Perspective

Open Network Index: 2026 results

Joseph Attwood, Gorkem Yigit and Caroline Gabriel

July 2026

Introduction

Open networks redefine how telecoms networks are built and operated. They create a vendor-agnostic, cloud-based, AI-driven foundation for greater automation, innovation and strategic independence. Telecoms operators have been on a long journey to achieve this vision, and many have now begun to turn it into reality with tangible progress.

As the adoption of open networks in the telecoms industry grows, it is increasingly important to define and measure network openness to provide a clear benchmark for progress, foster ecosystem alignment and ensure that open networks fulfil their transformative potential.

Analysys Mason, in partnership with Dell, conducts an annual longitudinal study to understand operators' strategies for open networks and measure their progress towards deployment. The results form our Open Network Index (ONI). This report is based on the results of the 2026 edition of the ONI, using data from a survey of 50 leading Tier 1 operators worldwide, conducted between March 2026 and May 2026. It assesses the progress and key changes in operators' open network transformations since the ONI 2025 and ONI 2024.[1]

Analysys Mason and Dell have also produced a separate report that assesses adoption of AI from a technological and commercial perspective.

Geography	
Western Europe	22%
Developed Asia–Pacific	18%
Central and Eastern Europe	14%
North America	10%
Emerging Asia–Pacific	10%
Middle East and North Africa	8%
Latin America	8%
Sub-Saharan Africa	6%
50 Tier 1 telecoms operators	

Job function	
CTO/CIO office	64%
Head of network strategy	18%
Head of technology strategy	10%
Head of cloud strategy	6%
Head of RAN strategy	2%
50 Tier 1 telecoms operators	

See also: Analysys Mason's Telco AI Readiness Index 2026

[1] See Analysys Mason's Open Network Index: 2025 results and *Open Network Index: evaluating operators' progress and attitudes to 'openness' across core, RAN and edge* (2024).

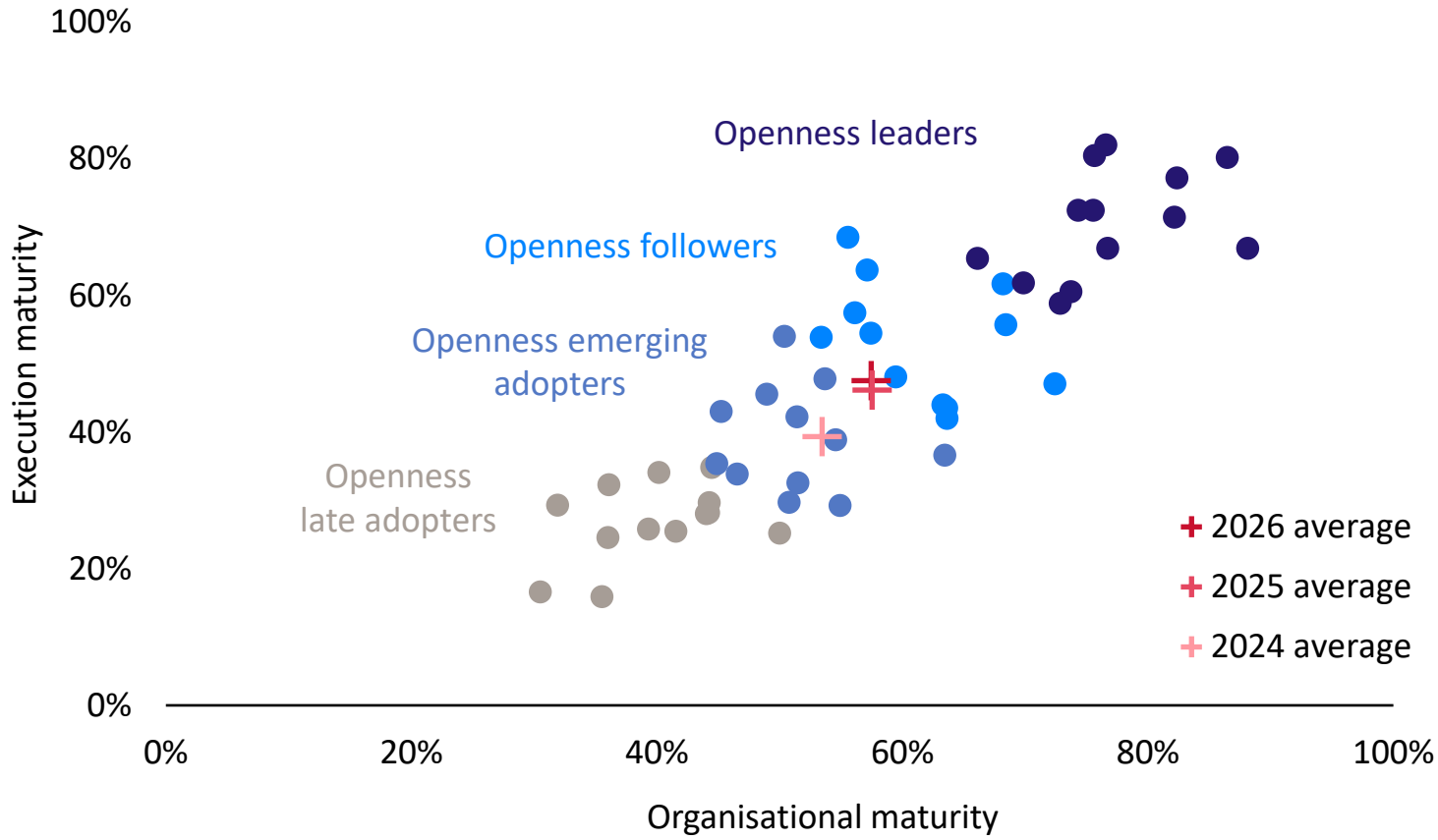
The ONI 2026 shows further progress in the technological aspects of open networks, with less mature operators progressing in organisational aspects

Operators continued to make progress towards achieving open networks between 2025 and 2026, though the change was less substantial than for the previous interval. This is due to many of the 'quick wins' that contribute to an improved score having already been exhausted.

Operators of all maturity levels made strides in execution maturity in the mobile core and RAN domains; this was somewhat masked by minimal progress being made in the RAN domain as the momentum behind Open RAN has diminished.

The less mature operators – the openness late adopters and openness emerging adopters – also made additional improvements in terms of their organisational readiness for open networks. In contrast, some of the more advanced operators seem to have somewhat scaled back their initially very ambitious plans and hit the limits of network openness that they can feasibly achieve in the short term. AI may have also distracted from operators' focus on open networks.

ONI 2026: Open network progress of 50 Tier 1 operators, by organisational and execution maturity; worldwide, March 2026–May 2026



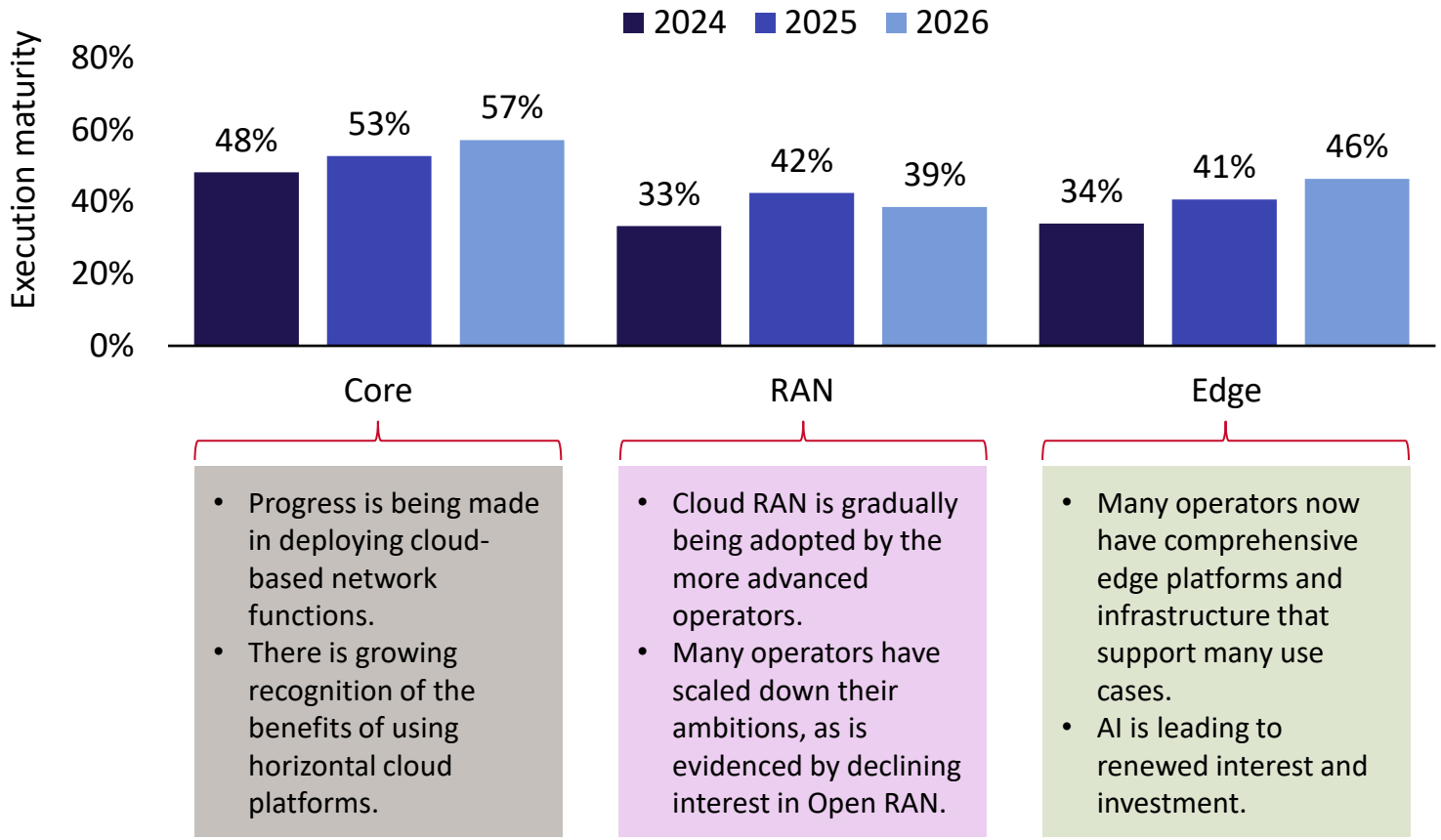
Openness is now a relatively well-established part of operators' network strategies, especially for mobile core networks

Most operators have now been moving towards open networking concepts – such as disaggregation, open APIs and automation – for many years. Consequently, many operators have made significant progress in implementing these concepts and overcoming organisational and technical barriers. This is especially the case for the core domain, where operators report that few significant challenges remain and cloud-native network functions (CNFs) feature prominently in operators' RFPs and vendors' solutions.

Operators' focus has now shifted from just having an openness strategy to extracting value from openness through improved automation, flexibility and resilience. Additionally, open networks are laying the foundation for ongoing transformation efforts, to achieve autonomous and/or AI-native networks, for example.

Wide gaps remain between leaders and laggards, but laggards can take confidence in the fact that they are taking a now well-trodden path.

