

The status of open RAN in 2025

An ideal to strive for, but difficult to achieve

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INTRODUCTION

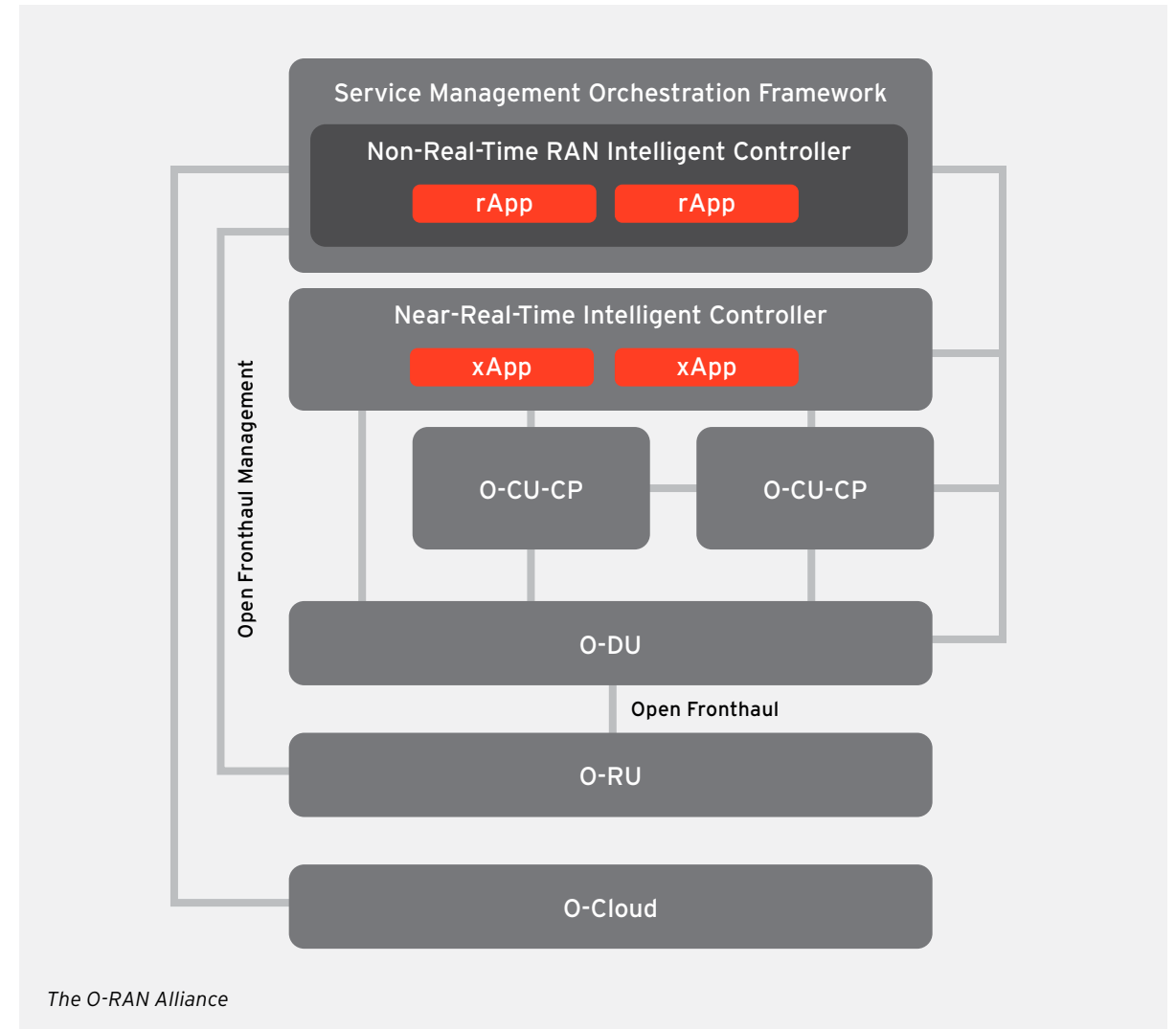
Open radio access networks (open RAN) became a tech darling during the first Trump administration, which touted it as the savior to U.S. telcos who would no longer need to use telecom equipment from China. But in the past couple of years, open RAN has fallen out of the hype cycle phase, becoming an ideal to strive for, but difficult to achieve.

In other words, reality has set in.

When looking back at the evolution of open RAN, traditionally, RAN gear came from the big telecom suppliers, including Ericsson, Nokia and Huawei. The radios and other hardware came prepackaged with proprietary software, making it difficult for telecom operators to work on the equipment or make software updates in-house. Operators always had to go back to their vendors for any changes, and they complained about vendor lock-in and the extraordinarily long time frames it took to make software or hardware updates.

Around 2014, some leading telecom operators began emulating their brethren in the IT world, who were using white-box servers to run a variety of open-source software in their data centers. Telecom operators began their virtualization efforts in their core networks, disaggregating monolithic stacks of hardware and software. This disaggregation is known as virtual RAN (vRAN).

While telecom was beginning its vRAN activity, VMware was experiencing a hyper-growth period with its virtual machines. Since then, Red Hat has stepped up as the leader in container-based IT environments.



INTRODUCTION

In 2018, the [O-RAN Alliance](#) formed to tap into all the benefits of virtualization and openness in the most technologically difficult part of wireless networks – the RAN.

At its simplest level, open RAN includes the centralized unit (CU), the distributed unit (DU) and radio units (RUs). All the software for this equipment runs on an open cloud, which is typically a container-based platform such as Red Hat's OpenShift. Another piece of software, called the RAN intelligent controller (RIC), can optimize the radio equipment. At some point, the RIC may be able to support different applications on the RAN.

