



i14y Lab: The Story So Far

Openness

Cooperation

Innovation

Supported by:



Federal Ministry
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on the basis of a decision
by the German Bundestag

European OTIC in Berlin · i14ylab.com

 **i14y LAB**

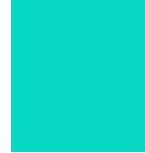
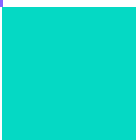


Table of Contents

03	Introduction
05	Welcome to the i14y Lab
08	The people
13	Lab as a service
19	Interoperability
26	Testing
33	Network Digital Twins: A safe place to fail
35	The future
38	About the i14y Lab
43	One more thing: Looking back ahead



Introduction

What started as the project called “Setup and Operation of an Open Lab for Open RAN” quickly became the i14y Lab. We set out to support the move to open standards and interfaces for more diversity and innovation by providing an open, shared lab. It would enable economies of scale in the complex testing envisioned that would be difficult to achieve for individual organizations and that could provide validation and ultimately certification, accelerating the time to market for Open RAN components.

The name we chose—**i14y Lab**—reflected that, conflating the word „interoperability“ to “i” and “y” and the 14 characters between.

The future is open



*Andreas Gladisch,
i14y Lab Consortium Lead*

The i14y Lab shows: providing an open, shared, professionally operated test and innovation environment creates value for a broad range of users, including operators, vendors, and R&D, enabling what is beyond individual organizations.

As an Open Lab for Open RAN, we set out to enable more vendor diversity and faster innovation through validation and certification. We assumed most testing for operators could be standardized but found operator-specific integration efforts too demanding and operators unhappy to effect the change in their operating model Open RAN demanded.

But diversity and innovation appeared from a different side, showing that openness is a catalyst for experimentation, collaboration, and technology development within the ecosystem. It confirms the broader value proposition of Open RAN, enabling innovation for example in the Open RAN intelligent control functions of the RIC xApps and rApps.

So, the story continues, with more testing, collaboration, and innovation.



*Thomas Jarzombek,
Parliamentary State Secretary to the
Federal Minister for Digital Transformation
and Government Modernization*

Over the past few years, the i14y Lab has done invaluable work to promote open, secure, and high-performance mobile networks in Germany and Europe, and has become an indispensable part of the global Open RAN ecosystem. With the help of funding, they were able to create a space where network operators, manufacturers, research institutions, startups, and small and medium-sized enterprises jointly develop solutions for testing and certifying network components.

The project has shown that interoperability and open interfaces are more than just a technical requirement. They are essential for competition, vendor diversity, and greater technological sovereignty. Through cross-vendor testing, validation, and hands-on collaboration, the i14y Lab has laid an important foundation for bringing Open RAN components to market more quickly.

I would like to extend my special thanks to all our partners, whose expertise and tremendous dedication contributed to the success of this project. The key now is to consistently build on the insights we've gained and make them even more useful in practice. The goal must be for the work of the i14y Lab to generate sustainable value and a viable business model.

Welcome to the i14y Lab

Our place

Since the beginning we had our place at consortium member Deutsche Telekom's Winterfeldstraße complex in Berlin. In 1929, it was Europe's largest telephone exchange. Today it is a hub for telco innovation. And the i14y Lab is right in the middle of that as the Open Lab for Open RAN.



Fernmeldeamt



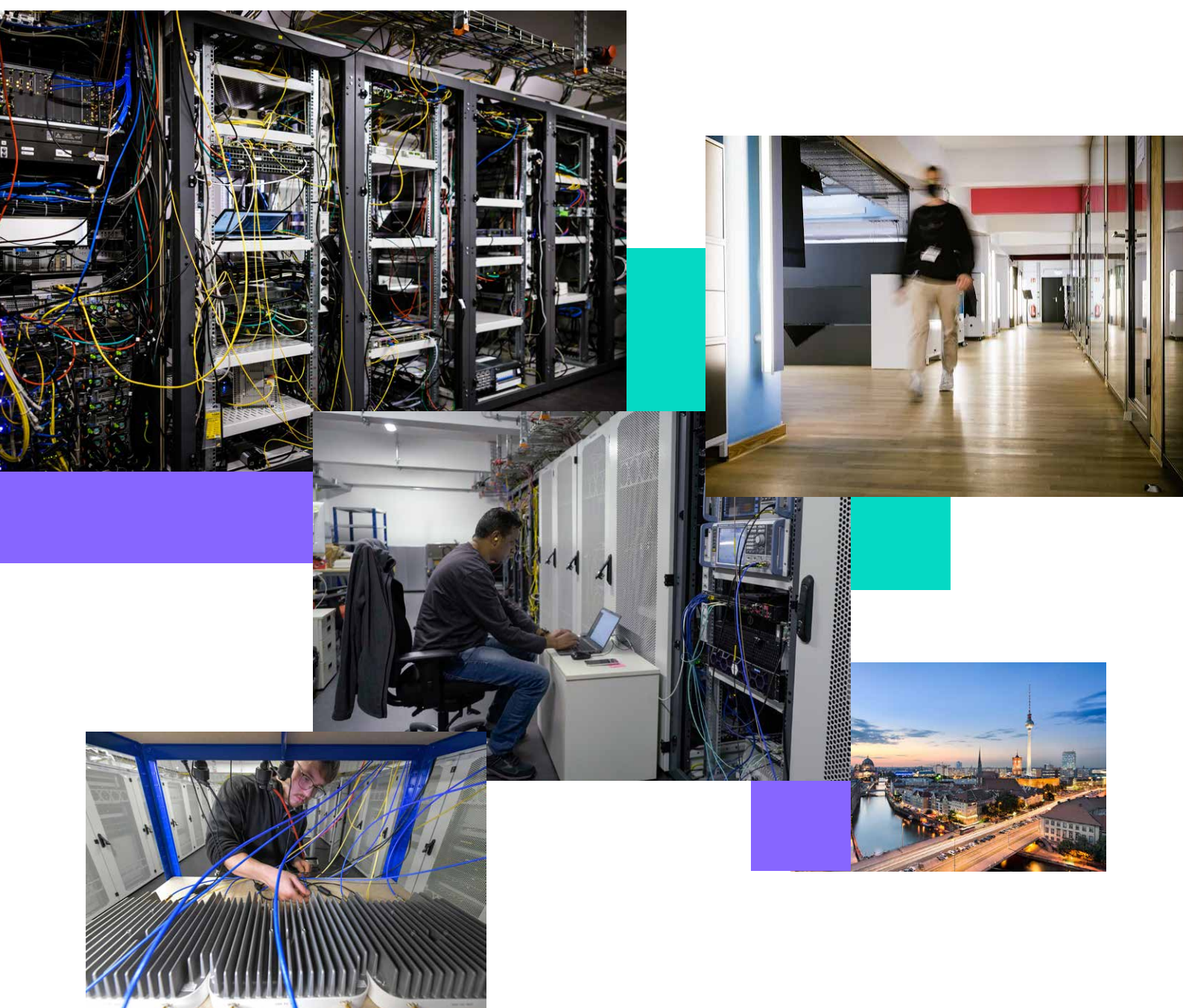
Today



Outdoorscreen (court)

Servers, cables, rooms, and tables

To support our vision of an Open Lab for Open RAN and open collaboration, we built a lab infrastructure that could support our LaaS philosophy and the work space that would support cooperation across players.



The people

Openness and innovation only work when you connect the right people. The i14y Lab is run by a consortium that brought knowledge and expertise from every corner of the telco ecosystem: the perfect mix to succeed and innovate in test and certification.