ONI 2026: Open network progress of 50 Tier 1 operators across the core, RAN and edge domains; worldwide, January 2024–May 2026



analysys mason

ONI 2026 versus previous years: strong signals of progress towards open networks are being seen in select areas across core, RAN and edge

	Change since 2025 and 2024	Takeaway
Cloudification is spreading to multiple mobile core domains, underpinned by horizontal platforms	• 80% (up from 66% in 2025 and 62% in 2024) of operators have now adopted cloud-based network functions for at least two mobile core domains. • 50% (up from 44% in 2025 and 34% in 2024) of operators have deployed a horizontal cloud platform for the mobile core domain.	Advanced operators have now adopted CNFs for multiple mobile core domains. Horizontal network platforms – that underpin multiple core domains – are increasingly seen as important for maximising the benefits of CNF adoption.
Operators continue to deploy Open RAN, albeit predominantly single-vendor Open RAN	• 34% (up from 32% in 2025 and 10% in 2024) of operators have now deployed one or more forms of Open RAN. Many of those operators that had already moved beyond proofs-of-concept (PoCs) and trials for Open RAN scaled their deployments in the last year. • 24% (up from 16% in 2025) of operators have adopted single-vendor Open RAN from a network equipment provider, while the share adopting multi-vendor Open RAN (8%) is steady from 2025.	Despite a scaling back of operators' multi-vendor Open RAN ambitions and of the challenger vendor ecosystem, Open RAN adoption does continue to increase (albeit slowly). The adoption of single-vendor Open RAN leaves open the possibility of operators adding other vendors going forward.
Operators are increasingly adopting a range of edge use cases	• There has been an increase in the share of operators that have already adopted edge use cases such as eMBB (40% in 2026, up from 32% in 2025), URLLC (40% in 2026, up from 10% in 2025) and FWA (36% in 2026, up from 28% in 2025).[1] • Within the next 2 years, many operators plan to run AI workloads (56%) and distributed UPF workloads (62%) at the edge.	The edge infrastructure deployments that operators have been planning for the last few years are now coming to fruition. Interest in edge is growing due to widespread recognition about the business cases of running distributed UPF and AI workloads on edge infrastructure.

[1] eMBB = enhanced mobile broadband. URLLC = ultra-reliable low-latency communications. FWA = fixed-wireless access.

analysys mason

ONI 2026 versus previous years: operators are increasingly focused on automation, forming partnerships and moving away from NEPs' clouds

	Change since 2025 and 2024	Takeaway
Operators are chasing automation as the key benefit of open networks	• 70% (up from 40% in 2025) of operators consider automation as a critically important component of being an open operator. • 90% (up from 44% in 2025) of operators consider the streamlining and automation of operating processes as a key operational benefit of open networks.	A desire to unlock benefits from automation is driving operators to evolve their operating models. In line with this, achieving opex savings and network performance/resilience benefits are cited as the top two benefits of adopting open networks.
Operators are increasing the number of partners that they are working with to achieve their open network ambitions	• Operators now partner with an average of 5.4 (up from 4.5 in 2025 and 4.1 in 2024) categories of vendor to achieve their open operator ambitions. • The share of operators working with NEPs (92% in 2026, from 64% in 2025), IT vendors (88%, from 64%), SIs (68%, from 40%), PCPs (64%, from 38%) and ISVs (52%, from 24%) has increased significantly.[1]	Operators increasingly recognise the importance of working with multiple vendors with different focus areas and capabilities to achieve their open network ambitions. Such collaboration can de-risk and accelerate an operator's transformation towards open networks.
Operators are selectively reducing their reliance on NEPs' vertically integrated solutions	• From last year, the share of operators deploying their 5G SA, IMS and vDU workloads on NEPs' cloud platforms has decreased.[2] • In contrast, use of NEPs' cloud platforms has increased for legacy mobile core, 5G NSA and vCU workloads.[3]	A desire to adopt horizontal clouds is driving use of DIY and PCPs' stacks for domains where it is most technically feasible and makes commercial sense. However, the simplicity benefits of vertically integrated solutions result in their continued use.

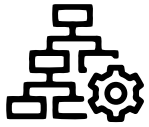
[1] NEPs = network equipment providers. SIs = systems integrators. PCPs = public cloud providers. ISVs = independent software vendors.

[2] vDU = virtualised distributed unit. [3] vCU = virtualised centralised unit.

ONI 2026 versus previous years: investments in open networks are being rationalised, with some scaling back of over-ambitious plans

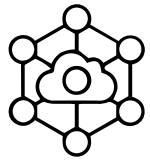
	Change since 2024	Takeaway
Fully open network architectures are being seen as less of a strategic priority	• The share of operators that already have a strategy for adopting an open network architecture has fallen from last year (31% in 2026, down from 36%), although it is still up from 2024 (22%). • That said, there has been an increase in the share of operators that are working on adopting or are planning to adopt such a strategy.	Declining interest in Open RAN and a shift to other priorities such as AI mean that operators are less ambitious about adopting fully open network architectures. Instead, operators are adopting the individual aspects of these architectures that they believe they would benefit most from.
Interest in cross-domain horizontal cloud platforms is falling	• Only 14% (down from 24% in 2025) of operators currently have a horizontal cloud platform spanning multiple domains (core, RAN and edge). • However, the share of operators deploying a horizontal cloud platform has increased for the core domain (50%, up from 44% in 2024) and edge domain (22%, up from 8% in 2024).	Plans to build horizontal platforms spanning multiple domains were probably too ambitious and as such have been scaled back. A divergence in cloudification ambitions for the core versus RAN domain has also contributed to this. However, adoption of horizontal cloud platforms for standalone domains continues.
We measured limited progress in organisational maturity for advanced operators	• The improvements in average organisational maturity from 2025 to 2026 were driven by openness late adopters and openness emerging adopters. The openness leaders and openness followers made very limited progress in organisational maturity as measured by our benchmark.	Advanced operators are deprioritising investments in improving organisational maturity as they reach the limits of what they can achieve in the short term and rationalise the focus areas for investments in openness.

Open networks: calls to action for operators [1/2]



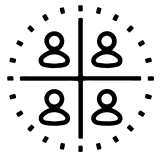
Embrace the different aspects of open networking pragmatically and target improved automation as a key goal

Operators can increase buy-in for, and the likelihood of success of, their open network transformation projects by targeting improved operational efficiency, network performance and network reliability through greater network automation. Operators can start small and then scale open networks rapidly after they develop learnings from their initial deployments.



Adopt horizontal network cloud platforms that simplify scaling network cloudification and unify automation within domains

Operators should define a horizontal network cloud architecture starting with the mobile core domain, and then later for the RAN domain. Migration of different workloads to the architecture can be gradual, but the architecture should be based on a common cloud platform and a common automation, observability and assurance layer that can support all NFs in each domain.



Capitalise on the learnings from advanced operators and the vendor partners that supported their transformation efforts

Early movers towards open networks have a wealth of best practices that other operators can use to ease the adoption of, and maximise the benefits that they achieve from, open networks. Additionally, many vendors now have ample experience supporting operators with open networks; this increases the importance of identifying and forming close partnerships with these vendors.

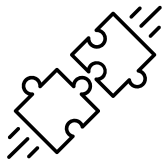
Open networks: calls to action for operators [2/2]

Align network architectures and operating models with the requirement to further integrate AI into network operations

Operators should evolve how they build their networks to facilitate greater use of AI (agents) going forward. This will include ensuring observability data is exposed and captured from network components, breaking operational silos to give AI systems end-to-end visibility and moving to architectural patterns (e.g. declarative operations) that fit well with agentic AI.

Engage neutral partners to safeguard openness and balance large vendor influence

Operators should prioritise partnerships with neutral players that are committed to supporting multi-vendor, horizontal cloud strategies, and work with NEPs that are willing and able to collaborate with these neutral players. Neutral partners help to maintain competitive pressure, preserve openness and prevent NEPs from fully dictating network architectures.



Deepen engagement in open networking initiatives to shape standards and vendor roadmaps

Operators should expand their involvement in initiatives such as the CNCF[1], Nephio, Sylva, the O-RAN Alliance and the AI-RAN Alliance, which drive open network principles, cloud-native operations and multi-vendor interoperability. Active participation strengthens operators' influence over standards development, fosters knowledge sharing and increases leverage over vendor ecosystems.

[1] CNCF = Cloud Native Computing Foundation.

Open networks vision and strategy

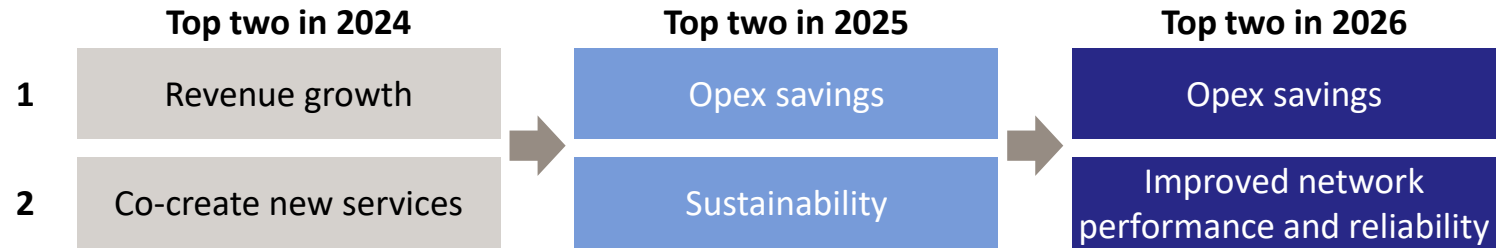
analysys mason

Openness vision: the desire for openness remains high, largely spurred by an aspiration to achieve greater network automation

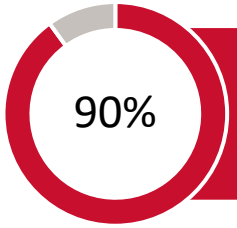
The ONI 2026 results show a continued commitment from operators to deploy disaggregated networks that use vendor-agnostic, horizontal cloud platforms, underpinned by open APIs and automation tooling and operational processes that are unified across different network functions. Operators' overall progress was less sizeable from 2025–2026 than 2024–2025. However, there has been a significant rise in interest in the potential for open networks to enable operators to achieve higher levels of automation.

Operators are opting to adopt more open approaches to application and infrastructure lifecycle management, instead of closed, black-box automation, as well as using unified automation frameworks and cloud-native automation approaches (that use GitOps, for example). This delivers improvements in operational efficiency, network performance and the time to deploy new services and security patches.

What are your top business outcomes or objectives that you are aiming to achieve by transitioning to open networks?

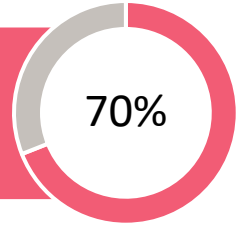


From 2025 to 2026, the share of operators reporting that opex savings were a top-three objective increased from 42% to 70%.



