Cutting-Edge Lab Capabilities

Over the past few months, CableLabs' expert technical team prepared its state-of-the-art 5G Lab by adding new lab capabilities to test contestants' O-RAN subsystems. The capabilities include Viavi's TeraVM and TM 500 systems for wrap-around testing on each of the O-RAN subsystems—Centralized Unit (CU), Distributed Unit (DU) and Radio Unit (RU)—and one of the industry's first Open Distributed Unit (O-DU) testers. CableLabs and [Kyrio](#) staff are finalizing work to ensure that participants can reliably and securely test the support of industry specifications and the interoperability of the contestants' subsystems. Multiple CU, DU and RU systems will be tested during the 5G Challenge with the goal of accelerating the development and deployment of O-RAN in the 5G ecosystem.

The test plans for each O-RAN subsystem were developed by CableLabs in conjunction with the NTIA to focus on conformance with the [O-RAN Alliance](#) and [3GPP](#) specifications. Each system will be tested for integration, interface conformance, functionality and performance. These tests will provide information to the vendors, NTIA-ITS, the Department of Defense and the larger 5G ecosystem about the current status of the O-RAN vendor community, the benefits of interoperability, and the potential for future development of open and interoperable systems for 5G and future wireless networks.

Staff Expertise and Analysis

Contestants and the government will not only benefit from access to the state-of-the-art 5G Lab but also from access to the wireless network expertise of CableLabs and Kyrio staff. Staff will assist each contestant team to ensure complete and accurate testing. As the [Host Lab](#), CableLabs will also provide technical analysis of each test to NTIA-ITS.

We're looking forward to seeing all the contestants at the 5G Lab this summer and continuing CableLabs' long-term investment in open and interoperable networks.