Olaf Boness
Senior Architect
Deutsche Telekom

“The idea of an Open Lab finds its realization not only in open software and APIs but also in your mindset and your way of working.”



Sanna Brandt
Market Segment Manager
Rohde & Schwarz

“Proud to support i14y Lab through O-RAN PlugFests, ecosystem collaboration, and advancing open network innovation.”



Andreas Gladisch
Consortium Lead
Deutsche Telekom

“The i14y Lab demonstrates that openness enables research and innovation. Our testing shows: the journey to industry-class solutions is demanding, yet achievable. And we help guide the education of our engineers. I am proud to be part of that.”



Catarina Cruz
Head of Datacenter
Nokia



Katja Henke
Senior Project Manager
Freelance

“We showed that an open lab to connect the ecosystem works best through a globally visible and credible brand, strong communication, and connecting people!”



Dirk Hetzer
Senior Project Director
EANTC

“I think the i14y Lab project was a perfect approach to develop a strong ecosystem for disaggregated networks in O-RAN environments. I’m proud as EANTC to be part of the team.”



Frank Hillebrand
Senior Expert Radio
Access Network
Vodafone

“As a consortium partner, I was able to contribute our experience from Open RAN projects to support the development and activities of the i14y Lab.”



Gerald Huber
Senior Innovation Manager
Telefónica Germany

“The i14y Lab is a place to create innovation: to take those steps that have not yet been taken.”



Jan Klare
Chief Operating Officer
OSISM

“The i14y Lab allowed us to bring open source to the telecom world, from building the LaaS with things like Kubernetes as a Service to finding solutions for monitoring based on open source.”



Helmut Hinterberger
Product Manager
Nokia

“The collaborative spirit and openness among all partners have been truly a valuable experience.”



Bettina Lehmann
Senior Innovation Project
Manager
Deutsche Telekom

“Innovation happens when technology and collaboration go hand in hand. The i14y Lab is a strong example of what a shared vision and close partnership can achieve.”



Alfons Mittermaier
Software defined networks
Highstreet Technologies

“We are happy to contribute our SMO ht.Connect, because vendor-neutral, multi-domain SMO is indispensable for Open RAN.”



Ajesh Pulyaar Keerthi
System Engineer
Deutsche Telekom

“The i14y Lab enables hands-on interoperability across Open RAN, fronthaul, RAN-Core integration, and open-source network solutions.”



Alexander Pabst
Vice president 6G
Technology
Rohde & Schwarz

“Rohde & Schwarz is proud to support the i14y Lab in ensuring Germany’s and Europe’s competitiveness in the future of mobile networks.”



Carsten Rossenhövel
Managing Director
EANTC

“The i14y Lab brought us together to build deep O-RAN testing expertise and a world-class, independent testing authority in a short time. We have proudly contributed our test methodology, automation solutions, and expertise to this milestone initiative.”



Mohammadreza Razmi
O-RAN Engineer
Deutsche Telekom

“At the i14y Lab, we are integrating O-RAN based setups, testing & validating them, also using AI tools to accelerate integration/troubleshooting, and exploring new areas.”



Michael Schlosser
Engineer
BISDN

“We are proud the i14y Lab core switching infrastructure is based on switches with the BISDN Linux open-source operating system and that the concept of a lab as a service infrastructure, developed together with Deutsche Telekom, was successfully implemented in the lab.”



Slawomir Stanczak
Head of Division Commu-
nications and Networks
Fraunhofer HHI

“Network digital twins make complex networks testable, reproducible, and their behavior predictable before real deployment.”



Christian Werling
Security Researcher
TU Berlin



Monika Tarwala
Wireless Network Engineer
Capgemini Engineering

“Transforming interoperability from a challenge into a catalyst for innovation, turning ideas into real-world impact across the Open RAN ecosystem.”



Pankaj Vats
Senior Professional Services
Consultant
Capgemini Engineering

“The i14y Lab turns interoperability challenges into opportunities for collaboration and innovation.”



Ehsan Tohidi
Head of Sustainable and
Modular Networks Group
Fraunhofer HHI

“Interoperability is easy to specify, hard to prove. The i14y Lab proves it in hardware, and its twin at scale.”



Hamad Zafar
Senior Project Director
Fraunhofer HHI

“At the Lab, I developed a digital twin that let me build closed-loop xApps optimizing large-scale O-RAN networks.”

Lab as a Service

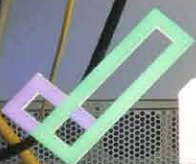
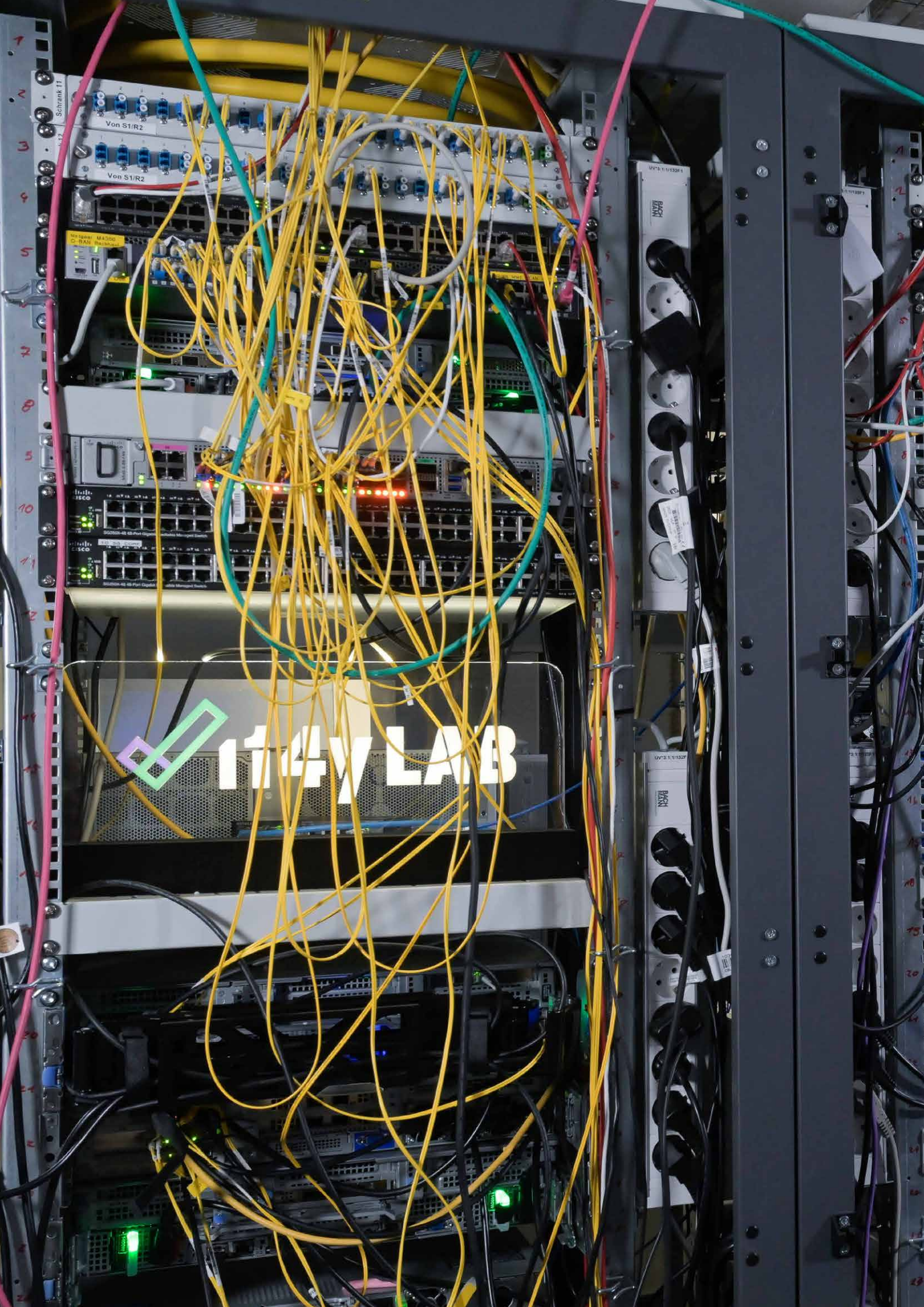
The idea behind how we built the i14y Lab

An open lab needs to be modular and scalable to make it future-proof. And it needs to give multiple test partners what they need when they need it while staying resource efficient.