The share of operators that say that *streamlining and automating operational processes for greater agility and efficiency* is a benefit of transitioning to open networks

The share of operators that rank *automation* as being a critically important technical aspect of being an open operator; this is up from 40% in 2025



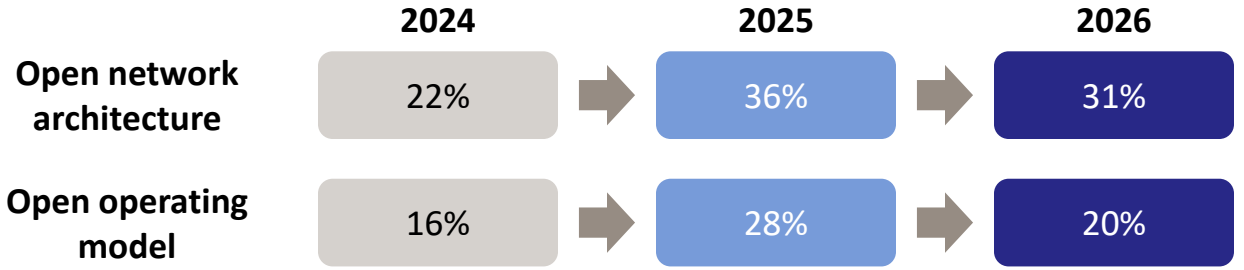
analysys mason

Open network strategy: operators are being more selective about how they deploy open networks as they look to rationalise their investments

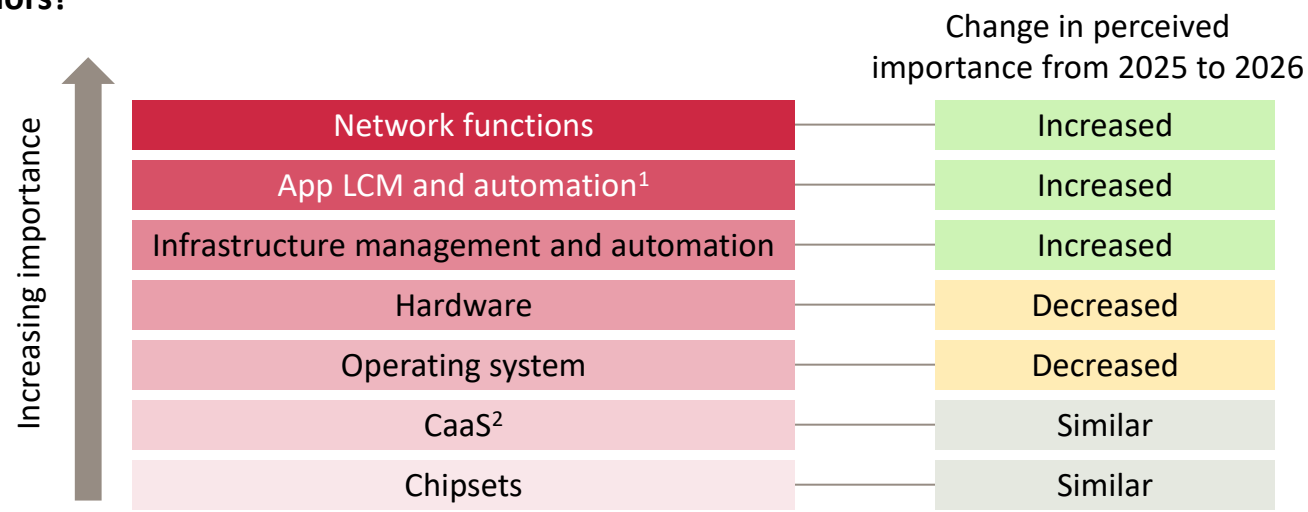
Momentum behind the adoption of open architectures and open operating models slowed from 2025–2026, following strong progress from 2024–2025, although adoption as of 2026 remains above 2024 levels. Declining interest in Open RAN, some scaling back of initially over-ambitious visions and a shifting focus to other priorities such as AI likely contributed to this adoption slowdown.

Operators are still selectively adopting aspects of open networks – for example, to achieve network agility and operational efficiency benefits (as discussed on the previous slide). After network functions, respondents said that openness has the most (and growing) importance for the automation and management cloud layers, while choice of vendors was seen as less important for the hardware and operating system layer in 2026 compared to 2025. Operators still aspire to have multi-vendor deployments but are more acutely aware of practicality concerns with these ambitions.

Do you already have a strategy for adopting an open network architecture and operating model?



In which of the following cloud layers is it most important to you to have openness / a choice of vendors?



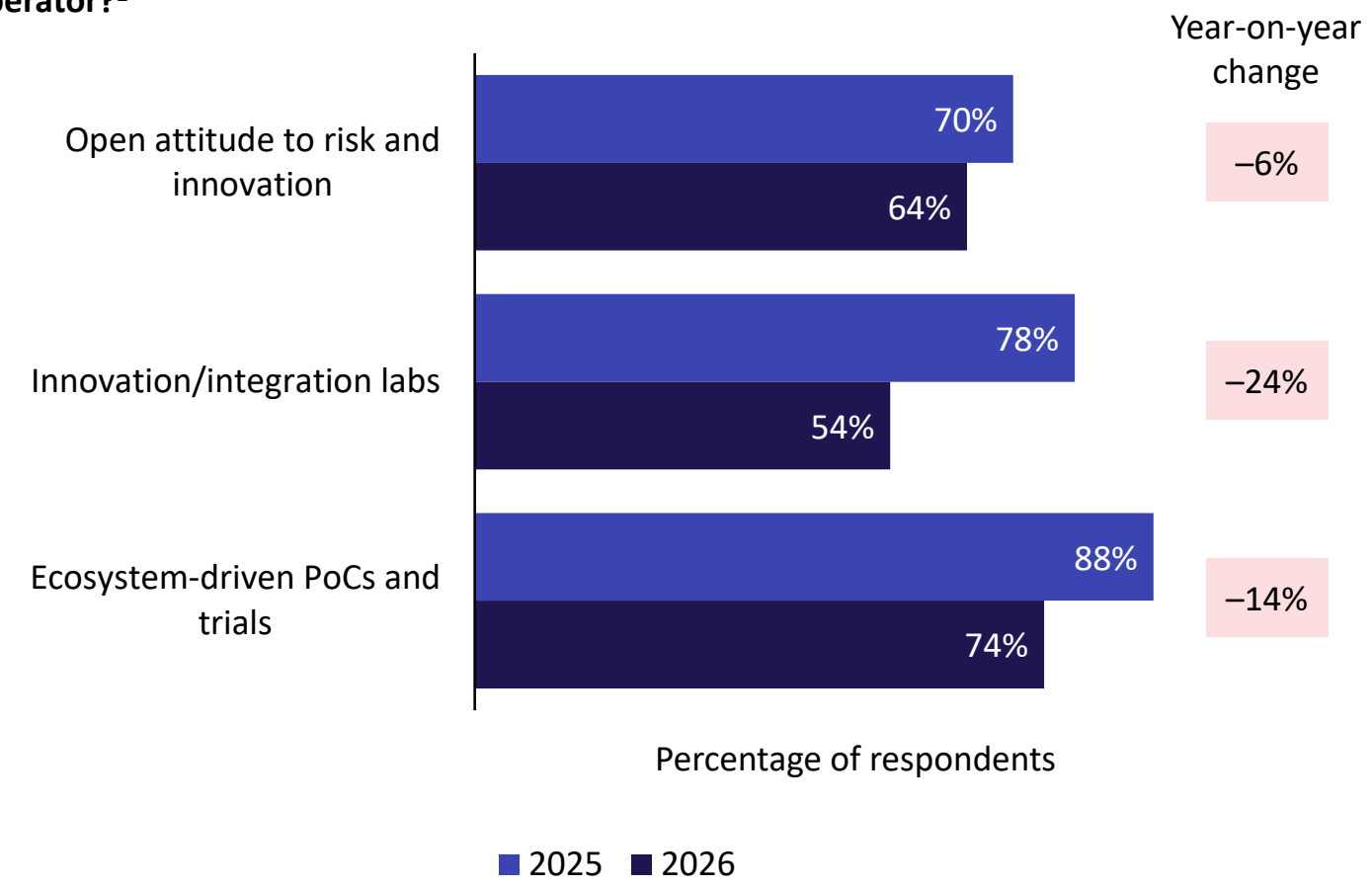
[1] LCM = lifecycle management. [2] CaaS = containers as a service.

Openness is becoming seen as more of a standard way of working, rather than an area that requires significant innovation efforts from operators

We are seeing a fall in the share of operators that say that having an open attitude to risk and innovation, having innovation and integration labs, and running ecosystem-driven PoCs are critical for their transition to becoming open operators. One explanation is that these changes are driven by operators' declining interest in multi-vendor Open RAN.

However, we also believe this is a result of the telecoms industry having now gained significant experience with open networks. As a result, advanced operators increasingly no longer see open networks as experimental or risky. Innovation undoubtedly remains important, as operators build horizontal cloud platforms and adopt new automation approaches, for example. However, as openness becomes a mainstream practice, it is seen as less critical for operators to commit to investing in significant in-house innovation work in order to make a success of their open network transformation projects.

How important is each of the following aspects to making a successful transition to becoming an open operator?[1]



[1] i.e. they were rated as having an impact of 3 or more out of 5.

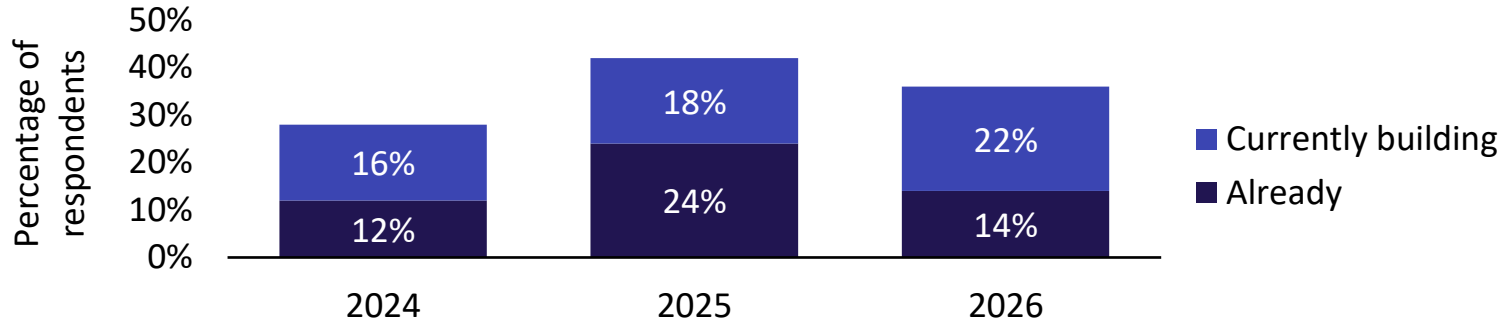
analysys mason

Operators' use of cross-domain horizontal platforms and open-source solutions is limited