The Fierce Network Research survey

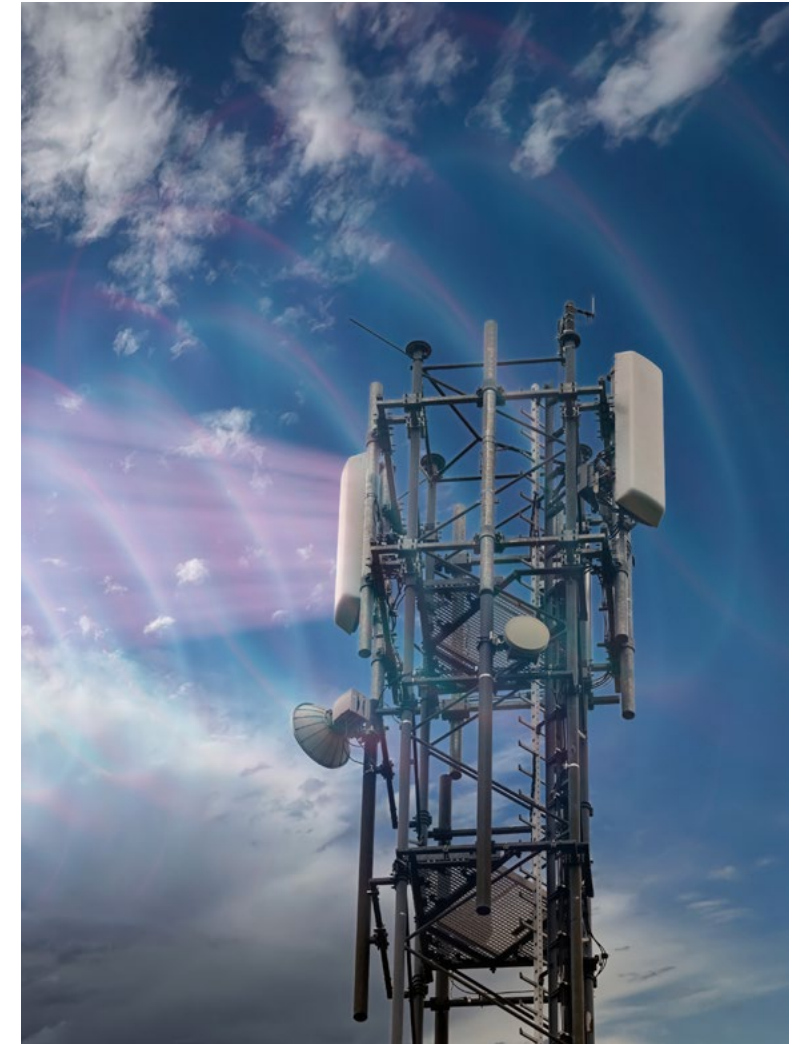
Fierce Network Research conducted a survey from May 30 to July 26, 2025, to gauge the current status of open RAN. We asked operators their opinions about the technology, including its biggest challenges and its trajectory. This report presents the key findings from that survey with analysis. The survey methodology can be found at the end of this report.

Top 4 things you'll learn in this report



1. Which wireless operators are implementing open RAN
2. Who the vendors are in the space
3. Why AT&T and Ericsson have been criticized for their open RAN efforts
4. Whether open RAN will transform telecom in the near future

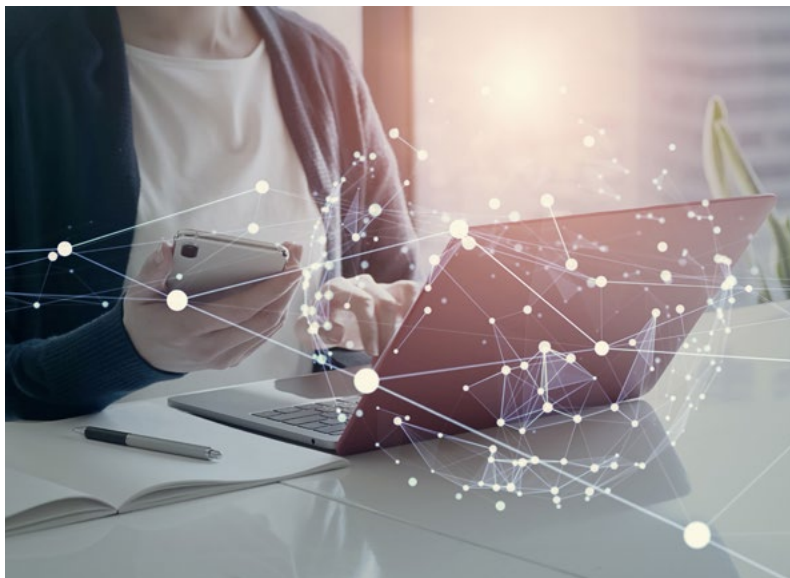
This report is written by Linda Hardesty, Chief Analyst - Communications Technologies and edited by Elizabeth Coyne, Editor in Chief, at Fierce Network Research.



WILL OPEN RAN BREAK VENDOR LOCK-IN?

Open RAN's biggest promise was that it would allow new innovative companies to break into an industry that's historically been monopolized by a handful of RAN vendors, but the jury's still out on whether that has happened (or will ever happen).

For the Fierce Network Research survey, we asked participants how mature they think the current open RAN vendor ecosystem is. Nearly half (45%) said it's in an "early stage and needs more development."



IN YOUR OPINION, HOW MATURE IS THE CURRENT OPEN RAN VENDOR ECOSYSTEM?