That is why we built the i14y Lab as a Lab as a Service (LaaS). This architecture provides on-demand access to pre-configured, scalable testing environments based on three building blocks: lab automation and configuration as code, processes and lifecycle management, and finally, test automation.

“Lab as a Service (LaaS) provides organizations with on-demand access to pre-configured, scalable testing environments, eliminating the need to maintain specialized labs.”

Michael Schlosser



174v LAB



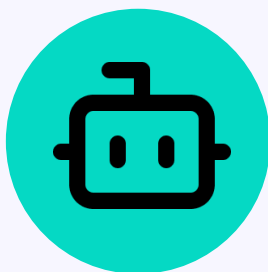
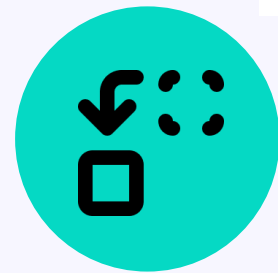
Configuration as Code & Lab Automation

Configuration changes are not made ad hoc, but are written as code, then reviewed, tested, and then deployed.

Move without breaking things—and if you break, you can rebuild/roll back quickly.

Processes and Lifecycle Management

Self-service that only builds and maintains what is needed—and removes it when the task is done
Keeping it lean, clean, and tidy.



Test Automation

Using software for steering the full lab environment: automating testing and reporting as much as possible. Where networks become code, cycles speed up, and testing has to be automated.

Automation

Automate!

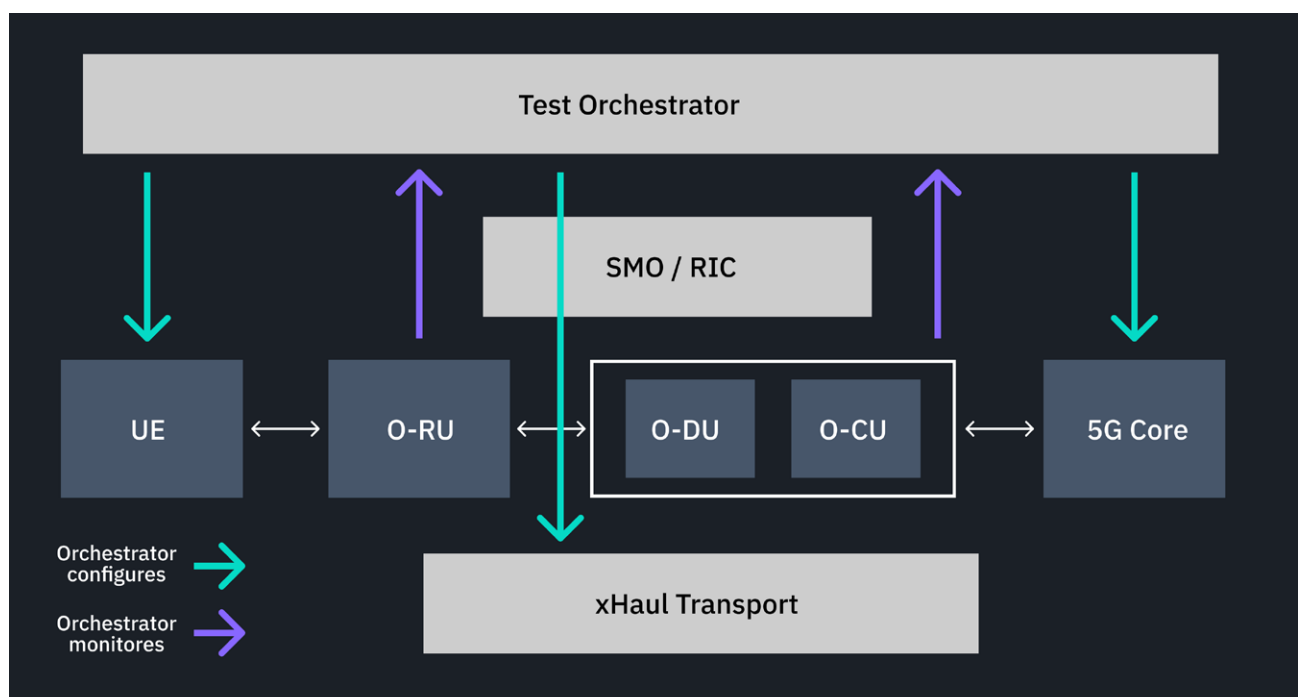
What is standardized should be automated. That is why we had EANTC develop the Test Orchestrator at the i14y Lab, where we are now using it to automate testing. True to our core values, it is based on an open-source architecture and supports major test- and lab tools. This way we can run automated regression tests. Because with software, as in life, change is the only constant.



“Software changes, but testing is constant. After all, you don’t rewrite the symphony for every performance? So we built the Test Orchestrator to settle the score for validation and certification.”

Carsten Rossenhövel, EANTC CEO

Simplified Diagram of the orchestrator



But we had to build it first

Defining that the i14y Lab infrastructure operates under LaaS principles, focusing on automation, standardization, and reproducibility, is all very well.

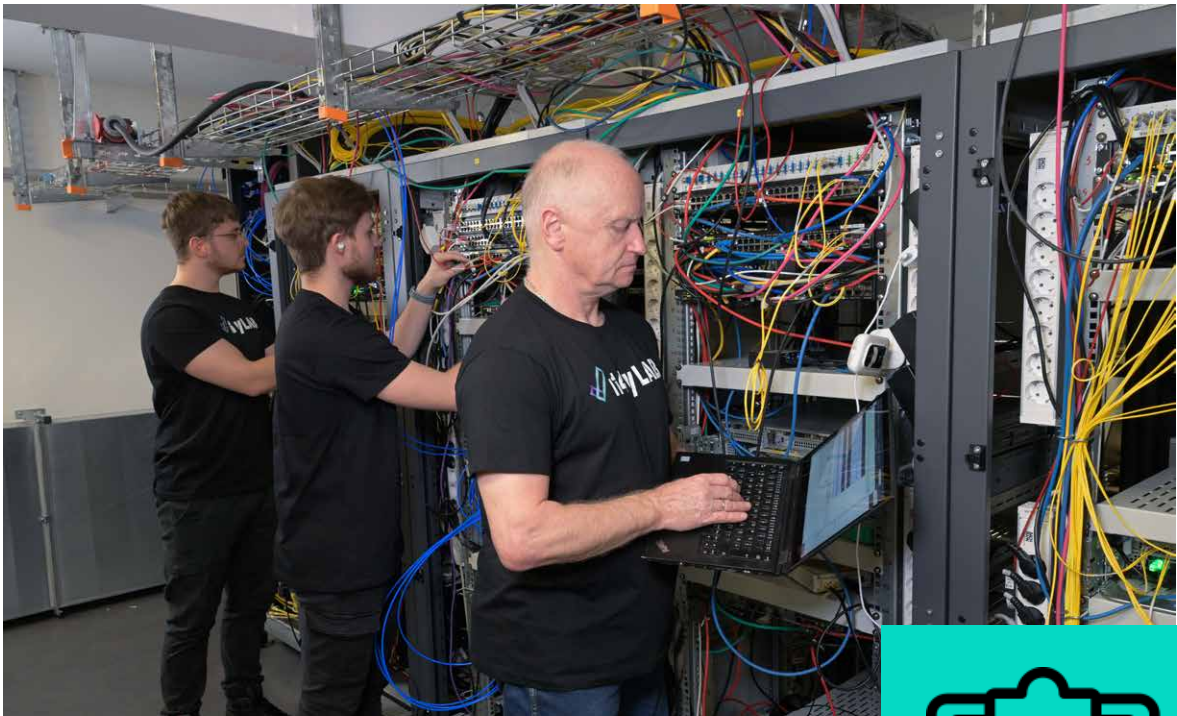
But to get a lab out of these principles took a lot of work. All components, platform configurations, and services had to be defined as code and maintained in version-controlled repositories, ensuring consistent, traceable deployment, modification, and restoration.