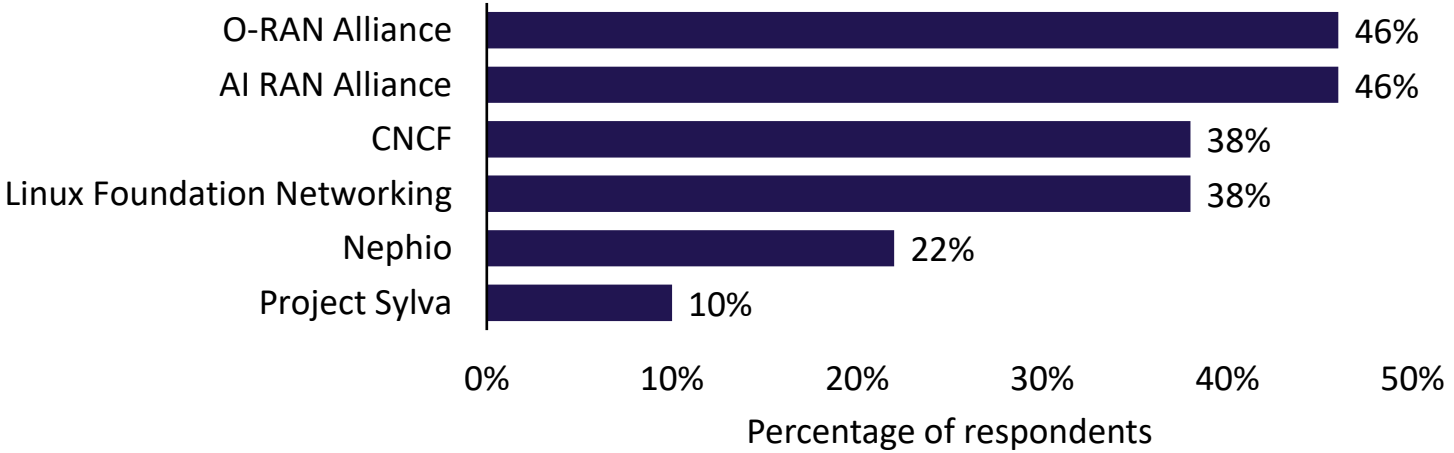
Operators have been scaling back their plans to deploy horizontal, vendor-agnostic cloud platforms that span multiple domains (i.e. core, RAN and network edge). Instead, operators are now favouring domain-specific platforms, in part because of variations in the requirements of and pace of cloudification in each domain, and as implementing a future-proof platform for a single domain can be challenging enough. However, it remains critical that operators have in mind how to integrate different domains, ensure unification of automation and orchestration, and scale common tooling and platforms across domains.

Additionally, the extent to which operators actively participate in key open-source projects related to open networks remains relatively low. Project Sylva, for example, shows strong potential to help operators address the complexities of deploying horizontal cloud platforms, but it has yet to attract involvement from more than a handful of European operators.

Do you have a horizontal, multi-vendor cloud platform strategy that spans multiple domains (core, RAN and network edge)?



Which of the following industry standardisation and open-source initiatives are you involved in?



analysys mason

Neutral vendors remain critical for operators' open network ambitions, although operators are also working more closely with NEPs

Operators need to work with vendor partners that can support them with designing, deploying and operating open networks. The trend – at least for open network architectures – seems to be for operators to work with a growing number of different partners. In 2026, operators partnered with an average of 5.4 categories of vendor to achieve their open operator ambitions, up from 4.5 in 2025 and 4.1 in 2024.

Increasingly, NEPs are considered an important partner for operators' open network transformation initiatives, which is perhaps indicative of NEPs' growing willingness to back the idea of open networks. However, IT vendors and systems integrators also continue to gain importance as neutral, third-party partners. Operators recognise that working with these neutral partners is essential when deploying multi-vendor networks and that they bring a strong commitment to, and an abundance of learnings related to, open networks.

Who are your strategic partners that will help you achieve your open operator ambitions?

	Partners for open network architecture			Partners for open operating model		
	2026 value	Change since 2025	Change since 2024	2026 value	Change since 2025	Change since 2024
Public cloud providers	64%	+26pp	+24pp	46%	0pp	+2pp
Network equipment providers	92%	+28pp	+20pp	40%	+18pp	+14pp
Systems integrators	68%	+28pp	+30pp	36%	+18pp	+26pp
Other operators	24%	–8pp	–2pp	36%	–4pp	–4pp
Software-only cloud platform providers	64%	+4pp	+8pp	18%	–32pp	–34pp
IT vendors	88%	+24pp	+20pp	60%	–2pp	–4pp
Consulting companies	8%	–4pp	–4pp	40%	–2pp	0pp
Independent software vendors	52%	+28pp	+34pp	10%	–18pp	–12pp

analysys mason

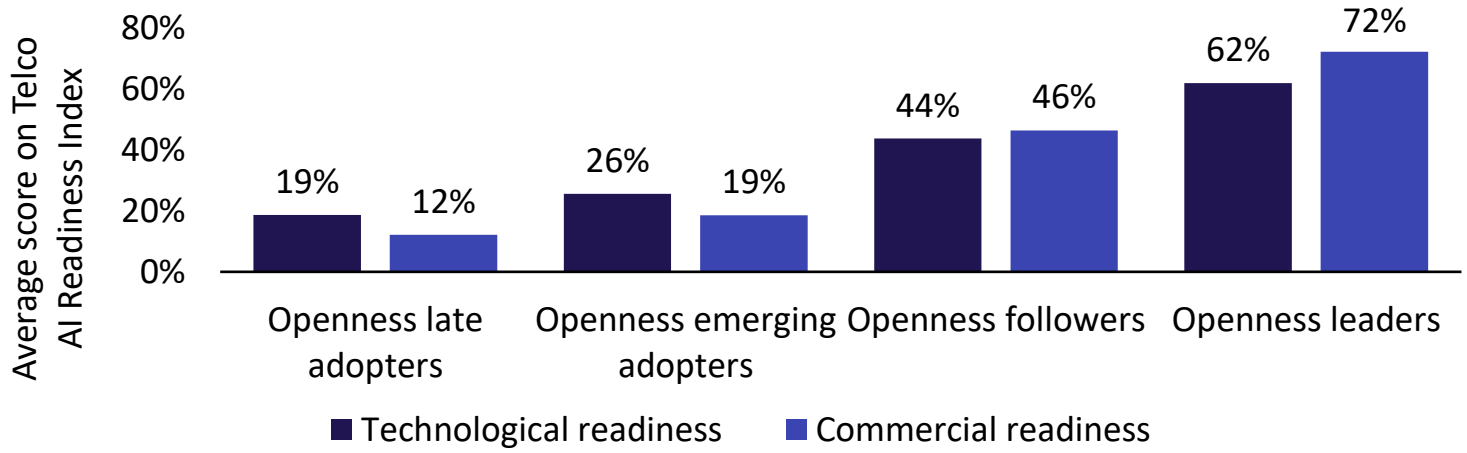
AI strategy: actual adoption of AI in the network is currently modest, but operators have strong ambitions for the next 2 years

Operators are looking to embed 'traditional' AI/ML, generative AI and agentic AI into their networks. So far, most operators are yet to operationalise and scale AI in the network. Those that are the most advanced in terms of the adoption of open networks tend to be the most mature in terms of implementing AI – both from a technological and commercial point of view.

Open and cloud-native networks lay the foundation for AI-native networks. However, rather than just being a feature extension, AI-native networks must be designed from the ground up to embed AI capabilities. Operators that have prioritised strategic decisions about their network architectures and operating models are likely to have the advantage in the AI era.

For more information, see Analysys Mason's Telco AI Readiness Index 2026

Telco AI Readiness Index score by Open Network Index operator category



Most popular use cases for AI in the mobile core network and RAN

	Already deployed	Over the next 2 years
Mobile core	Network design and planning	Network security
	Network security	Predictive maintenance
RAN	Network design and planning	Energy management
	Energy management	Network security

analysys mason

Domain-specific results: mobile core

analysys mason

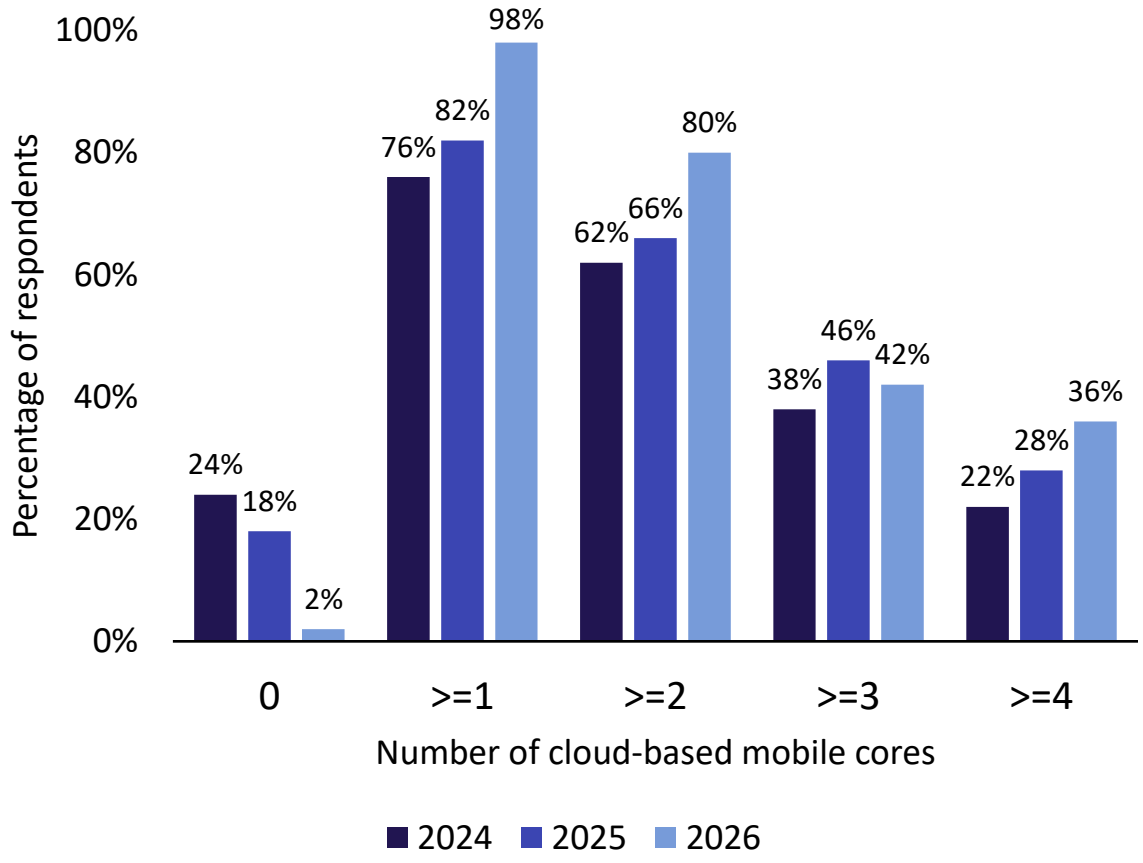
Cloud-based deployments: nearly all operators now have at least one cloud-based core, which sets the stage for adoption in other core domains

There has been a steady rise in the adoption of cloud-based mobile cores, with 98% of operators having deployed at least one cloud-based mobile core and 80% having deployed such a core for at least two domains. Most noticeably, the share of operators with cloud-based 5G NSA cores increased from 66% in 2025 to 94% in 2026. This is being driven by the adoption of dual-mode core (5G NSA plus SA) implementations, which are typically cloud-native. However, many operators that have deployed dual-mode cores have not yet activated 5G SA licences due to complexity and/or commercial reasons.