Very mature - comparable to traditional RAN vendors

8.87%

Moderately mature - viable in specific use cases

33.87%

Early stage - needs more development

45.16%

Immature - not ready for mainstream use

10.48%

Not sure

1.61%

In the U.S., the two big operators implementing open RAN are EchoStar's Dish Wireless division and AT&T.

Dish Wireless

Dish Wireless was in the process of building a greenfield network based on open RAN. The company has achieved accolades for the technical heights its network has achieved with a 5G standalone core and open RAN. But EchoStar, as a company, is struggling with financial and political problems.

Recently, EchoStar announced it's selling its 600 MHz and 3.45 GHz spectrum licenses [to AT&T for \\$23 billion](#). So, it's unclear if Dish's open RAN network will ever be utilized.

AT&T

For its part, [AT&T made a big commitment](#) to open RAN in December 2023, when it announced that it was implementing open RAN into its brownfield network with Ericsson as its major vendor. Other vendors include Fujitsu for radios and Dell Technologies for server hardware.

However, in February 2024, [AT&T announced](#) that a milestone on its open RAN journey was to implement Ericsson's Cloud RAN solution, raising questions about whether AT&T remains committed to deploying open RAN or will be satisfied with Ericsson.

AT&T has also been criticized for selecting a big traditional vendor. This move seems like it's defeating the whole purpose of open RAN, which is to open the playing field to more vendors. Ironically, AT&T is removing Nokia equipment from its network, further strengthening Ericsson's market share.



Rakuten Mobile

In other parts of the world, Rakuten Mobile led the charge on a greenfield open RAN network and has since introduced [Rakuten Symphony](#) to offer a turnkey solution for other operators that want to set up a fully open, disaggregated mobile network.

The UK and Europe

In Europe, [Vodafone said it had plans](#) to implement open RAN; but as of spring 2025, it had sold off parts of its network, lost its head of network strategy to Verizon, and the vendors involved in their open RAN plans have been moving away from open RAN altogether.

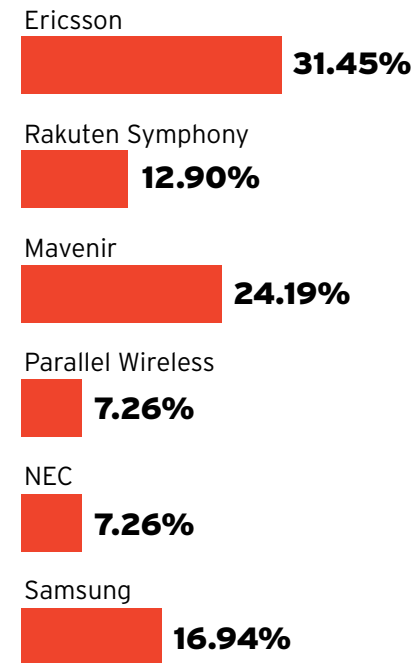
Separately, in the U.K., Virgin Media O2 was also working with Mavenir as its open RAN vendor and prime integrator to help transition its network to a cloud-native, vRAN architecture. BT launched a trial of Nokia's RIC, and the U.K. government is also supporting the move toward open RAN, with an ambition to carry 35% of the U.K.'s network traffic over open and interoperable RAN architectures by 2030.

Contrary to how it may seem, the open RAN vendor ecosystem goes beyond Ericsson.

The Fierce Network Research survey asked respondents to name the top open RAN vendor from among a small selection of well-known companies. Unsurprisingly, the majority (31.5%) named Ericsson, followed by Mavenir (24%); Samsung (17%); and Rakuten Symphony (13%).



WHO DO YOU CONSIDER THE TOP OPEN RAN VENDOR?



In June 2024, Mavenir announced it was getting out of [the business of making open RAN radios](#), but the company is still involved in designing radios and creating CU and DU software.



Open RAN expert John Baker

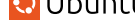
John Baker, a familiar figure in the open RAN community, worked for Mavenir for eight years. He recently published an updated chart of all the open RAN vendors, and he noted that there are still plenty of players in the ecosystem. (See Baker's list of players on next page.)

Based on the large number of vendors involved in different parts of open RAN, the ecosystem is robust. "Clearly, people are finding ways to [generate] business," Baker said.

Even though not every company can strike behemoth contracts like the deal between Ericsson and AT&T, small open RAN companies are still happy to get million-dollar contracts.

Fascinatingly, Baker's list of open RAN vendors does not include Ericsson. Baker said he challenges the premise that Ericsson is a true open RAN vendor.

Open RAN vendor ecosystem

RAN SW & HW Components Providers					RAN Infrastructure Component Providers			
Open Radios	CU & DU SW	RIC & SMO	xApps/rApps		COTS	Cloud Infra	Transmission	Computing & Acceleration
                   	                     	                              	                      	             	        	        	                	             

Source: John Baker

Measuring open RAN

“There’s no real clarification that Ericsson is even open RAN at all,” Baker said. “They say they are, but who do they work with? There’s no way to measure what an open RAN product is apart from the vendors that openly interlock with each other. Nobody can do true open RAN unless you’ve got like-minded companies that all have the interface in there.”

Baker also thinks that Ericsson is “dominating” the O-RAN Alliance. He said the alliance doesn’t want to become involved in certifying products as open RAN-compliant. And he thinks that’s primarily due to Ericsson’s dominance in the organization and its self-serving desire not to create an ecosystem of more vendors.

“Open RAN discussions are quite complex due to the different challenges encountered: regulatory, financial, budget, technology and ecosystem readiness, which are not following the same pattern, and the resistance from suppliers is slowing down efforts to regulate and deploy widely.”