Processes made sure that operations follow the configuration-driven approach. Health monitoring and incident/capacity management guarantee stable, reliable, and observable system operation. Open-source tools for booking, communication, information sharing, and other tasks enable easy and efficient way of partner interoperation and collaboration. And our open, cooperative concept also supports partner interoperation and controlled information sharing with third parties.

Ultimately, it's the people you saw on the previous pages—and others not included—that made this happen. With this, they created the foundation for the results and successes to be reported in the coming pages.

Open source and the importance of

So, it is not only Open RAN that runs on open source, but also an open lab for Open RAN. 6G and AI in RAN won't work very well without open APIs and a collaborative ecosystem. And likewise, testing these solutions like Open RAN requires fair evaluation, community collaboration, and validation of interoperability across vendors. This approach fosters standardized test methodologies, accelerates industry adoption, and ensures the lab's work remains valid and accessible.



Interoperability

One of the tenets of Open RAN is the interoperability of the network components, making them exchangeable. This allows multiple providers to cooperate, operators to choose and replace vendors, when better solutions become available, and thus generally bolster resilience and innovation. Our experience has shown that this kind of interoperability is as much about the interoperability of devices as it is about the interoperability of people. This is why we put much effort into understanding the ecosystem we are part of and into connecting this ecosystem to create successful collaboration.

Ecosystem

In our work we have found that the ecosystem has these members, each playing a vital role:

Operators

They, of course, want to benefit from the perks of openness such as innovation, optimization, and cost efficiencies.

Mature Vendors

Vendors with a proven track record of providing mobile network solutions to operators worldwide will look at what Open RAN has to offer.

System Integrators

Integrating components/systems from different vendors, they play a mediating role and help with the complexities of integrating disaggregated systems.

Open Industry Organizations

Global, member-driven, and largely independent organizations such as the O-RAN Alliance and TIP are essential for the collaboration on requirements, standards, and bringing the ecosystem together.

Academia/Research

Academic institutions are given new opportunities for research and development through open interfaces and an open architecture.

Independent Test Labs

...such as the i14y Lab, are providing the essential open and collaborative test environments and making testing repeatable and reproducible.

Public Sector

Public sector players such as national ministries or European bodies have an interest because disaggregated, open systems can play a vital role for digital sovereignty.

Startups

Open interfaces and disaggregation offers an unprecedented opportunity for innovation and new companies to enter the telco market seeking, developing, and validating a scalable business model.

Test & Measurement Vendors

Companies specializing in providing equipment, tools, and solutions for testing and validation act as an insurance policy for other players in the ecosystem.

Going through the list, it becomes obvious that one depends on the other and that there is a web of interactions between them. It also becomes obvious, that open labs such as the i14y Lab are a sort of fulcrum in this system, making them essential for the interaction. That is why our work was focused on creating that connection through a number of tools, as you can see on the next page.



O-RAN Global Plugfests

O-RAN Global PlugFests are periodic events organized by the O-RAN ALLIANCE to enable efficient progress of the O-RAN ecosystem through well-organized testing and integration.

Between 2021 and 2026, the i14y Lab hosted nine PlugFests with more than 70 scenarios in various test areas, such as E2E, O-RU Conformance, RIC/xApp/rApp, and others. As you can see below, topics and intensity have shifted throughout the years, reflecting the changing focus of the ecosystem towards more mature End-to-End (E2E) solutions and smart software for network optimization through the RAN Intelligent Controller (RIC) layer.

Plugfest statistics and numbers as is

Metric	2020	2021	2022	2023	2024	2025	2026
E2E	0	3	2	3	6	4	1
O-RU Conformance	10	4	3	3	2	1	0
RIC	0	2	6	13	2	1	1
Others	1	3	3	1	0	0	0



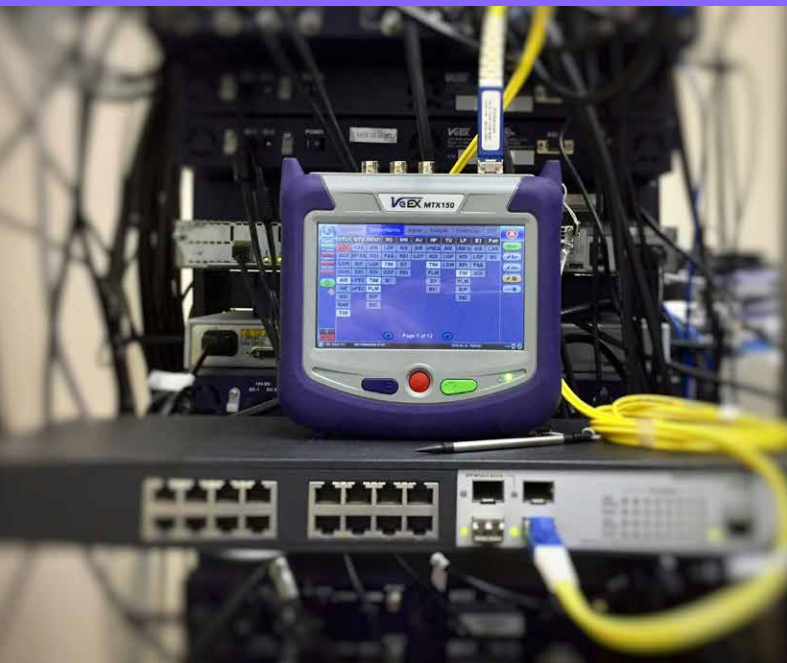
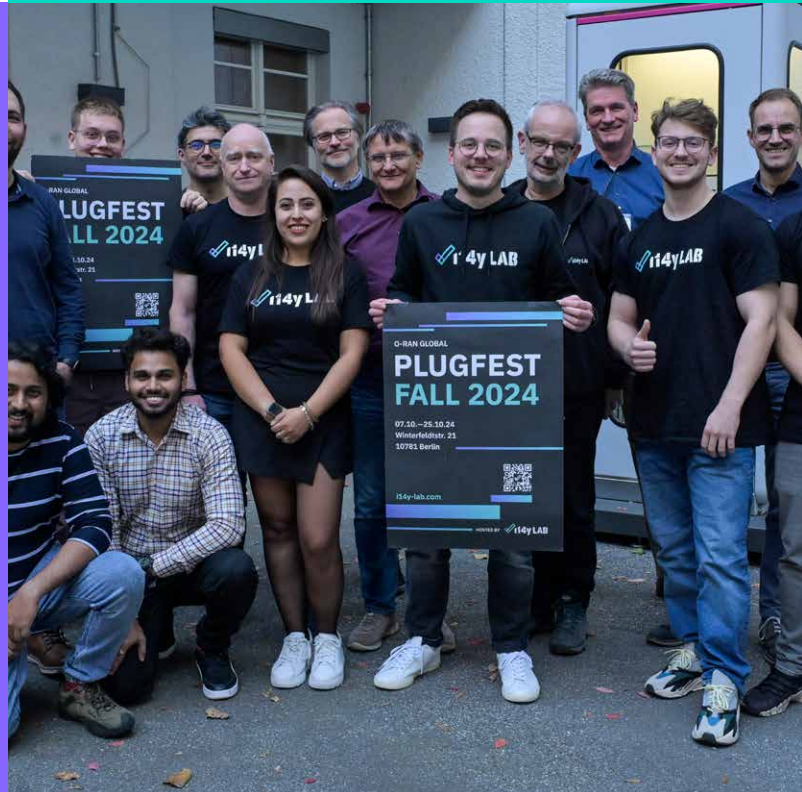
Autonomous Logistics robot at Plugfest

