

Brochure

Test as a Service (TaaS)

Speed 5G Services to Market



Command the 5G network.

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Introduction to TaaS



5G and Open RAN are creating opportunities for companies to both expand their product portfolios and enter new markets. To be successful, organizations need to be able to bring new products to market quickly and demonstrate to prospective customers that they can deliver commercially robust solutions that meet demanding performance criteria. However, 5G technology is complex and Open RAN architectures create additional demands on interoperability with third party components. New architectures such as mobile edge access computing, network slicing and new technologies including advanced MIMO configurations further add to the demands on engineering teams.

The right test strategy is an essential part of mitigating the risks that development teams face. As a specialist in network testing, VIAVI possesses unrivalled experience in network equipment development, deployment and operation and has worked with the world's leading operators for many years to help them both bring new products to market and then deploy them in the network quickly.

5G, Open RAN, and TaaS

VIAVI can help to test your network equipment within an Open RAN environment, as we have not only adopted the O-RAN Alliance specifications, we have been and are actively involved in the development of them which is particularly important in supporting multiple vendors with different vendor specific requirements. The requirement for robust, high performance test equipment is vital for testing against the latest specifications so you can guarantee your radio access equipment not only interoperates with equipment from other vendors but ensure you are optimizing the performance of that equipment.

VIAVI now provides a Test as a Service (TaaS), offering the support to maximize your engineering productivity and provide access to the right tools and expertise to enable the rapid delivery of high performance and ultra-reliable cellular communications products. As 5G and O-RAN evolve, VIAVI TaaS is enabling you to deliver product to market faster and on budget.

VIAVI TaaS enables you to:

- De-risk and accelerate product time-to-market
- Reduce operating and capital costs
- Maximize the utilization of test assets
- Reduce training and ramp-up time for engineers

TaaS Provides the Solution for These Challenges:



Limited Test Expertise



Network Complexity



Hard Delivery Timescales



Risk of Delay



Flexibility is Key

Benefits of TaaS

Test-as-a-Service is designed to support short-term and time-sensitive 5G and O-RAN projects that require access to tools and expert staff with a minimal ramp-up time. Delivering 5G and O-RAN projects on time and on budget is challenging but VIAVI expertise and TaaS can help mitigate those risks.

VIAVI TaaS offering is flexible but typically includes access to leading-edge, lab-based test equipment and expert engineers that can create and execute scripts and analyze test logs. This enables you to concentrate on developing products without needing to worry about the test equipment.



TaaS provides fast access to de facto industry standard test equipment.

With years of experience in both the virtual (cloud-based) and the physical, VIAVI have developed strong partnerships and reliable services, which places us in the ideal position to help facilitate the delivery of TaaS.

TaaS assets can also be pooled in a centralized datacentre, shared and re-allocated across departments and global locations, which is made possible by subscription-based usage.

In the past, when a team in one location shut up shop and went home, equipment lay dormant and unused until the next day. Now, the tools and know-how can be re-allocated or used simultaneously from other locations, significantly enhancing the utilization of high value test equipment.