– Anonymous survey respondent



Open RAN is big in Taiwan

Many Taiwanese companies are moving to implement open RAN because Taiwan’s government has made some spectrum available and recommended that startups focus on the enterprise space to offer open RAN products and services.

While open RAN is often thought of in the context of large wireless carriers, there are also opportunities for enterprises to use open RAN, especially for private 5G networks. Enterprises that deploy private 5G can use open RAN technology to mix and match hardware and software from different vendors, often reducing cost and making it easier to change things without being locked into a single vendor’s proprietary system.

Baker said that Taiwanese company MTI has the largest portfolio of open RAN radios. The company does all of its research and development in the U.S., and in December 2024, it received nearly \$35 million in funding from the National Telecommunications and Information Administration (NTIA) to advance open RAN technologies.

Originally, one of the main features of open RAN was its multi-vendor capabilities. Indeed, when asked for the primary driver for adopting open RAN, 40% of respondents to our survey said it was the ability to choose from multiple vendors and break vendor lock-in. Other respondents said operating cost reduction (22%) and capex reduction (18%) were the most important reasons to adopt the technology.



Roberto Yanez, formerly with UScellular

Roberto Yanez, who was with UScellular for 22 years until the recent purchase of the company by T-Mobile in August 2025, said that cost considerations are always vital for operators.

"In my experience, being able to have some leverage when

you're negotiating and having some competition in the industry is key to being able to achieve cost savings," Yanez said. "We've seen from the large RAN vendors that the price gets really challenging."

WHAT'S THE PRIMARY DRIVER FOR WIRELESS OPERATORS TO ADOPT OPEN RAN?

Operating cost reduction

21.77%

Capital expense cost reduction

17.74%

The ability to choose from multiple vendors and break vendor lock-in

40.32%

Making the network more versatile for AI

16.13%

Complying with governments who encourage, and may subsidize, open RAN

3.23%

Other (please specify)

0.81%

Samsung – and before the political issues with China, Huawei and ZTE – added a nice competitive layer to the RAN vendor ecosystem.

"The potential for open RAN is having a viable competitor alternative to be able to keep the large incumbent vendors honest in terms of pricing and competitive reality," Yanez said.

New services from open RAN



Rob McManus, principal product marketing manager, Red Hat

Rob McManus, principal product marketing manager at Red Hat, said new services should be one of the reasons operators implement open RAN.

"A lot of the lucrative opportunities are with enterprises," he said. "Open RAN allows the door to be opened a little bit more to

target enterprises. Think about logistics; think about factories; think about Industry 4.0 – open RAN allows operators to sort of build compelling services specifically for these vertical segments, because they need to try and come away from just offering pure connectivity."

The hope is that the RIC will one day enable the RAN to act as a kind of Apple or Android app store for applications within the wireless network.

Currently, the RIC enables a small application to run inside the radio unit. This is helpful so that data doesn't have to travel back and forth from the radio to the core

SECTION 3: MULTIPLE RAN VENDORS REDUCE COSTS

for processing. “A lot of real-time services, especially for video surveillance and artificial intelligence, need to be very, very fast,” McManus said. “The RIC allows you to do computational tasks right at the edge of the network, which means the latency is really low.”

Currently, the RIC is only being used to optimize the radio itself, resulting in a better experience for wireless users. But it’s not being used for third-party applications.

McManus said things aren’t moving as fast as he hoped in terms of creating applications for the RIC because there needs to be an ecosystem of developers interested in the RAN and telecom in general.



4

THE TECHNICAL DEBT STUMBLING BLOCK

Nearly 40% of telco executives said the biggest barrier to adopting open RAN is that the legacy infrastructure needs to be prepared.

WHAT IS THE BIGGEST BARRIER TO WIRELESS OPERATORS ADOPTING OPEN RAN?

The legacy network needs to be prepared for open RAN



Lack of in-house expertise



It's too expensive



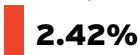
Lack of mature standards



Vendor support concerns



Other (please specify)



When asked which answer he would select, McManus asked Fierce, “Can I say, ‘all of the above?’ Because they’re all valid.”

But he agreed with most survey respondents that network preparedness is definitely an issue. “If you look at a lot of the traditional radio access networks, they haven’t got the container platform in there,” he said. “They’re still using proprietary hardware.”

He said a lot of this proprietary equipment is also quite old. “So that is a huge technical debt that they have to maintain,” he said. “Even though they’re modernizing at the same time, they’ve got to look after this technical debt.”

He also noted that telcos have problems attracting talent. “They’ve got the wrong skill sets in various places within the organization. Training obviously addresses some of it, but churn is a big issue.”

But the good news is – as cloud-native technology gets more established, network knowledge gets codified,

which means that the knowledge is written as code, and there’s less reliance on the knowledge that resides in the brains of various employees. “Once you start to codify the talent – and it’s not an overnight thing by any means – but as things get written as code, they can never be lost,” said McManus.

Over time, telcos will be able to move to full cloud-native, vRAN environments, codify their network processes and perhaps simultaneously implement open RAN.



Rakuten and Dish have both done open RAN in greenfield 5G networks, but AT&T is deploying open RAN within a large brownfield network. Perhaps that's why it's starting with Ericsson's cloud RAN as an early step on its journey.

AT&T has also said that all the new open radios on its network will be managed by Ericsson's Intelligent Automation Platform (EIAP) via open management interfaces. "It supports replacing the old legacy equipment and installing the new radios without missing a beat," according to an [AT&T blog](#) in December 2024.

WHAT DEPLOYMENT SCENARIO DO YOU SEE AS MOST SUITABLE FOR OPEN RAN?