9x

PlugFests

Testing energy saving apps since 2023

E2E, O-RU Conformance, RIC/xApp/rApp and more



over
70
Scenarios tested

The i14y Lab Summit

Since the first one in 2022, the annual i14y Lab Summit has become an important event on the calendar of the Open RAN ecosystem and especially the international open lab community.

We created programs to spark conversations. There were talks, panels, and workshops touching on all Open RAN subjects, from the latest in technology, the state of the Open RAN market, discussions about the way forward, and the importance of open source and openness. And we invited significant voices from all areas—technology, business, and policy—to share their thoughts.

And we gave our correspondingly diverse audience space and time to discuss the ideas during the event while catching up with their peers.





Testing

While PlugFests are for trying, we also wanted to establish and run an open, end-to-end environment that could test complex software systems of a multi-vendor nature. That should give operators a reliable indicator of the fitness of a solution and help both established and emerging vendors to create solutions demonstrably fit for market.

The underlying assumption was that approximately 70% of testing requirements would be common across operators. Consequently, with the i14y Lab, we proposed a shared testing and certification approach.

But while the market evolved towards pre-integrated, carrier-grade Open RAN solutions as complete packages, introducing a somewhat closed version of Open RAN, the value of a shared infrastructure and collaboration, building expertise and strong ecosystem relationships, remains high.

And with 6G, AI, and a disaggregated, softwarized mobile network architecture, testing collaboratively in an open lab will be of great importance.

Certification

To be able to issue certificates and badges, we became both an O-RAN Alliance Open Text and Integration Center (OTIC) and an authorized TIP Lab.

In 2024 we became the first European OTIC to issue O-RAN certificates and badges. And until now we have in total issued three O-RAN End-to-End (E2E) Badges and one O-RAN Certificate of Conformance. We also did the testing leading to the TIP Silver badge being awarded to AirHop Communications for their rApp.

Certification Celebration #1

In 2024 we issued an O-RAN Certificate of Conformance for the VVDN VLRU-Gen3-3842-AE-AI and an O-RAN End-to-End (E2E) Badge to Capgemini Engineering O-DU/O-CU—becoming the first European lab to issue badges and certificates!



Certification Celebration #2

In 2025 we celebrated issuing an O-RAN End-to-End (E2E) Badges to Radisys' 5G SA RAN Software and to the srsRAN Enterprise 5G CU/DU. The badge for SRS also was the first O-RAN Badge in the world to be issued after automated testing.



Reproducible and Repeatable Testing

For testing and certification to work—for an open ecosystem or anywhere—repeatable and reproducible testing is a must! Would you buy a coffee machine that only works in one lab but not in another? Who knows what it would do to your coffee at home?

To make the results of Open RAN testing repeatable (the measurement by same lab of same item at different times) and reproducible (measurement by different lab of same item at a different time) we participated in an international test campaign together with Viavi's VALOR Lab (USA), employing identical setups, to see how the results would compare.

Ian Wong (VIAVI/VALOR), Andreas Gladisch (i14y Lab/Deutsche Telekom), and Carsten Rossenhövel (i14y Lab/EANTC) presented the results of the collaboration in an International Open RAN Symposium (IORS) virtual session in May 2025, showing how and when to use peer review to ensure high-quality test results and build trust in the Open RAN testing certification and badging process.

The banner features a dark blue background with a network diagram of icons (a robot head, a server rack, a signal tower, a smartphone, and a tablet) connected by lines. The VALOR logo is in the top right, and the i14y LAB logo is in the top right corner. The event title is in large white and teal text. The date and time are in teal. Three speakers are listed at the bottom with their photos and affiliations.

MAY 19TH, 16:00 CEST / 10 AM EDT

Experiences in lab peer review
and procedure harmonization for
**inter-lab and tool-independent
reproducibility in O-RAN testing**

 Andreas Gladisch
Deutsche Telekom &
i14y Lab Consortium
Lead

 Carsten Rossenhövel
EANTC

 Ian C. Wong
VIAVI Solutions

As a result recommended to

- Establish repeatable and consistent testing methodologies through standardized, reproducible test procedures.
- Benchmark performance across environments by comparing results from independent lab setups.
- Create a knowledge-sharing framework to share insights and benefit stakeholders.
- Support global standardization with O-RAN Alliance, TIP, and 3GPP to drive repeatable and consistent testing.



**VIAVI is an associated partner
of the i14y Lab**

The provider of test and measurement solutions launched VALOR in 2024 with support from the U.S. NTIA, providing multi-vendor Open RAN interoperability, conformance, and performance testing.

Energy Efficiency Testing

Energy efficiency (EE) is one of the key challenges facing wireless communications. And many look towards Open RAN to find new, smart ways to reduce energy consumption. But how do you measure energy efficiency and demonstrate the efficacy of an EE tool in a consistent and comparable way?