Further adoption of cloud-based mobile cores will accelerate in the coming years as operators apply the learnings from, and potentially also the platforms used for, the cloudification of their first domain to transform other mobile core domains.

Progress varies by region, with operators in developed Asia–Pacific and North America being most advanced in adoption.

Number of domains for which operators have already deployed cloud-based mobile cores (legacy / 5G NSA / 5G SA / IMS)



Average by region	
Developed Asia–Pacific	3.4
North America	3.2
Middle East and North Africa	2.3
Western Europe	2.2
Central and Eastern Europe	1.5
Emerging Asia–Pacific	1.4
Latin America	1.0
Sub-Saharan Africa	1.0

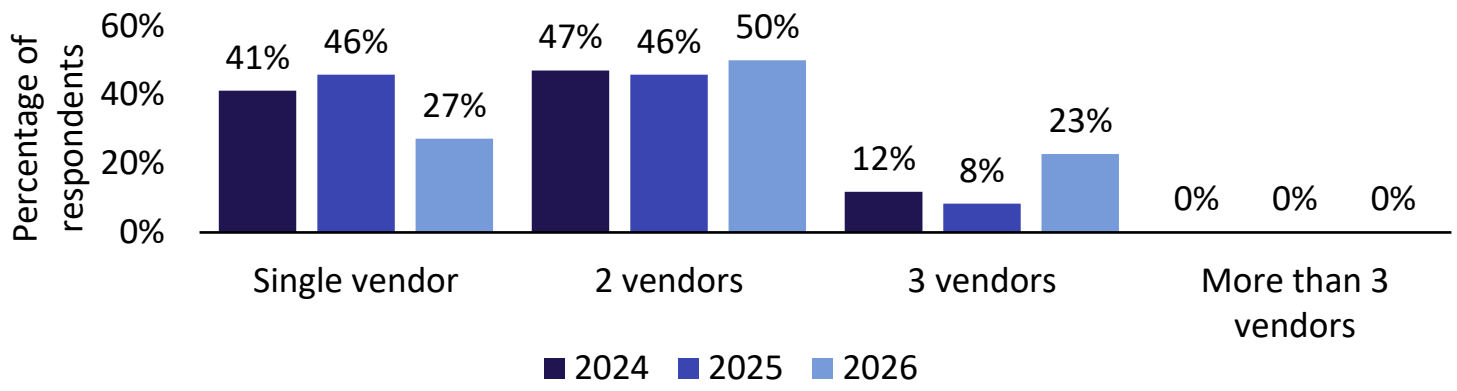
analysys mason

Multi-vendor adoption: operators have growing ambitions for multi-vendor 5G SA cores, but actual implementation progress remains limited

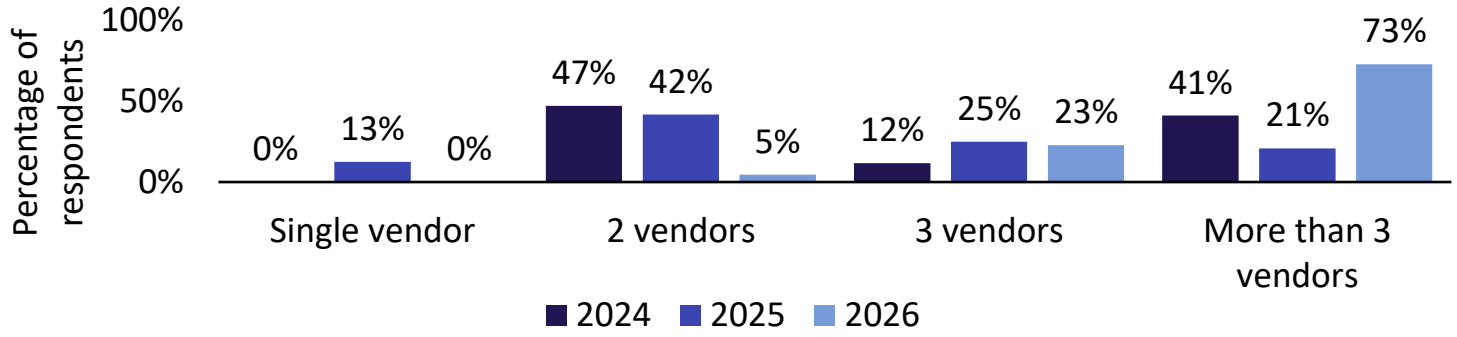
The adoption of multi-vendor 5G SA cores is accelerating. The share of operators' 5G SA core deployments that are multi-vendor increased from 54% in 2025 to 73% in 2026. This has been enabled by growing use of horizontal cloud platforms, cloud-native expertise in operators and network function vendor willingness to support multi-vendor deployments.

Operators' stated ambitions to increase the number of vendors in their 5G SA core in the next 3 years indicate that they are taking a staged approach to multi-vendor deployments. They plan to build capabilities internally before moving on to highly complex deployments. However, looking back at past iterations of this study, operators have generally been overly optimistic about the progress that they expect to make. In 2024, 41% of operators reported that they would use more than three vendors in their 5G SA core by 2027, but no operators from the 2026 study had yet achieved this.

How multi-vendor is your 5G SA core today?[1]



How multi-vendor will your 5G SA core be in 3 years' time?[1]



[1] Here we only include respondents that had already launched a 5G SA core when surveyed.

analysys mason

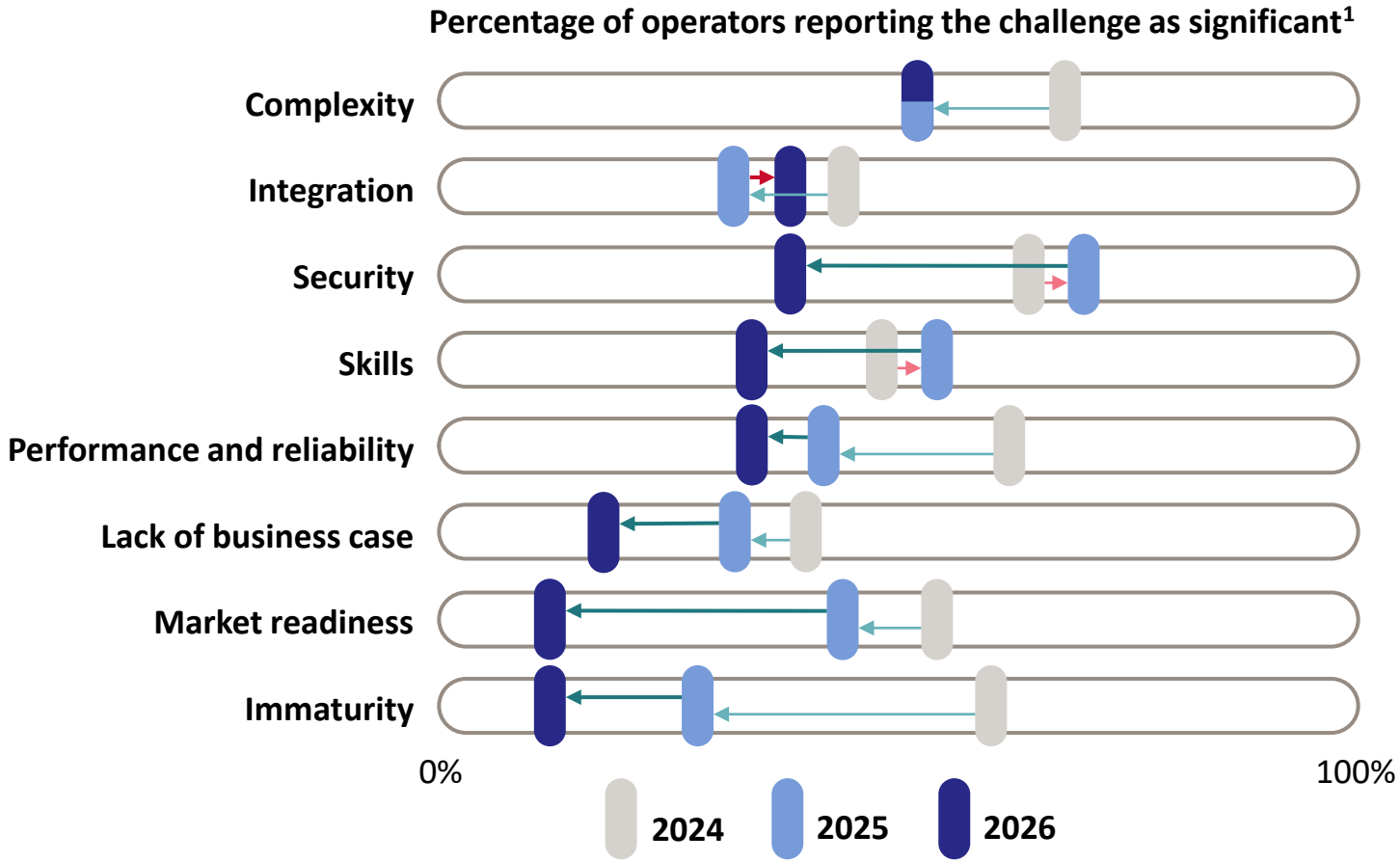
Openness challenges: operators have made significant progress in overcoming challenges with adopting open mobile core networks

A key factor behind the accelerating adoption of cloud-based mobile cores for 2025–2026 is that operators have now largely overcome the major challenges that had a significant impact on implementation progress.

The most impactful challenge in 2026 – the complexity of deploying and operating open and disaggregated core networks – was only rated as being significant by 52% of operators, down from 68% in 2024. This improvement reflects operators' internal efforts – for example, the development of in-house expertise and knowledge, as well as greater readiness of vendor partners to support the deployment and operations of open networks.

An improvement in market readiness has been observed as CNFs and cloud-native ways of automating networks have matured. The potential to deliver improved automation, and the emergence of new service opportunities (such as slicing and network APIs), have also strengthened the business case for open networks.

Score each of these challenges by the impact that they have on your progress towards adopting an open mobile core network.



[1] i.e. they were rated as having an impact of 3 or more out of 5.

analysys mason

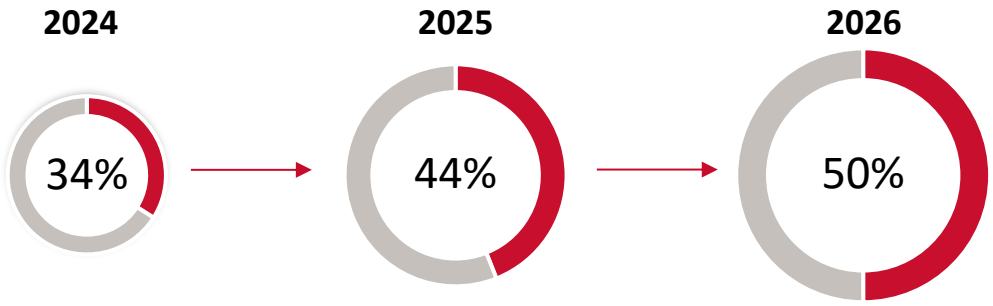
Horizontal cloud: advanced operators have built horizontal network clouds in house, while other operators are working with cloud platform providers

Adoption of horizontal clouds for the mobile core is accelerating as operators increasingly look to move beyond vertically integrated stacks. The most advanced operators have built their own horizontal platforms and/or are engaging with the Linux Foundation's Sylva project. Operators with less advanced in-house capabilities are instead adopting CaaS platforms from software-only cloud platform providers.