Greenfield networks

78.23%

Brownfield networks

21.77%

AT&T's open RAN project began in January 2024 and is expected to be complete in January 2027. Rob Soni, VP of RAN technology at AT&T, told Fierce AT&T plans

to move 70% of its wireless network traffic to open hardware/software infrastructure by late 2026, and the overall project is on track.



Rob Soni, VP of RAN Technology, AT&T

"Most of the radios in our new footprint are O-RAN-compliant, and our baseband hardware, whether cloud RAN or purpose-built, supports open front haul and open network management solutions – [like] rApps," Soni said.

In terms of the biggest challenges of deploying open

RAN in a brownfield network, he said, "Moving forward with open, disaggregated, software-driven solutions requires transformation of vendor behavior, transformation of operator behavior and almost zero disruption or impact to customer services."

Open RAN technology must also fit within existing plans for modernization and growth in AT&T's footprint, and it must exceed existing solutions in terms of performance and operations, Soni noted. "Specifications, while maturing, still have a way to go to meet and ensure the interoperability needs of multiple vendors."

When it comes to responding to critics about using one major vendor for its open RAN deployment rather than diversifying the vendor landscape, Soni said, "Supporting ORAN means supporting vendor competition, not particular competitors. The agreement with Ericsson creates a foundation that will enable us to deploy hardware and software components from alternative vendors as conditions warrant."

AT&T is subsequently introducing new vendors for baseband hardware and radio and for a variety of third-party applications for RAN optimization and automation.

"Open RAN's promise lies in modularity, but this brings up challenges around fault isolation, for instance, as well as vendor coordination and of course, SLA clarity to avoid finger pointing that could arise, especially in brownfield deployments."

– Anonymous survey respondent

6 | THE SYSTEM INTEGRATION CHALLENGE

When asked which part of the open RAN architecture is the most challenging to implement, the majority (37%) said it was system integration, followed by 26% who cited the RIC.

In terms of system integration, Dell Technologies is an interesting example. A few years ago, Dell decided that it was going to be a systems integrator for open RAN.

Dennis Hoffman, SVP and GM of Dell Technologies' Telecom Systems Business, [told Fierce in 2022](#) that the industry had swerved from "guardrail to guardrail." People were tired of vendor lock-in where everything was on one box, and they had no choices. Then along came open RAN where there were lots of choices, but operators had to be responsible for making everything work together.

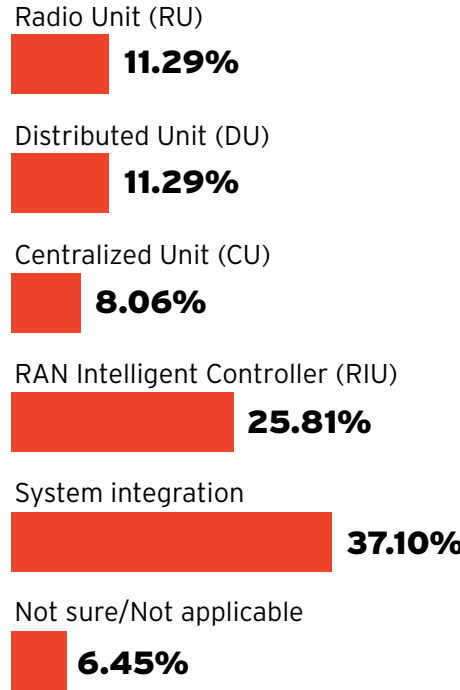
He said the industry was settling "into a more pragmatic notion" where there would be more vendors, but somebody would help set everything up and keep it running. At the time, Dell Technologies said it wanted to be that systems integrator.

Fast-forward to today: Dell has quietly given up on that aspiration and gone back to providing common, off-the-shelf hardware for open RAN. In fact, in May 2024, [Dell and Ericsson announced](#) a partnership in which Dell effectively became Ericsson's server vendor, supporting its cloud RAN deployments.



Yanez speculated that it's "too large of an undertaking" for a company such as Dell (or Mavenir, for that matter) to try to do the whole RAN from end to end. "It's just really difficult to be soup-to-nuts: CU, DU, radio provider, software provider, hardware provider," he said. "It's just better to focus on some specific areas."

WHAT PART OF THE OPEN RAN ARCHITECTURE IS THE MOST CHALLENGING TO IMPLEMENT?



So, what's the future trajectory of open RAN? Will the few big operators in the world that are using the technology be able to lead the way for others to follow? And will open RAN deliver as good as, or better, performance over the long term?