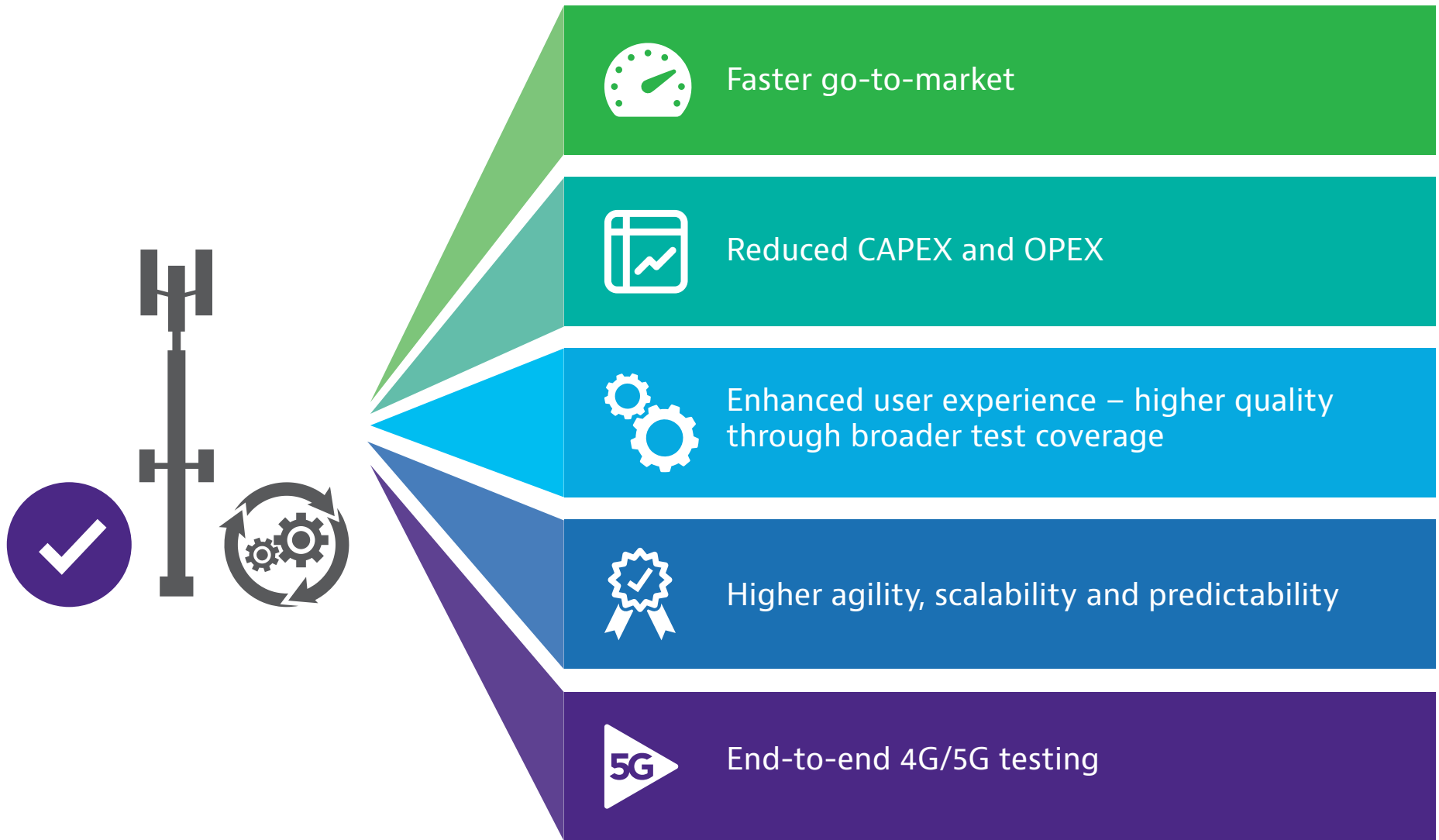
TaaS allows you to de-risk and accelerate project deliverables, enabling you to bring products to market on time and on budget. It provides the access to the industry's leading edge test tools and world-class support organization. This is supplied with a flexible range of solutions to address different needs and budgets and flexible test scenarios to assess coverage and optimize.

Move from project kick-off to real-world testing in days, not weeks.

All services are flexible and upgradeable to allow small scale start and then grow over time, delivered with automation scripting capabilities to boost engineering productivity.

Our "Pay as you grow" offering is enabled by scalable software options allowing you to match investment phasing to project phasing and the ability to optimize the test equipment configuration to align to your test strategy. Avoid the costs and time of competence build up for 5G testing by using off-the-shelf experienced experts and tool sets.

VIAVI TaaS Delivers



1046.900.1221

A photograph of two men in a server room. They are both wearing white shirts and dark ties. They are looking intently at a laptop screen. The background shows server racks with yellow cables. A large, semi-transparent blue and purple graphic overlay is on the left side of the image, featuring a network diagram pattern. The text 'Bring Services to Market Faster' is overlaid on this graphic.