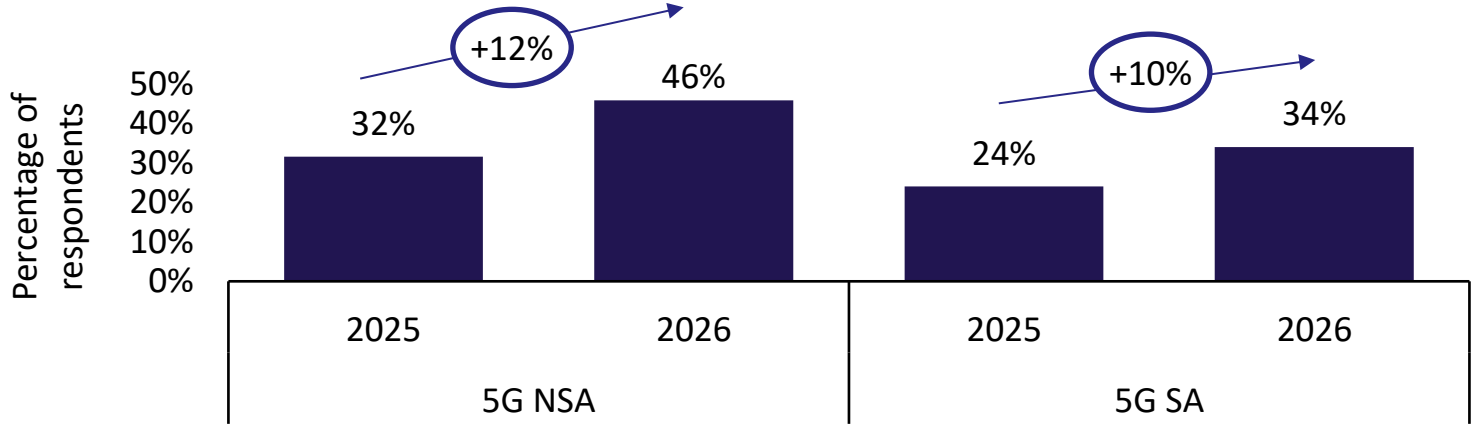
Horizontal platforms can facilitate improved automation and operational efficiency by enabling the reuse of automation and observability tooling and breaking down operational silos between different mobile core domains. They also streamline the adoption of cloud-based network functions for multiple core domains.

Growing (future-looking) interest in the public cloud for 5G SA cores is driven by NEPs' efforts to partner with PCPs to support resilience and disaster recovery use cases, as well as to enable SaaS models (mainly for smaller operators).

Do you have a horizontal network cloud platform (IaaS or CaaS) for your cloud-based mobile core?



Are you adopting / do you expect to adopt a do-it-yourself (DIY) deployment model for your 5G NSA and 5G SA mobile cores (rather than using NEPs' or PCPs' cloud stacks)?[1]



[1] A DIY deployment model means operators build their own disaggregated and multi-vendor private network cloud platforms using software from a software-only cloud platform provider and/or an open-source/in-house developed platform running on IT commercial-off-the-shelf (COTS) hardware.

analysys mason

Domain-specific results: RAN

analysys mason

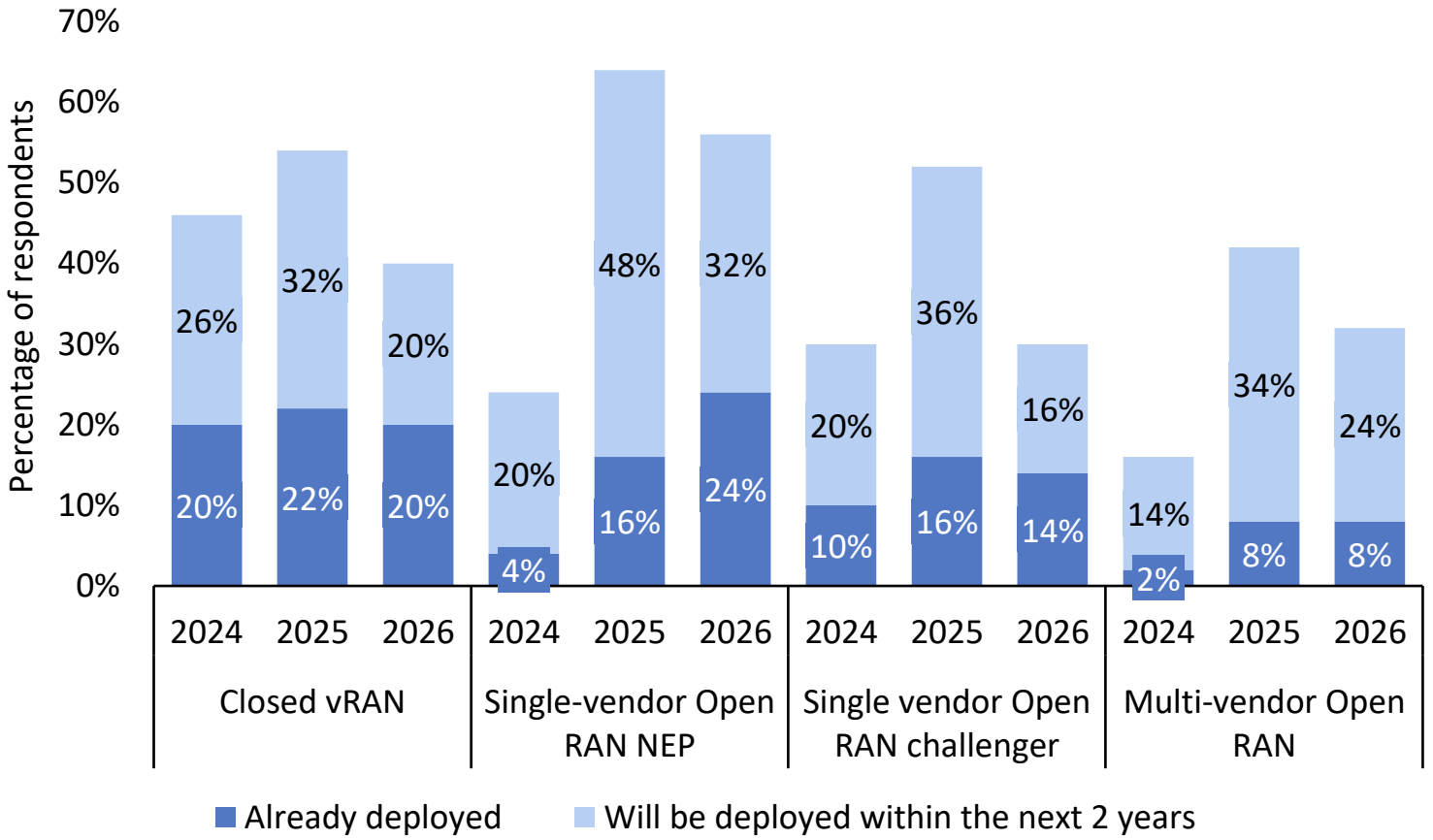
Cloud-based deployments: vRAN and Open RAN did not experience the take-off in adoption that had previously been expected

Much of the early excitement about multi-vendor Open RAN has now faded, following an end to initial PoCs/trials, tepid adoption at scale by operators and challenger vendors failing to gain a foothold. Efforts by operators to constrain RAN capex have also limited their appetite to invest in cloud RAN transformation.

A significant share of the progress in cloud RAN deployments in the past 2 years has been in the deployment of single-vendor Open RAN from NEPs. This is seen as a less risky deployment model that avoids perceived complexities with multi-vendor Open RAN while keeping open the possibility to introduce additional vendors in future thanks to the use of open interfaces.

That said, the gradual resolution of barriers to multi-vendor integration, the automation capabilities promised by the SMO/RIC[1], and the desire to implement AI-RAN are likely to serve to catalyse Open RAN adoption in the coming years.

When are you planning to adopt the following cloud-based RAN (vRAN and Open RAN) architectures?



[1] SMO = service management and orchestration; RIC = RAN intelligent controller.

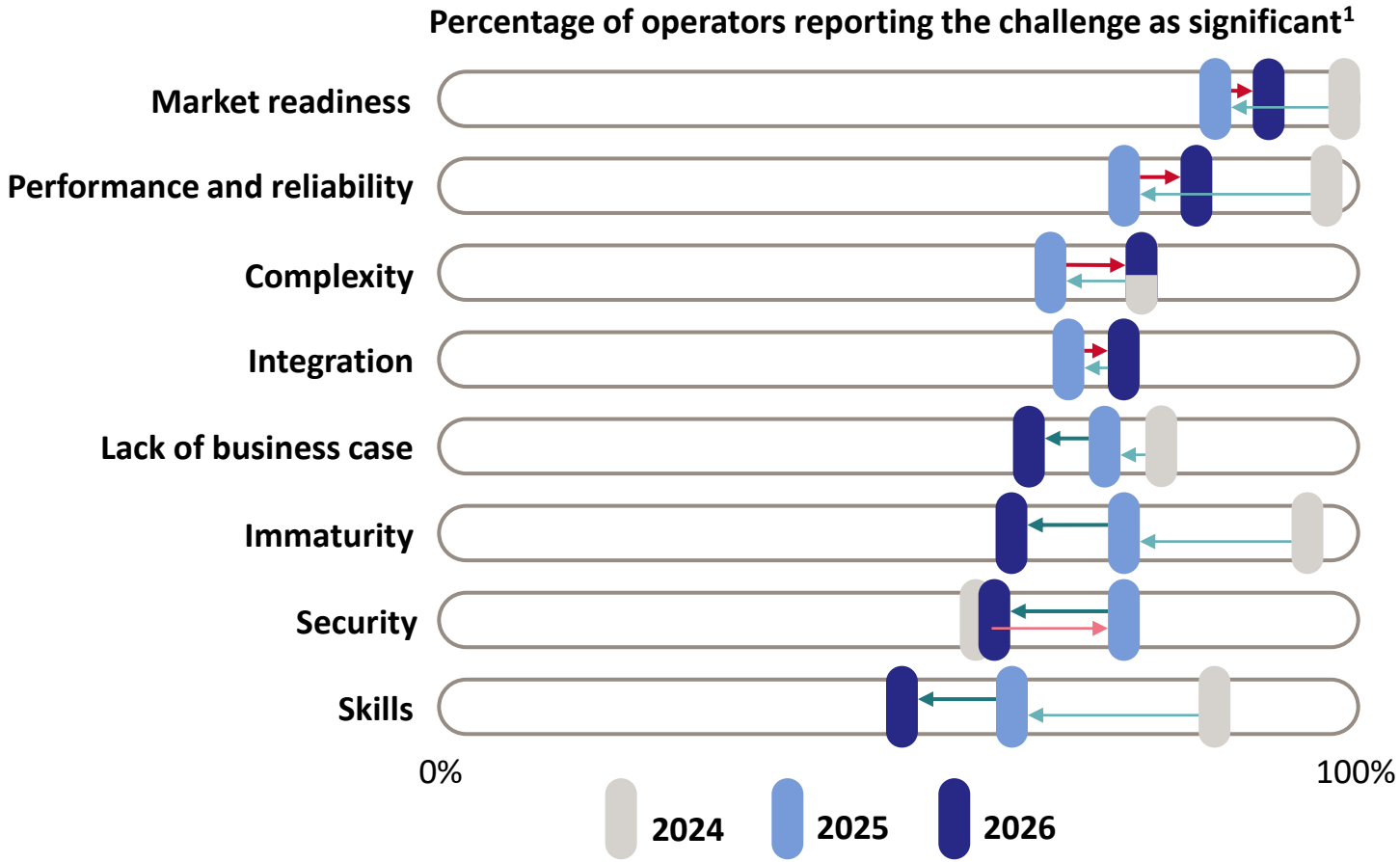
analysys mason

Openness challenges: barriers to Open RAN adoption have eased slightly since 2024, but significant challenges remain

Since 2024, progress has been made in nearly all areas with addressing the challenges associated with Open RAN (although some of the gains have reportedly been lost since 2025). The most notable improvements have been seen in ecosystem maturity and having access to employees with the skills required to deploy and operate Open RAN.