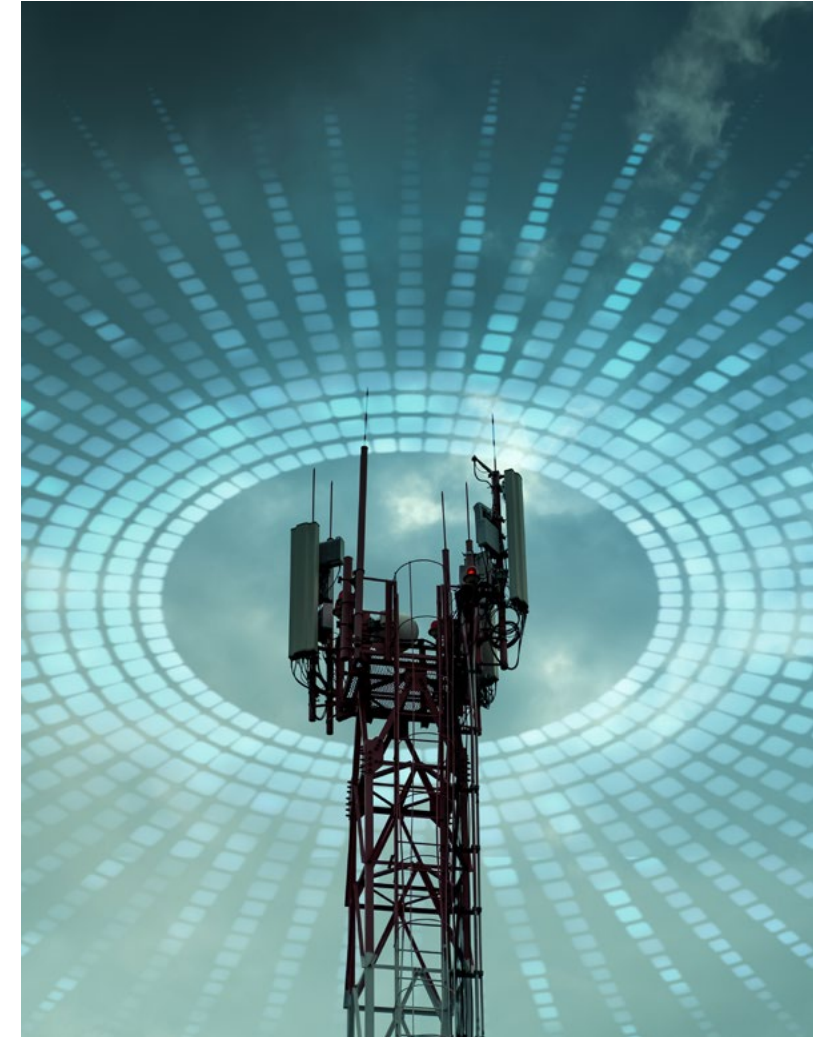
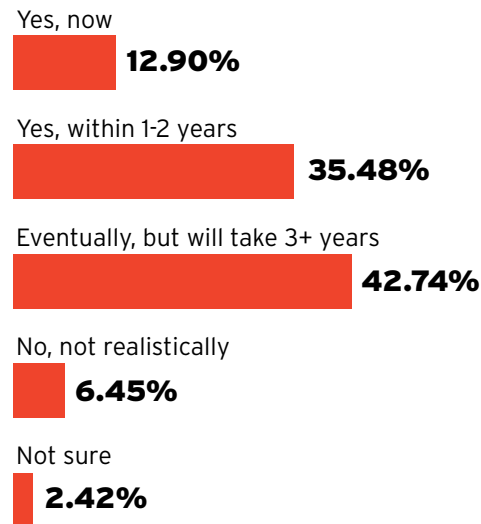
The vast majority of survey respondents think open RAN will win the day, but it will take time. More than 42% said it will take more than three years; 35.5% estimate it will take one to two years; and 13% said it can deliver the same performance as traditional RAN systems right now.

"I do believe that performance is or can get to parity, or even exceed that of purpose-built, either now or in the future," Yanez said. "If there's a continued focus on the development of open RAN, performance parity would not be an issue."

But he said it's kind of a chicken-and-egg situation because in order to optimize open RAN, there must be a significant number of deployments. "I do believe that once that scale starts to happen, the performance will eventually no longer be a concern," Yanez said.

Perhaps the move to 6G will be a good opportunity for many more wireless operators to incorporate open RAN. A lot of the concepts and premises of open RAN are natively embedded in 6G, so it will be there from the start.

DO YOU BELIEVE OPEN RAN CAN DELIVER THE SAME PERFORMANCE AND RELIABILITY AS TRADITIONAL RAN SYSTEMS?



8

THE GOVERNMENT SUPPORT ANGLE

For the final question in the Fierce Network Research survey, we asked how important government regulation or support is to accelerate open RAN adoption.

"Given mobile network operators are so monopolized, I do not see any willingness of those big operators to take equipment from small open RAN vendors unless there is a certain insurance company or government agency standing up to mitigate the financial risk."

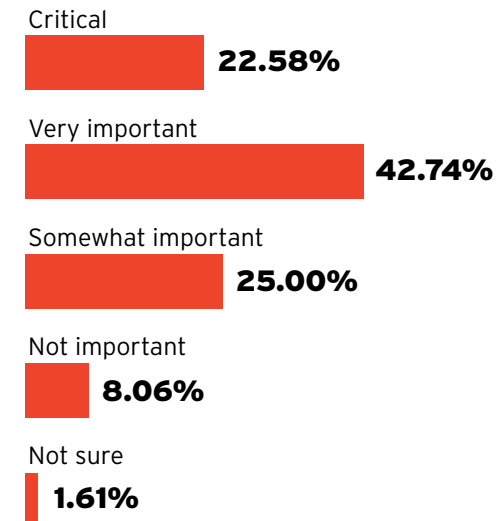
– Anonymous survey respondent

Baker said, "I think it's extremely important." He said with AT&T selecting Ericsson and both T-Mobile and Verizon using majority Ericsson equipment, the playing field of vendors has actually been reduced. "How on Earth can the U.S. allow their telecommunications networks to be sole sourced from a foreign company?" he asked. "We need regulation. We need multiple sources of supply."

Most survey respondents agreed with Baker with 43% saying government regulation was very important and 22.5% saying it was critical.

However, there are a lot of things happening in the world (think tariffs and wars, to name a few) that are currently a higher priority than increasing competition in the telecom vendor ecosystem. So, it will be up to telcos themselves to advance open RAN technology.

HOW IMPORTANT IS GOVERNMENT OR REGULATORY SUPPORT IN ACCELERATING OPEN RAN ADOPTION IN YOUR REGION?



CONCLUSION

OPEN RAN – THE STRUGGLE IS REAL

The promise of open RAN is that it will allow many new vendors to participate in the ecosystem, encouraging innovation, competition and lower costs. In addition, the first Trump administration championed the technology to spur U.S. companies to become RAN vendors so wireless operators didn't always have to rely on foreign suppliers for their critical communications equipment.