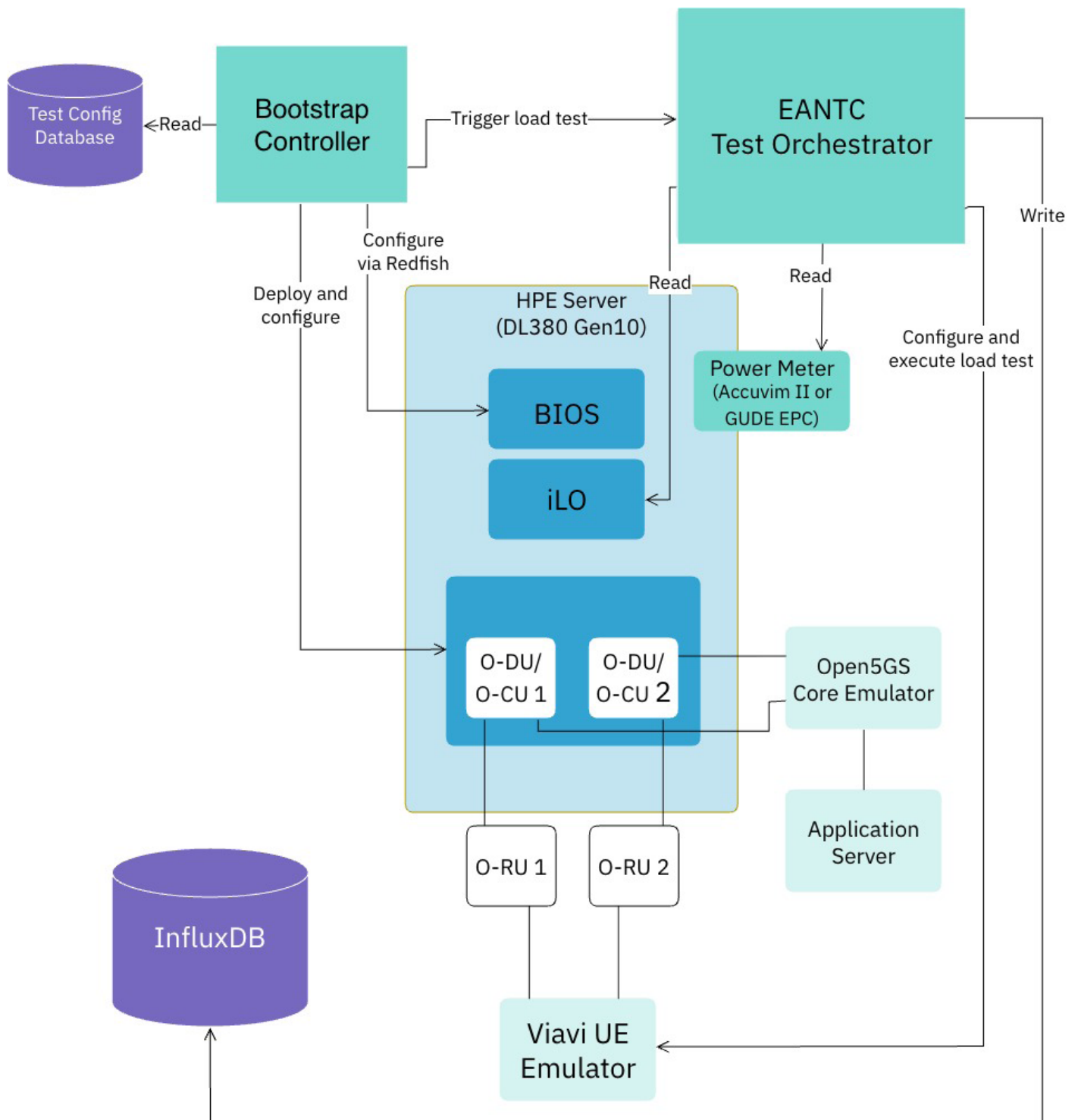
An answer to that question now is operational in the i14y Lab as an energy consumption measurement setup, implemented in a controlled multi-vendor disaggregated/Open RAN testbed. It is collecting data to be analyzed to identify optimization opportunities, including RIC, and recommendations for fine-tuning energy-aware configurations.

It is the result of a collaboration with our associated partner Rimedo Labs. In 2025 we published a whitepaper describing the need for and basic parameters for an i14y Lab Energy Efficiency Testing Framework. In a second whitepaper published in April 2026 in collaboration with Rimedo and Dell's Open Telecom Ecosystem Lab (OTEL) and Deutsche Telekom, we described that framework in detail, leading to the energy consumption measurement setup we now have at the i14y Lab.



Rimedo Labs is an associated partner of the i14y Lab

Rimedo Labs specializes in providing high quality consulting, implementation, and R&D services in the field of modern wireless systems.



Security Testing

Open RAN needs to work reliably, but also securely. So of course, the mandatory security testing is part of our E2E test setup. But we also helped with research to advance the O-RAN requirements and making it more secure.

Open-source software is a tenet of Open RAN but comes with its own risks. As most projects will include a complex list of dependencies, an automatic auditing process is necessary to provide a holistic overview of the software components that are used.

So, in 2024 we had a study done at the i14y Lab by Tsvetan Kolev from TU Berlin, inspired and supervised by Dr. Kashyap Thimmaraju, postdoctoral researcher at Prof. Dr. Jean-Pierre Seifert's chair for Security in Telecommunication Software. It used Composition Analysis (SCA) to address security threats introduced to open RAN with open-source software components, employing a continuous scanning method using GitHub Actions, designed to help developers identify and manage risks in the code of the O-RAN software.

Dr. Kashyap Thimmaraju and his colleague Christian Werling from the Security in Telecommunication chair at TU Berlin also conducted research in an i14y Lab supported project to evaluate and enhance the security aspects of open RAN. Exposing vulnerabilities in the Near-Real-Time RAN Intelligent Controller (nRT-RIC) components is an important part of this research. Dr. Thimmaraju used a two-pronged approach, involving the static analysis and run-time testing of open-source nRT-RIC implementations (OSC and micro ONOS). The latter led to the development of the O-RAN A1 Interface Testing Tool (OAITT). OAITT is the first open-source tool available to the O-RAN community for security and performance testing of the A1 interface.



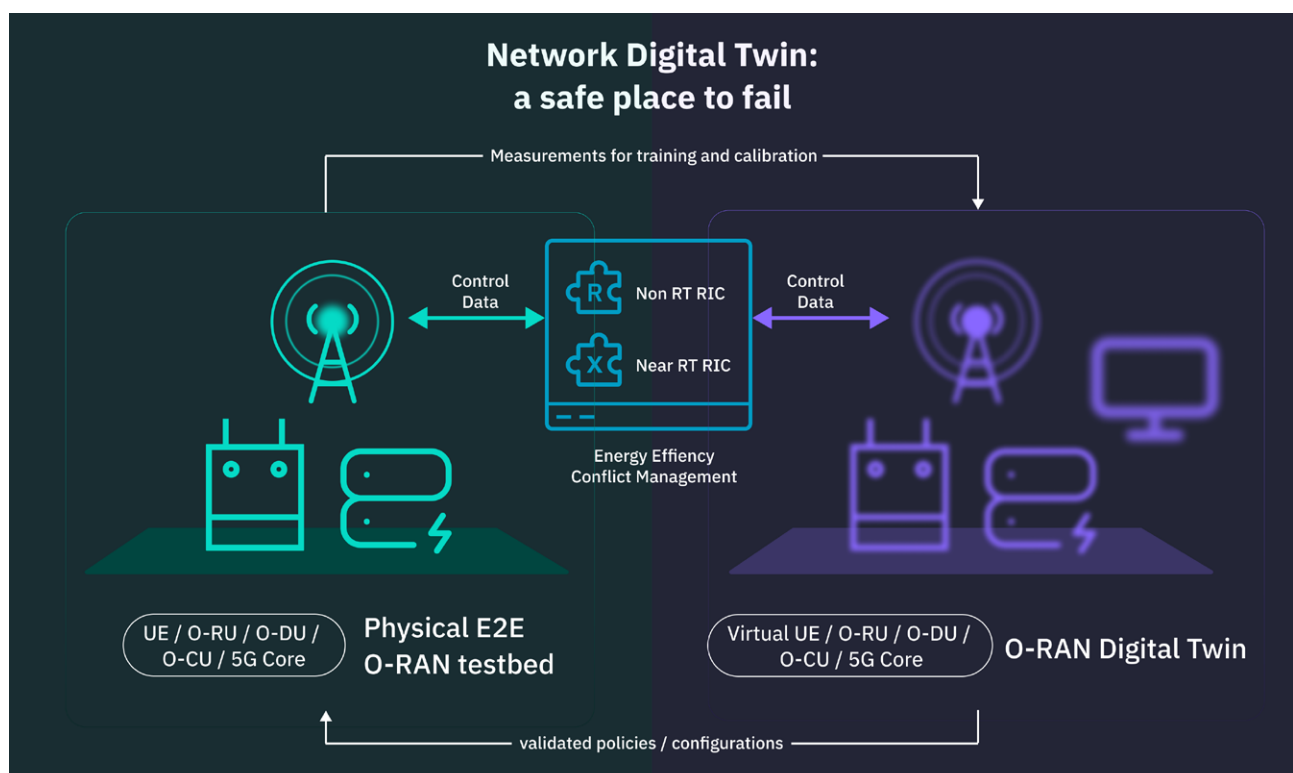
Dr. Kashyap Thimmaraju

Network Digital Twins: A safe place to fail.

