Accelerate Open RAN Radio Unit (O-RU) Commercial Deployment and Secure NTIA NOFO 2 Funding

Trusted Development and Test Partners at Your Service



TRUSTED DEVELOPMENT AND TEST PARTNERS AT YOUR SERVICE

VIAVI and Rohde & Schwarz have combined their industry-leading capabilities to deliver comprehensive and scalable **Open RAN development and test solutions**, aligned with the needs of O-RU manufacturers and MNOs planning to bid for NTIA Public Wireless Supply Chain Innovation Fund (PWSCIF) Second Notice of Funding Opportunity (NOFO 2).

As a recipient of NOF01 funding for our VALOR[™] lab, we have firsthand expertise in successful bidding and execution. We also provide our vendor and MNO partners with access to VALOR, our Automated Lab-as-a-Service for Open RAN. VALOR reduces costs through unique cross-referencing and offers additional resources for interoperability, validation, and testing.

Successful bids and project execution must address multiple aspects. VIAVI and Rohde & Schwarz enable vendors and operators to collaborate closely and align their testing efforts by supporting them in processes, test activities, and defining KPIs. Our active role will focus on the following areas:



Lab Test

Functional and performance testing of O-RUs



Certification Test

3GPP, O-RAN WG4



Security Test

O-RAN WG11



Field and Interoperability Test

With O-DU/O-CU, defining and meeting operator KPIs



Manufacturing

Seamless migration from lab test to production test

Based on specifications set by TIP, 3GPP, O-RAN Alliance Working Groups, and TIFG, our solutions cover the entire product life cycle, enabling you to launch products on time, within budget and at scale in a multi-vendor MNO ecosystem. Leverage the combined strengths of our companies that deliver a superior offering surpassing what any single company could achieve alone.

BENEFITS OF OUR COMBINED SOLUTIONS

Comprehensive O-RAN and RF Development, Validation and Test

We support baseline 3GPP/O-RAN tests specifications and beyond:

- Conformance: 3GPP and O-RAN WG4 Conformance tests
- Interoperability/Performance: O-RU RF and Fronthaul; O-RU O-DU and O-RU SMO/OSS management. High fidelity PoC/Prototype tested in complex, multi-vendor lab, in a simulated field environment, and through real-world field trials.
- Security: 0-RAN WG11 Tests
- Further: comprehensive performance requirements validation, with any
 combination of real network elements and emulators in an automated,
 simulated field environment.

You can further integrate additional VIAVI and Rohde & Schwarz equipment and services to extend test capabilities, including combined O-RU and O-DU, end-to-end qNB, over-the-air testing, energy-saving features, and advanced MIMO configurations.

Proven Solutions

We have been present in hundreds of labs worldwide for a decade in 5G, and since the inception of O-RAN, conducting **Telco-grade** integration, validation, and testing.

Expertise and Experience

- **O-RAN Specifications:** We actively contribute to specifications development through leadership positions in the O-RAN ALLIANCE and TIP.
- Development and Validation Labs: Our solutions, services, and expertise are utilized by nearly all major O-RAN equipment and component vendors, as well as MNOs globally.
- Multi-vendor Interoperability: Since the inception of O-RAN over five years ago, we have supported over 100 PlugFests and 60 O-RAN vendors and MNOs worldwide.

Accelerated Deployment

By running specified O-RAN tests to validate function and performance, we enable early detection and resolution of issues within the development cycle.

Competitive Capex and Opex Models

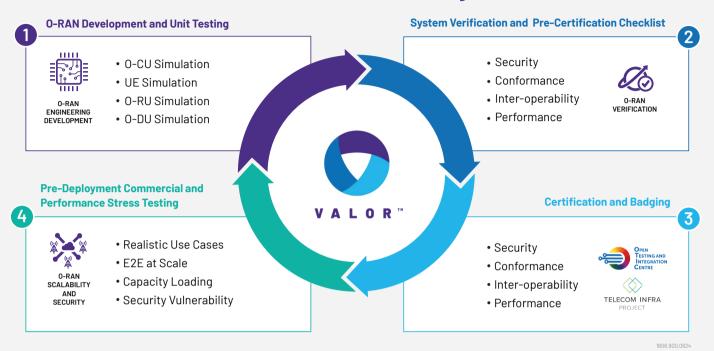
Our unique and competitive end-to-end solutions offer cost-effective testing options for NEM and MNO labs, enhanced with additional performance and interoperability testing using existing VALOR lab assets.

NTIA Reference with VALOR

The commercially available O-RAN solutions mirror that of the NTIA-funded VALOR Lab, made possible by a \$21.7 million grant from the first PWSCIF Notice of Funding Opportunity.

VALOR provides fully automated, impartial testing and integration for Open RAN. It offers an on-demand test suite covering O-RU conformance, performance, security, and interoperability testing, leveraging a full set of golden O-RAN compliant components from reputable partners and a large RF anechoic chamber.

VALOR Services Life Cycle



At the VALOR lab, we provide an on-demand test suite. In addition, leveraging golden O-RAN compliant O-RUs, O-DUs and O-CUs provided by several reputable partners and a large RF anechoic chamber, VALOR offers Massive MIMO and beamforming over-the-air (OTA) validation including system-level Massive MIMO performance testing for up to 16 parallel spatial layers. VIAVI also offers Test-as-a-Service (TaaS) supporting short-term and time-sensitive 5G and Open RAN projects. Available to major NEMs and CSPs, the TaaS offering provides a complementary alternative to handle peaks in lab demand with customers' in-house testing approach.

We look forward to welcoming you in person to the VALOR Lab in Chandler, AZ.

THE BEST OF BOTH WORLDS

Top Performance

Access the combined VIAVI & Rohde & Schwarz leading O-RAN performance and RF solutions across lab, deployment and production, which are also future-proofed as 3GPP and O-RAN standards evolve.

Automated Single Point of Control

Single user interface to control all instruments, including the Device Under Test (DUT), eliminating the need for manual intervention.

Streamlined Support

The ethos of Open RAN is bringing multiple vendors together to deliver the highest levels of performance reliably, robustly and without compromising support. Our customers benefit from a single point of contact for technical inquiries, who will oversee the entire support process. By leveraging expertise from both companies, this ensures your projects stay on track.

Market Leadership

Both companies are trusted by major network equipment manufacturers for 4G, 5G, and O-RAN development, validation, capacity and production test.

In partnership with ROHDE & SCHWARZ



Let's partner for your testing needs when bidding for the NTIA NOFO 2.

Visit viavisolutions.com/nofo2 for more information.