But alas, those hopes and dreams have diminished over time for a number of reasons.

Rakuten Mobile, the first operator to deploy open RAN, has struggled to capture market share in Japan. And EchoStar's Dish Wireless is selling off its valuable spectrum, raising the question of whether its open RAN technologies will be used. The struggles of Rakuten and Dish stem from their business problems and are unrelated to open RAN. Nevertheless, the advancement of open RAN will be a casualty if either Rakuten or Dish give up on wireless.

Meanwhile, AT&T has become the most prominent operator in the world to tackle open RAN. But strangely, rather than using a variety of vendors, AT&T decided to play it safe and go with Ericsson, a vendor against which open RAN was supposed to compete. And it's unclear whether AT&T is doing true open RAN because it mainly talks about deploying Ericsson's cloud RAN solution.

It's a great irony that Ericsson is now leading the open RAN charge for AT&T and seems to be dominating the O-RAN Alliance. One could say that we've put the fox in charge of the hen house. To be fair, Ericsson is a public company that has a duty to maximize profits for its shareholders. Why should it work hard to introduce RAN competitors that would chip away at its profits?

Open RAN has other struggles as well. Telcos are still working on vRAN and dealing with heaps of technical debt. They lack an employee workforce on the cutting edge of the newest IT technologies. And there's precious little interest among outside developers to create applications for the RIC.

In summary, open RAN has made great strides and has potential, but like so many things, it's two steps forward and one step back. Currently, we're in the step-back phase. We agree with most survey respondents who say that the full potential of open RAN will probably be realized, eventually, but it will likely take three years or more.

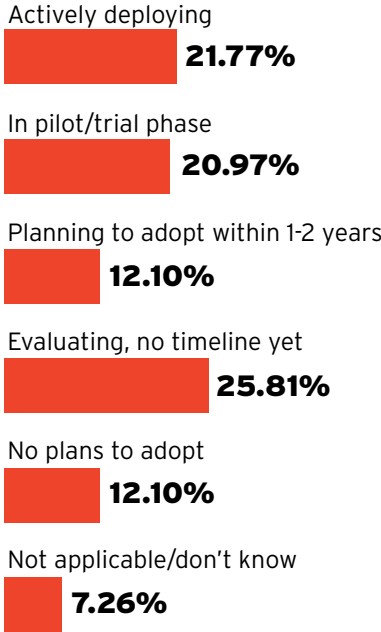
METHODOLOGY



The survey for this research report was conducted online using Questex's databases. All 124 participants in the survey work for wireless, broadband, satellite, cable or other service providers. Of the 124 respondents, 53 make network architecture and deployment decisions in their companies, and the other 71 influence these decisions.

The companies that the respondents work for are in various stages of adopting open RAN with 26% evaluating the technology and 22% actively deploying open RAN.

WHAT IS YOUR ORGANIZATION'S CURRENT STANCE ON OPEN RAN ADOPTION?



**Ian Jolliffe**

Director, global software engineering
Red Hat

Ian Jolliffe has deep experience in the telecom and industrial verticals and has contributed to various open source projects since 2013. Jolliffe is most active these days in defining solutions that take cloud technologies and compute resources to the edge. Jolliffe has been a committer to the OPNFV high availability project, a contributor to Akraino and a frequent speaker at edge-focused events. He joined Red Hat in 2020 and is focused on delivering solutions for 5G edge.

“

Flexibility offered with cloud-native technology and methodologies is essential for the next generation of innovation in wireless telecommunication networks, particularly as 5G significantly increases the complexity and scale of RANs.

–Ian Jolliffe, director, global software engineering, Red Hat

”

What does the Red Hat OpenShift container platform do in the open RAN environment?

Jolliffe: An effective 5G multivendor open RAN solution relies upon a common cloud-native platform to bring tools, technologies and workloads together. A common cloud-native platform – based on open source that can support any workload, on any footprint and at any location – gives service providers the flexibility to build the right solution for their organization. A common platform also provides consistency for higher operational efficiencies and increased productivity.

Red Hat OpenShift can be deployed in any environment with the appropriate cloud native configurations applied, and it can be deployed in any location, providing the flexibility, security and performance needed to place multiple 5G open RAN network functions across a network.

What's the difference between cloud RAN and open RAN?

Cloud RAN means a virtualized RAN (vRAN) that is built using cloud-native technology, including microservices and container-based technology, and a cloud platform

to host distributed unit (DU) and centralized unit (CU) workloads. Similar to vRAN, a cloud RAN does not inherently comply with O-RAN Alliance specifications or enable mixed vendor components.

Open RAN is a generic term, referring to an industry movement and the associated open RAN technology and architectures used within service provider networks. It encompasses the use of virtualization, microservices, container-based technologies and, crucially, open interfaces.

The open RAN model, championed by the O-RAN Alliance, specifically introduces an open fronthaul interface between the RU and DU. This interface paves the way for a potential multi-vendor RAN model.

Can you talk about the importance of scalability of software in telco networks?

Open-source technologies underpin the software-defined nature of 5G and open RAN, allowing network functions that were once tied to proprietary hardware to be virtualized and/or cloudified and run on a common cloud-native platform. This abstraction of

network functions from hardware provides immense flexibility and scalability, crucial for the dynamic demands of 5G networks.

Scalability challenges exist for how applications scale within a cluster. Following cloud native principles helps improve scalability and overcome the challenges of monolithic applications. Additionally, scalability challenges exist for managing thousands of clusters at the edge of the network. Again, following cloud native principles reduces maintenance costs, leading to shorter upgrade times and lower TCO.