Effective testing of intelligent network functions like xApps and rApps on RIC requires access to test environments that can model the complex behavior of RAN. Here, digital network twins play a key enabling role, as they allow functionality tests to be conducted under realistic yet controlled conditions. Combining physical and virtual environments makes it possible to validate system behavior, explore edge cases, and ensure reproducibility of results.

This is why we have built such a digital twin. This first twin is focused on testing energy efficiency solutions. We have created and trained a model that can simulate the behavior of the End-to-End setup for the x-App or r-App under test for different load conditions based on the data we collected to train it.

This enables data-driven testing for this use case, supporting research and development.





“The network digital twin takes the risk, so the real network doesn’t have to. It also lets us test more scenarios, and more competing functions, than any testbed can host.”

Ehsan Tohidi, Head of Sustainable and Modular Networks Group at Fraunhofer HHI



“There’s more to it than meets the AI: novel dynamics, novel complexity generation, non-deterministic behavior—there’s a lot we have to understand, and the Network Digital Twin can help us with that.”

Heiko Lehmann, Principal Researcher, T-Labs

The future

It has been said that the best way to predict the future is to invent it. This adage has been attributed to physicists and management gurus alike, but it could very well be our motto.

The openness introduced by Open RAN enabled substantial innovation, accelerated research activities, and fostered the development of new Open RAN concepts and solutions. And we believe in our mission to accelerate innovation on its path towards tangible products and solutions. So, let's take a look at a few aspects that we believe will shape the future.

Openness, AI, and 6G are made for each other.

AI and 6G are not automatically bound to fail without Open RAN, but they are unlikely to reach their full potential in a closed, vertically integrated RAN.

The reason is that both depend on programmability, data access, distributed compute, and rapid multi-vendor innovation—capabilities that traditional proprietary RAN architectures tend to restrict.

Open RAN provides an important foundation—but unless interoperability, security, performance, and AI lifecycle management are solved, “open” alone will not cut it.

The AI Paradox: We need AI to handle AI in RAN.

AI in RAN can be very helpful and promises to create new and innovative features. But this also increases the number of moving parts, decisions, and feedback loops: the network becomes too complex to manage with static rules alone.

So, we need AI again to monitor, coordinate, and correct the behavior that AI-driven automation introduces.

But how will we test this?

Testing with AI and testing for AI

The softwareization of mobile access networks started a trend that only gets accelerated with AI: Innovation cycles are speeding up to the point, where R&D and prototyping are starting to become indistinguishable.

What was a nicely sorted linear process becomes increasingly non-linear with complex dependencies.

This means that a different approach to testing is needed, conceptually as well as in terms of infrastructure: a “test before trust” pipeline that moves from data and simulation to emulation, hardware, shadow mode, controlled pilots, and continuous monitoring.

Data is the basis for everything

Data is the basis for everything. Without it, there is no AI, no training, and no validation. The measurements that matter sit with different vendors, operators, and network domains, and no single player holds enough of them, so some form of sharing is unavoidable.

Today this is held back by fragmentation, commercial sensitivity, and the fact that the level of detail that makes data useful is often the level that makes it sensitive. Open interfaces help but do not solve it.

We aim to make testing produce reusable data: measurements documented well enough to be reproduced and compared; ways of sharing what a dataset shows without exposing the underlying records; and digital twins that extend real measurement campaigns with synthetic data.

Education, Education, Education

While everything changes, you still need people to deal with it. And those people need the skills and the knowledge to do their job. So, knowledge is the fulcrum of innovation, and education the force that makes it spin.

We have found that this relies on building the institutional knowledge in the open lab to reliably and efficiently perform our task of fostering innovation and serving as a hub that helps to educate the existing workforce and also the next generation of engineers.

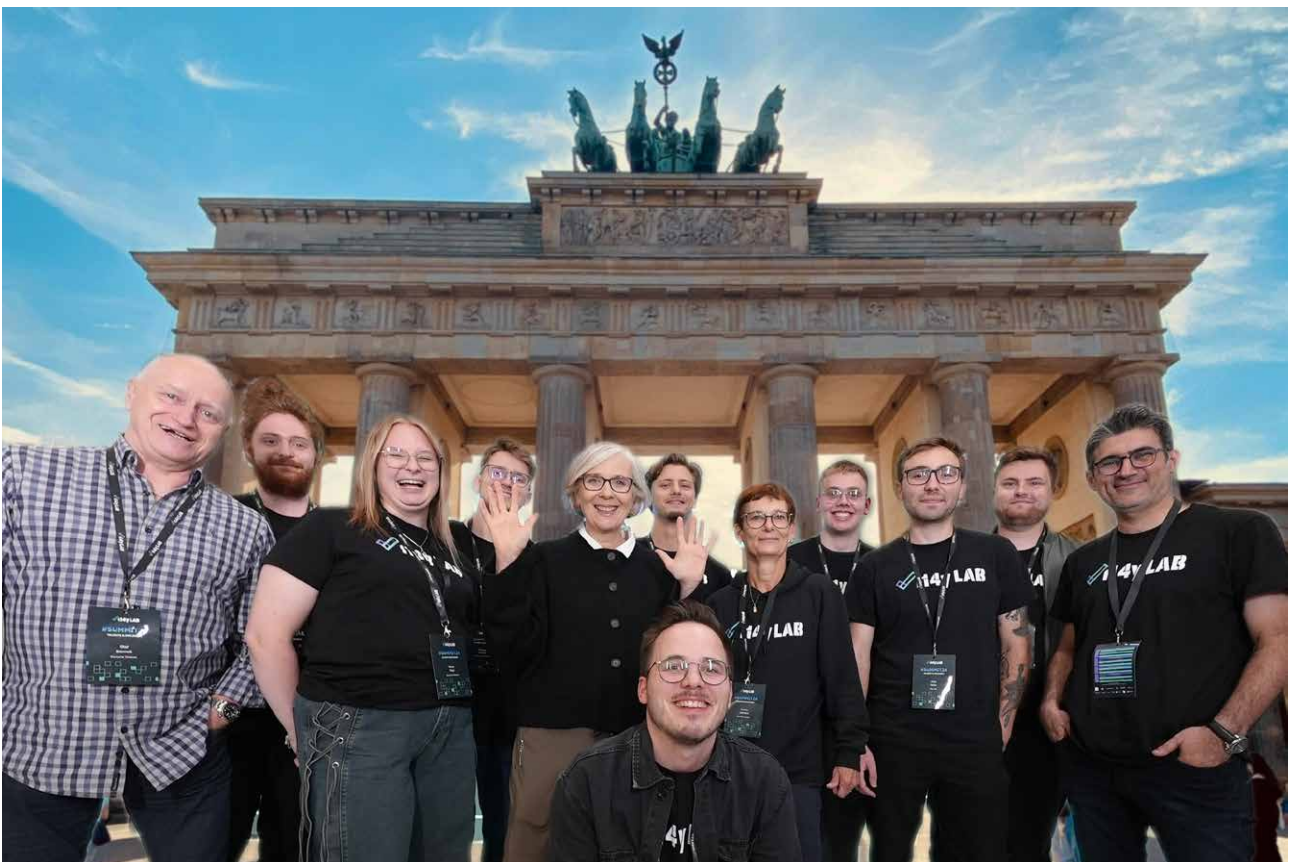
And it also relies on easing and enabling the access to knowledge for market players and end users.

About the i14y Lab

The People

The i14y Lab is about the interoperability of people as much as about the interoperability of hardware and software. Many people from our partners and from other places came together in Berlin to create the lab you know, enabling the work, the successes, and the lessons we could learn.