Bring Services to Market Faster

Delivering Commercially Robust Solutions

TaaS delivers functional, system integration and capacity testing of gNBs, Core Networks, Core Network Components and O-RAN subsystems. It enables you to focus on critical tests that are important to bringing new products and services to market quickly such as data throughput, mixed traffic scenarios with multiple UEs, handovers and mobility scenarios. These are all delivered with performance and commercial robustness with a leading 3GPP feature roadmap. By using VIAVI industry-standard test tools, this can increase the trust of your partners and with both existing and potential customers.

Consultation

Based on its broad expertise, VIAVI can advise test equipment and methodology to meet your needs now and in the future, tailored to your budget.

Planning

After initial consultation, where your scope and priorities have been identified, VIAVI can develop a comprehensive test plan aligned to your go-to-market timelines.

Implementation

Once the planning phase has been signed off, VIAVI can design and implement end-to-end system and subsystem testing, using the VIAVI test automation framework, test cases/scripts and testing reports aligned to your 5G network and network element requirements.

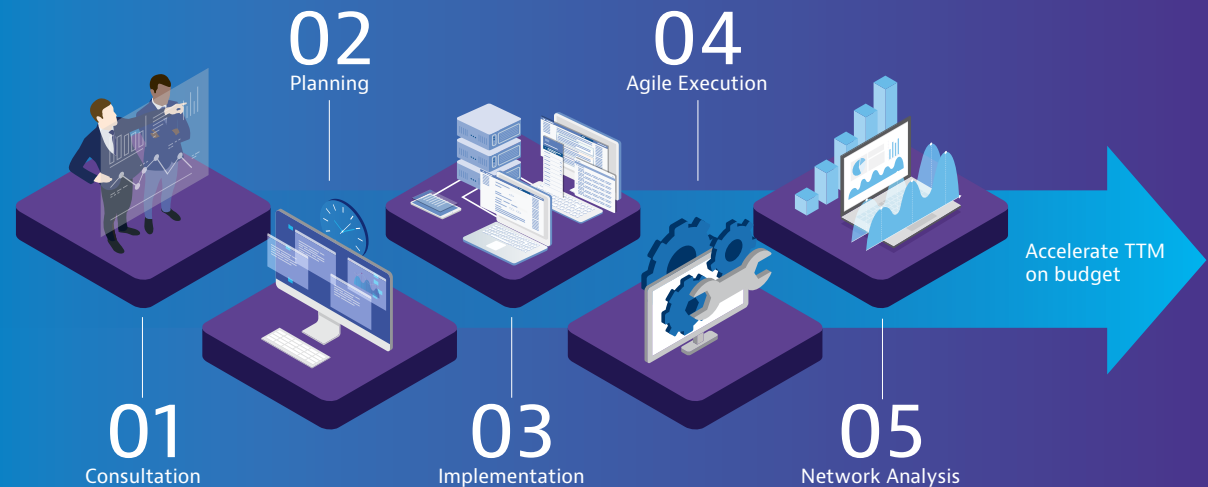
Agile Execution

By using VIAVI experts and toolsets to enable agile execution and troubleshooting of test cases means you can avoid the costs and time of competence build-up for 5G testing.

Network Analysis

VIAVI has a best-in-class testing analysis and strategy, based on our extensive fault finding and root cause analysis experience with leading 5G customers globally. VIAVI delivers the systematic detection of system vulnerabilities with standard KPIs and log analysis.

By using VIAVI industry-standard test tools, you can increase the trust of your partners and both existing and potential customers.



De-risking Product Delivery

The background is a dark blue and purple gradient. It features several glowing, semi-transparent gears of various sizes. There are also faint, glowing lines and patterns that resemble data streams or network connections. The overall aesthetic is futuristic and technological.