However, adopting Open RAN is still seen as very challenging in comparison with adopting traditional physical RAN (or open mobile core networks). Issues with market readiness, performance and reliability, complexity, and the difficulty of integrating solutions from multiple vendors stubbornly remain. While progress has been made with understanding the business cases for Open RAN, operators must weigh this against the risks of needing to work to overcome the range of issues associated with Open RAN. Consequently, many operators are opting to delay moving away from traditional physical RAN, or use single-vendor, rather than multi-vendor, Open RAN.

Score each of these challenges on the impact they have on your progress towards adopting Open RAN



[1] i.e. they were rated as having an impact of 3 or more out of 5.

analysys mason

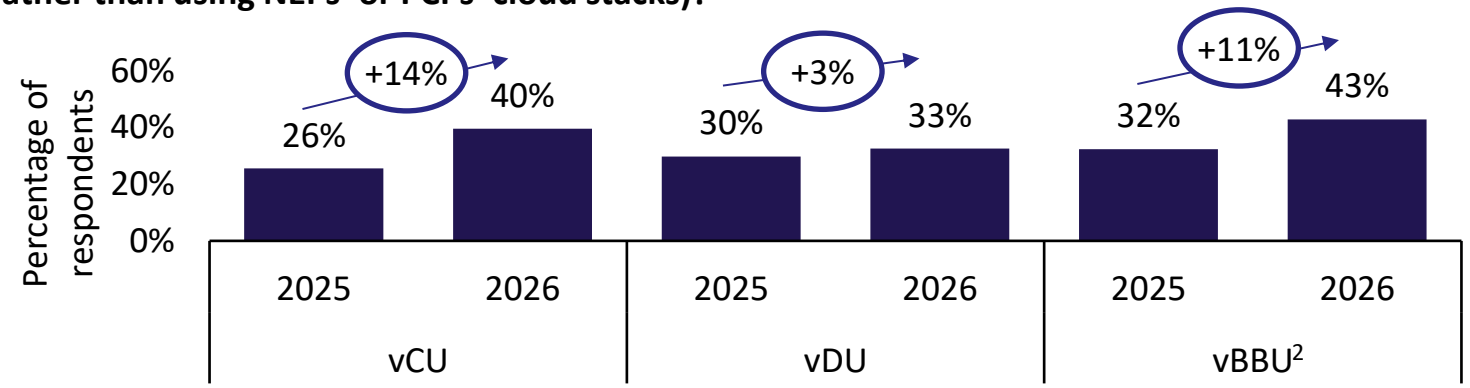
Deployment models: DIY RAN clouds are gaining traction over vertically integrated stacks; operators are exploring how to integrate AI into the RAN

Operators are increasingly looking to run cloud RAN functions on do-it-yourself cloud platforms that they either build in house or procure from software-only cloud platform vendors. Operators are approaching this in a somewhat piecemeal fashion given the persistence of traditional physical RAN; building a horizontal cloud platform that spans the entire RAN domain is not yet seen as a major priority.

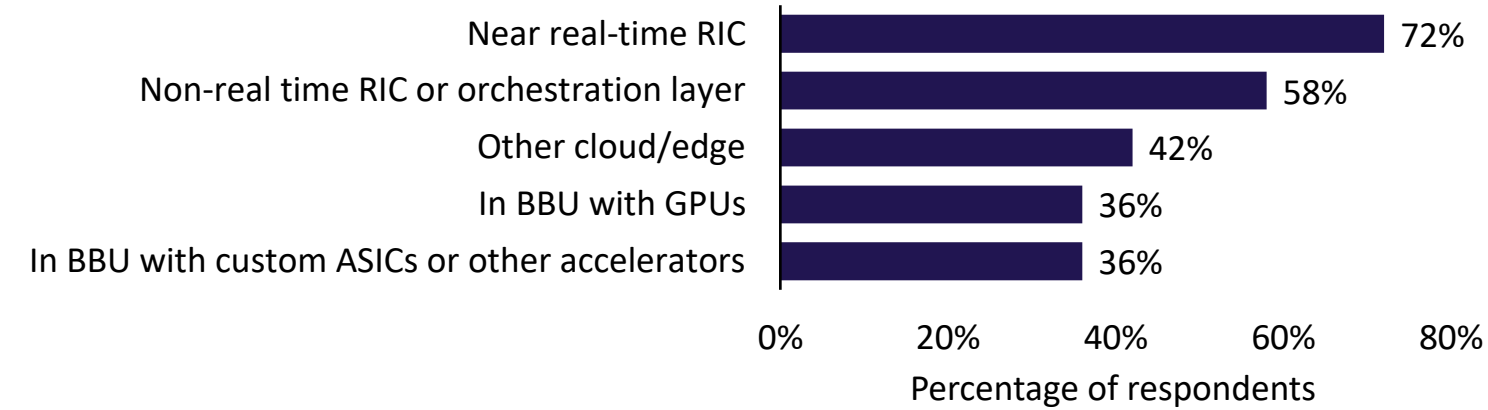
The need to support AI-RAN is becoming a key architectural consideration for operators.

Operators want to run AI workloads at RAN sites, primarily to support RAN operations, but also to facilitate offering new revenue-generating services. One option to achieve this is for the compute that supports traditional and/or cloud RAN to be separate from the compute (such as CPUs, GPUs and custom ASICs) used for running AI workloads. Alternatively, RAN and AI workloads can be run on the same compute platforms that combine various forms of accelerated compute.

Are you adopting / do you expect to adopt a do-it-yourself (DIY) deployment model for your RAN (rather than using NEPs' or PCPs' cloud stacks)?



In which areas of the network do you expect to deploy AI RAN capabilities?



[1] CPU = central processing unit; GPU = graphics processing unit; ASIC = application-specific integrated circuit.

[2] vBBU = virtualised baseband unit.

analysys mason

Domain-specific results: edge

analysys mason

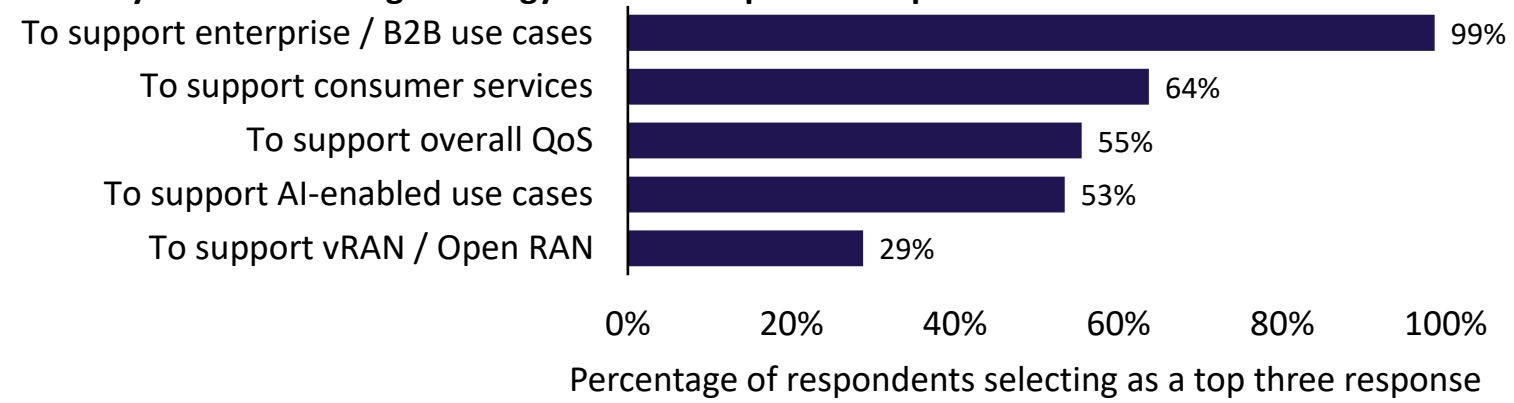
Edge strategy: investment in edge continues, with 68% of operators having now deployed at least one (and 46% at least two) edge use cases

Supporting enterprise / B2B services is nearly always a key component of operators' edge strategies as operators aim to support a range of different industry verticals including transport, utilities, public safety and manufacturing with URLLC and healthcare with mMTC.[1] Offering improved consumer services and better overall quality-of-service (QoS) also feature heavily in operators' edge strategies.

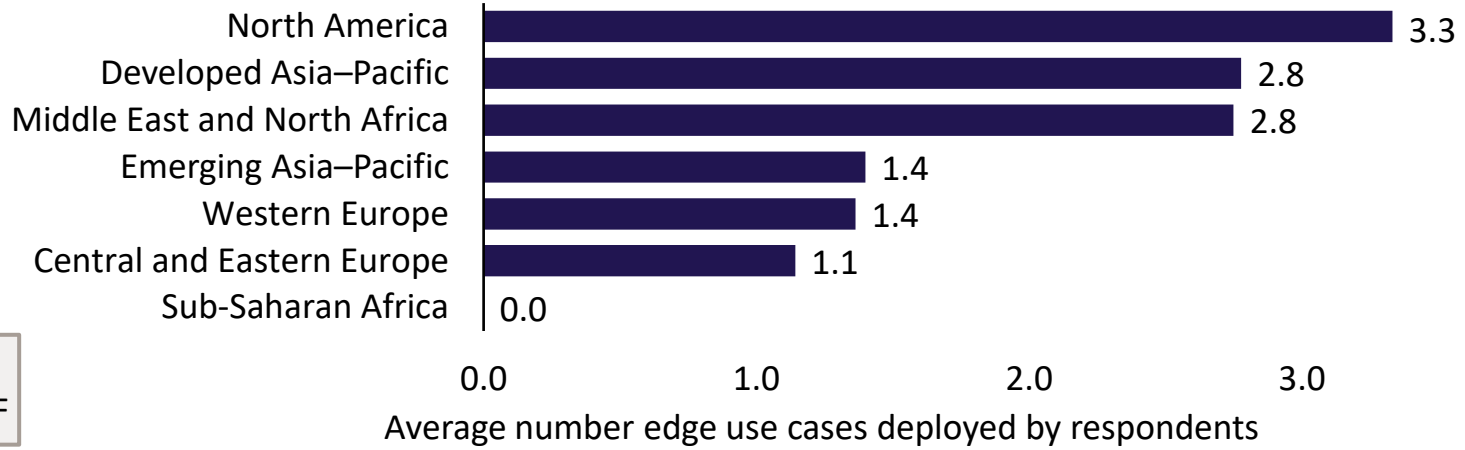
North American operators have the most advanced edge strategy; they are adopting a broad mixture of edge use cases and are typically ahead of their peers in other regions in the adoption of edge AI. The next most advanced operators are those in developed Asia–Pacific and the Middle East and North Africa, whose edge strategies are primarily centred around supporting a distributed user plane function (UPF) and URLLC.