Here are only a few of them – those that were there almost all the time. But everybody else is on there as well. In our minds, and in the lab they helped create.

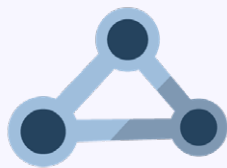


Consortium Partners

The i14y Lab is an open lab for interoperability testing of disaggregated telco systems, such as Open RAN, led by Deutsche Telekom together with consortium partners listed below, and supported with public funding from the German Ministry of Digital and Transport (BMDV) and now the German Ministry for Digital and Government Modernisation (BMDS).



The list reflects the consortium partners at the start of the project—because we want to include everybody who was part of the team.



BISDN

Berlin-based company for software-defined networking and open switch operating systems.

Capgemini  engineering

Technology services provider with deep expertise in building Open RAN systems.



Leading network operator and active shaper of open, disaggregated network architectures.



Independent test center for interoperability and performance testing of networking technology.



Research institute for tele-communications, photonics and the driving force behind the lab.



Specialist in open networking solutions and contributor to the O-RAN software community.

Until Dec. 31, 2025



Global vendor of mobile and network technology with a strong focus on Open RAN.



Provider of high-precision test and measurement equipment for mobile communications.



Network operator trialing open radio access technologies in real-world environments.

Until Dec. 31, 2025



Technical university with a research focus on communications and networking technology.

Until Nov. 09, 2025



International tele-communications group and pioneer in the deployment of Open RAN.

Associated Partners

Beyond those that form the consortium are our associated partners, who did much to help make the i14y Lab the success it is today.



Provider of open cloud and container platforms as the foundation for virtualized network functions.



Specialist in O-RAN applications such as rApps and xApps for intelligent network control.



Provider of test, measurement, and emulation solutions for building and validating open networks.

Supporting Partners

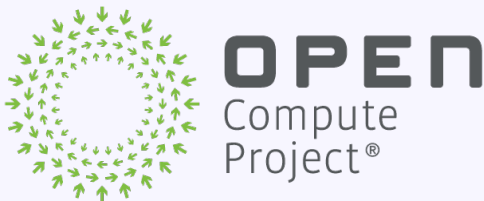
We are part of an ecosystem that is also held together by a network of organizations that believe in open, disaggregated networks, in open source, and in collaboration. We are proud to call them supporting partners.



Open-source platform for automating, orchestrating, and managing network services.



Open-source platform for automating, orchestrating, and managing network services.



Community initiative for open, standardized hardware designs for data centers and networks.



Global alliance defining open and interoperable interfaces for the radio access network (RAN).



Cross-industry initiative developing open, disaggregated telecom infrastructure.

One more thing: looking back ahead

1

2021

When it all began: as a proposal by a consortium to create an “Open Lab for Open RAN”. The Ministry for Transport and Digital Infrastructure shared our vision, and so we became a partly publicly funded project, officially opening its doors in:

2

2022

Which brought more O-RAN Global PlugFests and our very first summit! Can you believe it! Under the motto „Mix & Test,“ it was our introduction to the world and a big step ahead in our mission to connect people as well as hardware.

3

2023

The year in which we became an OTIC, started with our global lab collaboration, and paved the way towards certification with our first permanent test setups. Much had to be built; much had to be decided. All, while we were a host to two more PlugFests.

4

2024 & 2025

Certifications, finally! We became the first European OTIC to award an O-RAN Badge or Certificate! Of course we celebrated this in Berlin, together with our awardees. But that’s not all: work now increasingly included SMO, especially RIC and x-Apps / r-Apps, with questions about security, conflict mitigation, and how to measure their efficacy.

4

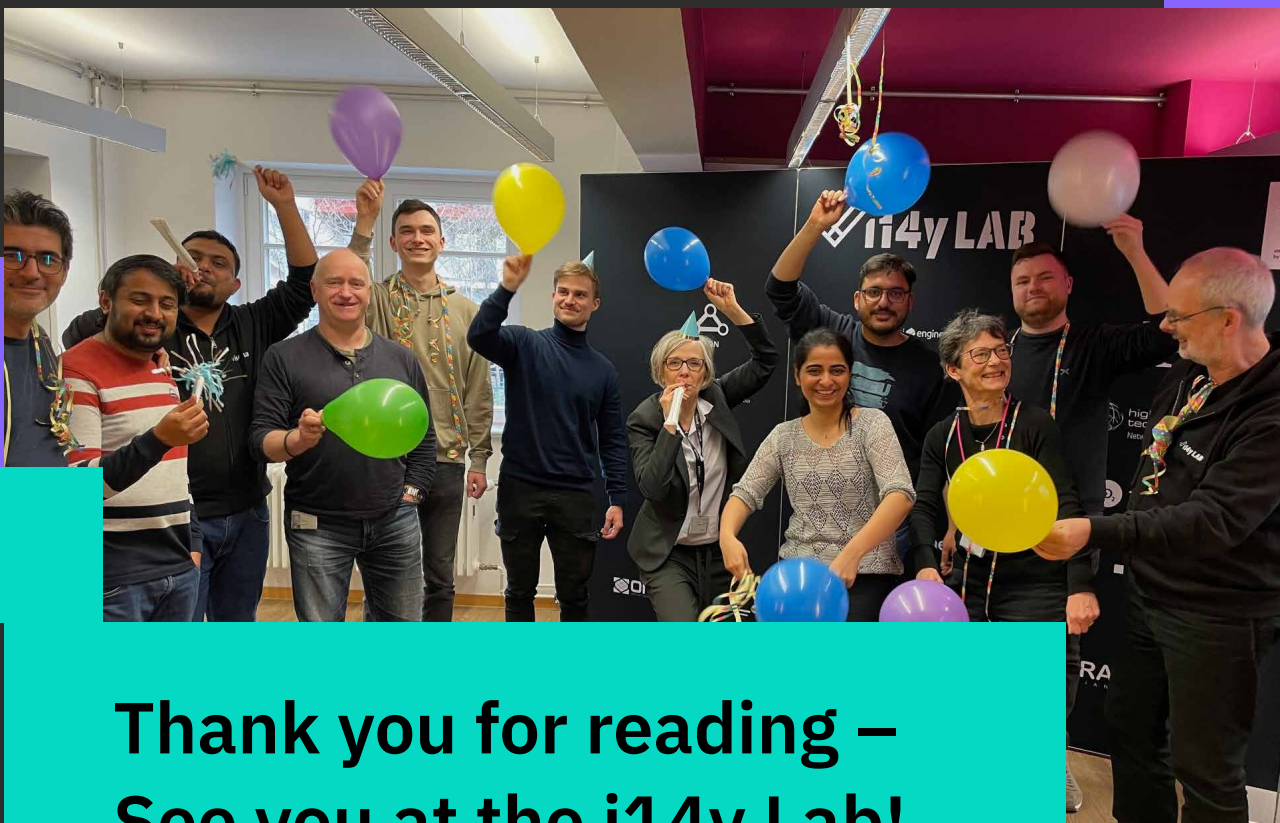
2026

Onwards and upwards! We have so far gotten the i14y Lab Energy Testing setup up and running, are collecting data for a thorough modeling of this system, worked on testing OCUDU, as the European independent test lab partner of the OCUDU Ecosystem Foundation and are very much looking forward to concluding the year the same way we started it: with more testing, more results, more insights.

5

2027

As we said: the best way to predict the future is to invent it. Let’s make this our motto and get to work. See you in 2027!



**Thank you for reading –
See you at the i14y Lab!**

Connect with us

Contact communication@i14y-lab.com



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