Test Creation and Automation

VIAVI enables you to accelerate ramp-up and boost engineering productivity. Developing and building automation frameworks and test cases from scratch takes time and expertise. By using VIAVI to do the initial work for you will avoid diverting your engineers time from other crucial tasks. VIAVI works with an easy-to-use, adaptable open-source automation tool, therefore producing clear KPIs and log analysis.

Service Subscription

VIAVI products and services are flexible, enabled by scalable software allowing you to pay as you grow. As your business and capabilities advance, we offer a test strategy to evolve with you. Start small and grow over time; reducing your initial investment commitment, yet enabling you to access leading-edge tools immediately.



Test Case Creation
and Automation



Service
Subscription



On-shore
and Off-shore SME



Equipment
Rental

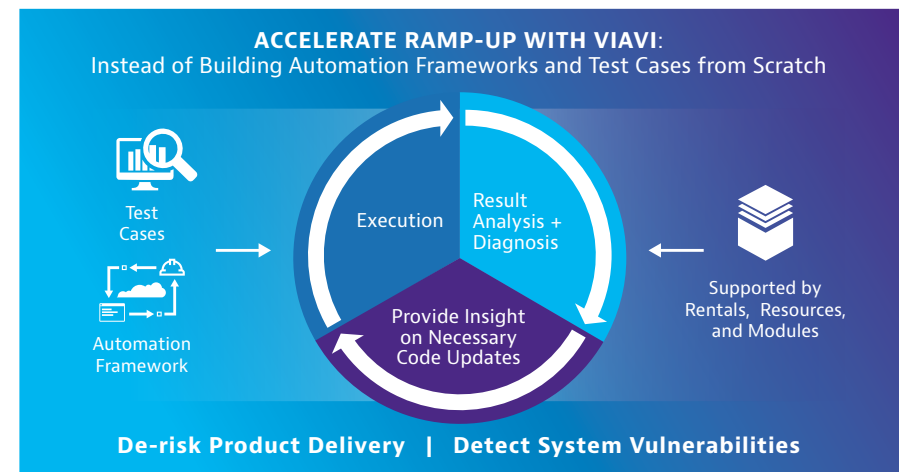
On-shore and Off-shore Subject Matter Experts

By subscribing to the VIAVI TaaS, you are receiving access to readily available on-shore and off-shore subject matter experts. Saving you 2-3 months of training of your own staff.

Equipment Rental

Invest in test expertise rather than physical equipment to maximize your return on investment.

The flexibility of equipment rental means you do not have to think about software updates, calibration, or in the unlikely case that a product needs fixing, all taken out of your hands. The rental allows you to truly receive the access you need to the equipment for your current test requirements. This is a no-risk option for test investment with leading 5G customers globally. VIAVI delivers the systematic detection of system vulnerabilities with standard KPIs and log analysis.



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Comprehensive Test Capability Coverage



Comprehensive Testing of gNBs, Core Networks, Core Network Components and Open RAN Subsystems

VIAMI delivers a vendor agnostic approach to test, providing test expertise based on technology and industry standards. Our large product portfolio enables us to truly deliver the test strategy tailored to your current and growing needs of your company, allowing you to bring products to market faster and on budget.