Telcos have been reluctant to work with new radio vendors because they trust the traditional vendors. What are your thoughts about the balance between trust and embracing new vendors and technologies?

Non-open RAN systems can be built with set components or network functions that, even if disaggregated, may contain choke points and inefficiencies in real-world scenarios. Conversely, an O-RAN-compliant open RAN network allows service providers to choose best-in-class solutions for each RAN component, avoiding the need to procure an entire package from a single vendor.

This efficiency in disaggregated network components is vital because 5G networks are incredibly complex, built at scale and require not only immense bandwidth, but also unflagging reliability. Every part of the network must function at peak performance for next-generation innovations requiring millisecond response times.

New entrants can participate and engage in the O-RAN Alliance PlugFests. This is a great opportunity to share common learnings and collaborate with the wider ecosystem.

The promise of open RAN is that operators will be able to mix and match components from different vendors. How's it going with interoperability?

Historically, RAN solutions from different vendors have been difficult to integrate due to proprietary designs. RAN disaggregation, cloudification, and the advent of open RAN that is built on a common cloud-native platform will promote an open-source philosophy, helping service providers to select different components or network functions (RU, DU and CU) from various vendors that best suit their unique environments and needs.

This flexibility offered with cloud-native technology and methodologies is essential for the next generation of innovation in wireless telecommunication networks, particularly as 5G significantly increases the complexity and scale of RANs. Red Hat's participation in O-RAN PlugFests contribute to our readiness, providing additional opportunities for collaboration across the ecosystem.

What's the role of RAN intelligent controllers (RICs) in open RAN?

The RIC is set to revolutionize the performance, scalability and security of RANs. The RIC can be used to enhance the performance and efficiency of RAN by optimizing and automating network resources in real time. Key benefits include continuously adjusting network parameters for optimal performance and user experience, AI-driven insights that use machine learning algorithms to predict and resolve network issues before they impact users and improved resource utilization that maximizes efficiency and reduces operational costs.

The RIC can be deployed on a common cloud-native platform. The deployment of the RIC on Red Hat

OpenShift offers streamlined scalability by enabling automatic scaling of RIC components to help meet demand and support high availability. It also provides enhanced flexibility with a cloud-native environment, supports integrated development using DevOps practices through CI/CD pipelines and offers robust security features to protect RIC applications and data.

ABOUT THE SPONSORS



Red Hat

As service providers race to become more agile to take advantage of the promise of cloud-native 5G networks, AI and edge computing, Red Hat and its global partner ecosystem offer a comprehensive open platform

that helps service providers innovate faster, reduce costs and mitigate risks, bringing new services to the market with superior scalability, security, and efficiency.



BubbleRAN

BubbleRAN's mission is to empower public and private mobile networks with fully-managed, high-performance 5G/6G software solutions that combine flexibility, customization and scalability. Powered by pioneering applied research, we create breakthrough technologies that enable

smarter and more efficient networks, transforming the future of connectivity. BubbleRAN is an international telecom innovator founded in 2021 in Sophia Antipolis, France, with operations in California US and Nairobi, Kenya. We specialize in advanced software-based 5G/6G technologies, featuring cloud-native architecture, O-RAN, and artificial intelligence to shape the networks of tomorrow. Our portfolio includes three flagship products tailored to distinct market segments: (1) MX-PRO zero-trust zero-touch private 5G solution at scale, and (2) MX-PDK a flexible platform development kit designed for 5G/6G research and innovation, (2) MX-AI Multi-X Automation and Intelligence Platform and open ecosystem built on the top of MX-PDK with portofolio of xApps/rApps/AI-Agents (4) MX-ORS an educational 5G platform with open documentation and labs for teaching and learning. Built on a foundation of transparency, cooperation and R&D excellence, our approach promotes automation, intelligence and an open ecosystem where collaboration drives value.

ABOUT THE AUTHORS

Fierce Network Research

The world's communications companies, cloud providers and enterprises are locked in a race to combine cloud, observability, automation, AI and security into a new networking model, Smart Cloud, that will precipitate the next great global technology revolution. Fierce Network Research delivers the understanding companies need to navigate this stormy transition.

Brought to you by Questex's Fierce Network, a news portal serving decision makers throughout the global communications and enterprise cloud industry, Fierce Network Research is dedicated to delivering insights focused on the impact, benefits and challenges that smart cloud technology presents to communications service providers and enterprises.

Fierce Network Research partners with leading organizations on comprehensive insights reports, interactive webinars and more.



About Linda Hardesty

Linda Hardesty is Chief Analyst, Communications Technologies, for Fierce Network Research. Hardesty has been covering telco technology since the mid-1990s, including leadership positions at SDxCentral, Fierce Telecom, Fierce Wireless and StreamTV Insider. She lives in Denver with her husband and saucy cat Jasmine. Her editorial content for Fierce Network won a 2024 Eddie Award in the Planned or On-location Coverage category for Fierce Network's 2024 reporting from Mobile World Congress.



About Elizabeth Coyne

Elizabeth Coyne is Editor-in-Chief of the award-winning Fierce Network, Fierce Network Research and Broadband Nation. Fierce Network was recognized by the 2024 Eddie awards for editorial excellence in onsite event coverage, news coverage, series of articles and outstanding work by a single author Diana Goovaerts. Previously, Coyne was the managing editor for Silverlinings. She honed her skills at Telephony Magazine before moving on to The Net Economy, Light Reading, America's Network and SDxCentral with stints in PR at TM Forum and editing for a crypto-focused pub called Blockworks. She lives in the Chicagoland area with her family.