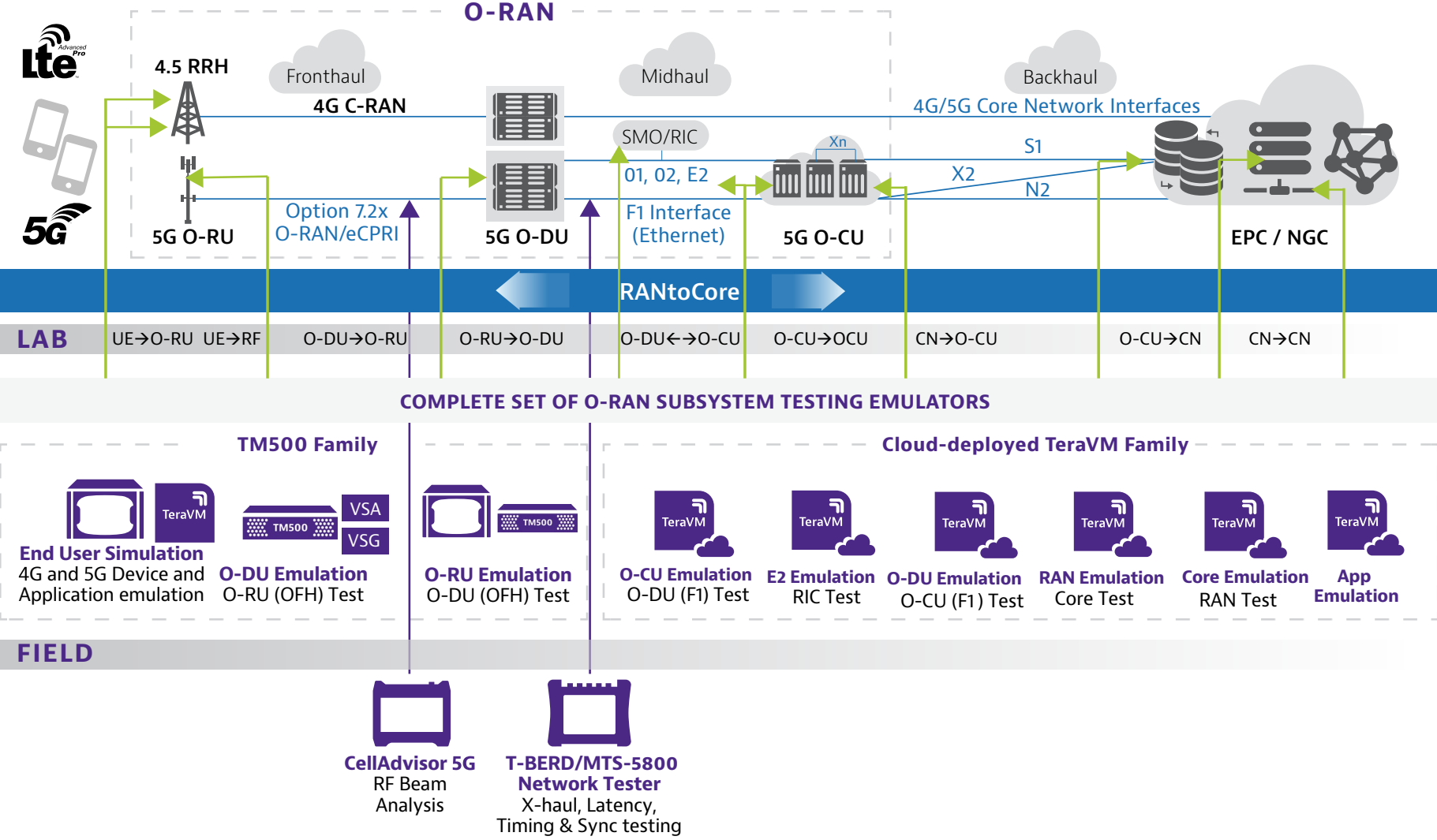
Test application scenarios include:

- 5G/4G RAN and Core Test
- O-RAN Component Test
- 5G Core Network Component Test
- Transport Test
- Conformance Test
- Security Test
- API, Microservices Testing
- KPI Verification

These test application scenarios are delivered with our industry leading lab to field test tools, working across the entire development lifecycle. From a range of defacto standard UE emulators, O-RAN specific component test tools, 5G core network and component emulators, and transport test tools that deliver test capability from early functional testing to regression test. VIAMI products are aligned to 3GPP and O-RAN Alliance specifications.

Our products are designed to deliver real-world test environments by enabling end-to-end testing of networks. We deliver high data throughput including different traffic mixes per user, mobility and handover scenarios to thoroughly test the performance of network infrastructure. It is essential that RAN components conform to specifications but it is equally important for those components to handle traffic efficiently. VIAMI has the test tools for scenario testing, modelling and optimization.

FUNCTIONAL / PERFORMANCE / CAPACITY TESTING / TROUBLESHOOTING & ASSURANCE





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