Edge use cases considered:	• eMBB • mMTC • AI • URLLC • FWA • Distributed UPF

What is your network edge strategy? Pick the top three responses.



Average number of edge use cases already deployed by operators in each region



[1] mMTC = massive machine-type communications.

analysys mason

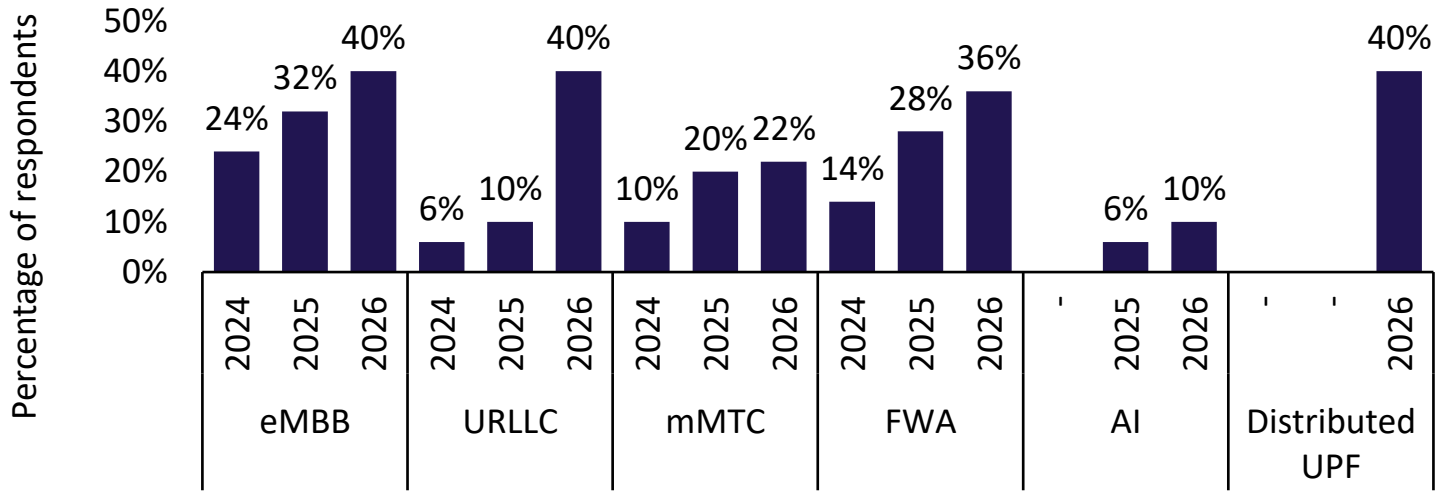
Deployment timelines: adoption of various edge use cases is accelerating, with AI expected to be the primary catalyst for further edge investment

Deployment by operators of eMBB, URLLC and FWA has increased significantly over the last 2 years as operators' edge strategies, infrastructure and platforms have matured. Operators expect a continuation of this trajectory over the next 2 years.

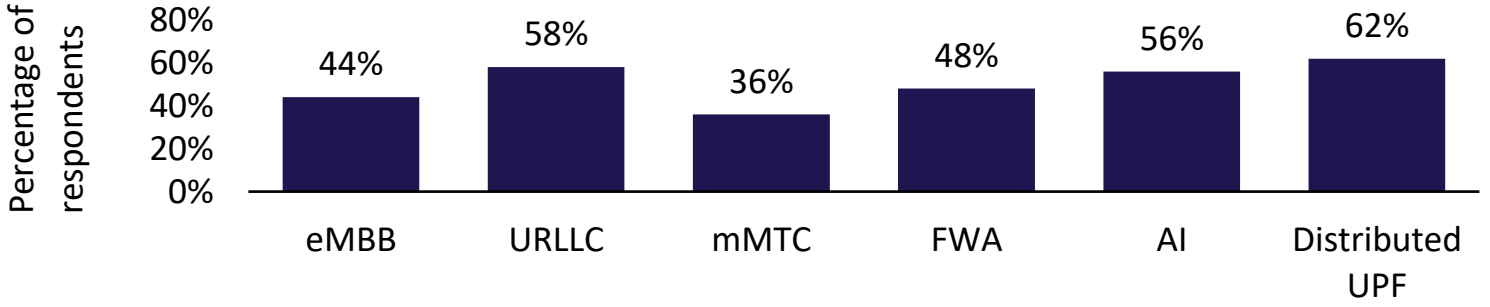
Investments in metro edge locations have also allowed 40% of respondents to deploy a distributed UPF, enabling them to deliver lower-latency connectivity and reduce backhaul requirements. 62% of respondents are set to have deployed a distributed UPF in the next 2 years, which will make it the most popular edge use case.

However, the most progress will be made with deploying edge AI. While it is currently nascent (supported by just 10% of operators), 56% will support edge AI within the next 2 years. The share of respondents already deploying edge AI only rose from 6% to 10% from 2025 to 2026, but the share of operators beyond the planning stage increased from 46% to 84%.

Have you already deployed the following edge use cases?[1]



Will you deploy the following edge use cases within the next 2 years?



[1] We only asked about AI as a use case in 2025 and 2026, and distributed UPF as a use case in 2026.

analysys mason

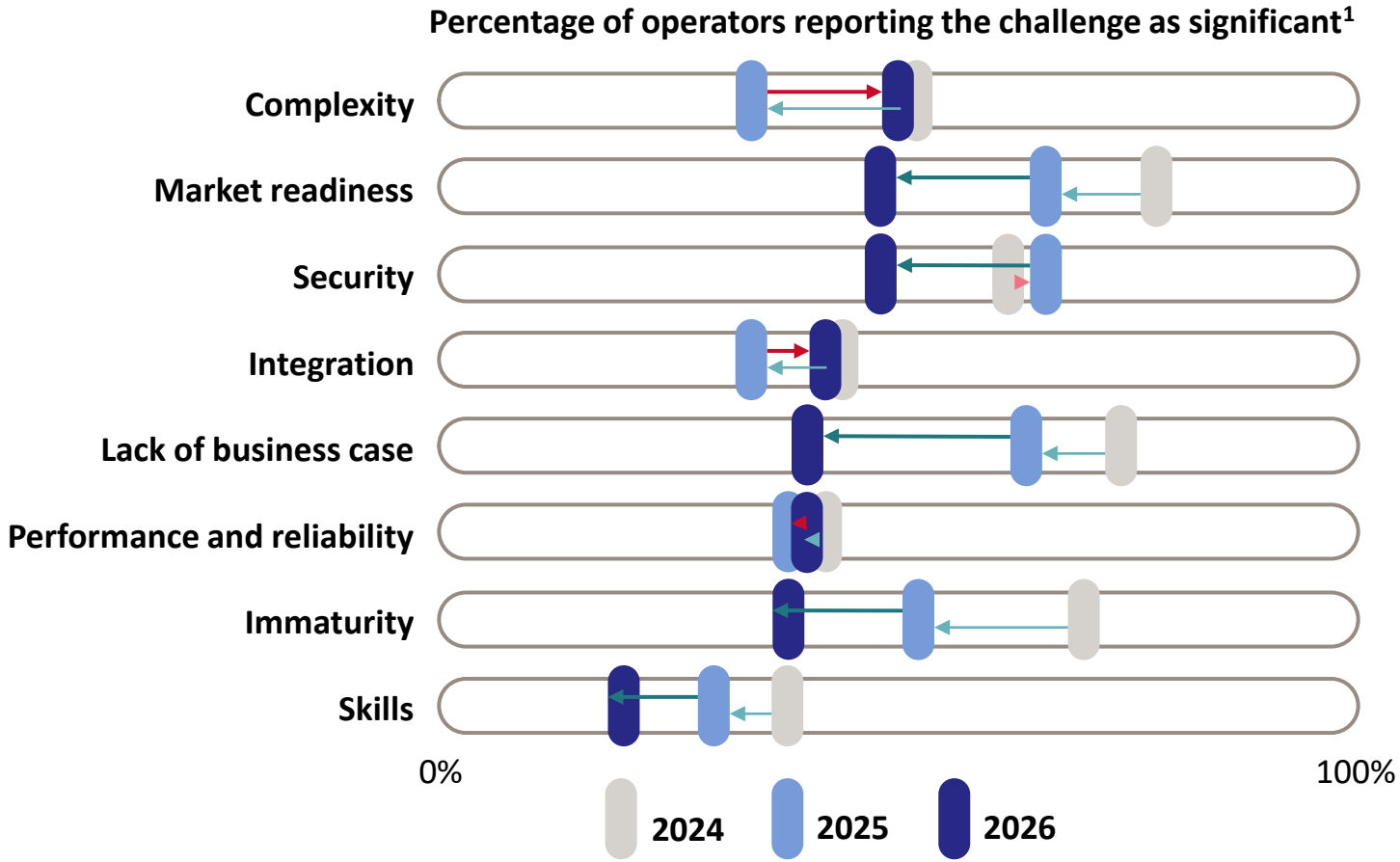
Openness challenges: AI is making the business case for investing in edge infrastructure much more convincing

In 2024, 74% of operators rated a lack of business case as a significant challenge for adopting open network edge environments. By 2026, this had fallen to 40%.

Traction for operators' first wave of edge infrastructure deployments in the early 2020s was held back by a combination of the limited number of use cases that could justify the cost and complexity of using edge infrastructure, the fragmentation of infrastructure and a lack of developer ecosystem. However, the situation for edge AI is different.

Edge AI is deemed essential to support numerous high-value use cases for enterprises. Additionally, operators can tap into NVIDIA's developer ecosystem, which is deeply embedded in several industry verticals, as well as orchestration solution providers that have built solutions to manage distributed GPU infrastructure. Consequently, AI helps provide a more compelling case for a second wave of investment in the edge.

Score each of these challenges on the impact they have on your progress towards adopting an open network edge environment



[1] i.e. they were rated as having an impact of 3 or more out of 5.

analysys mason

AI strategy: operators are still trying to identify the most lucrative edge AI use cases, but several candidates have already emerged

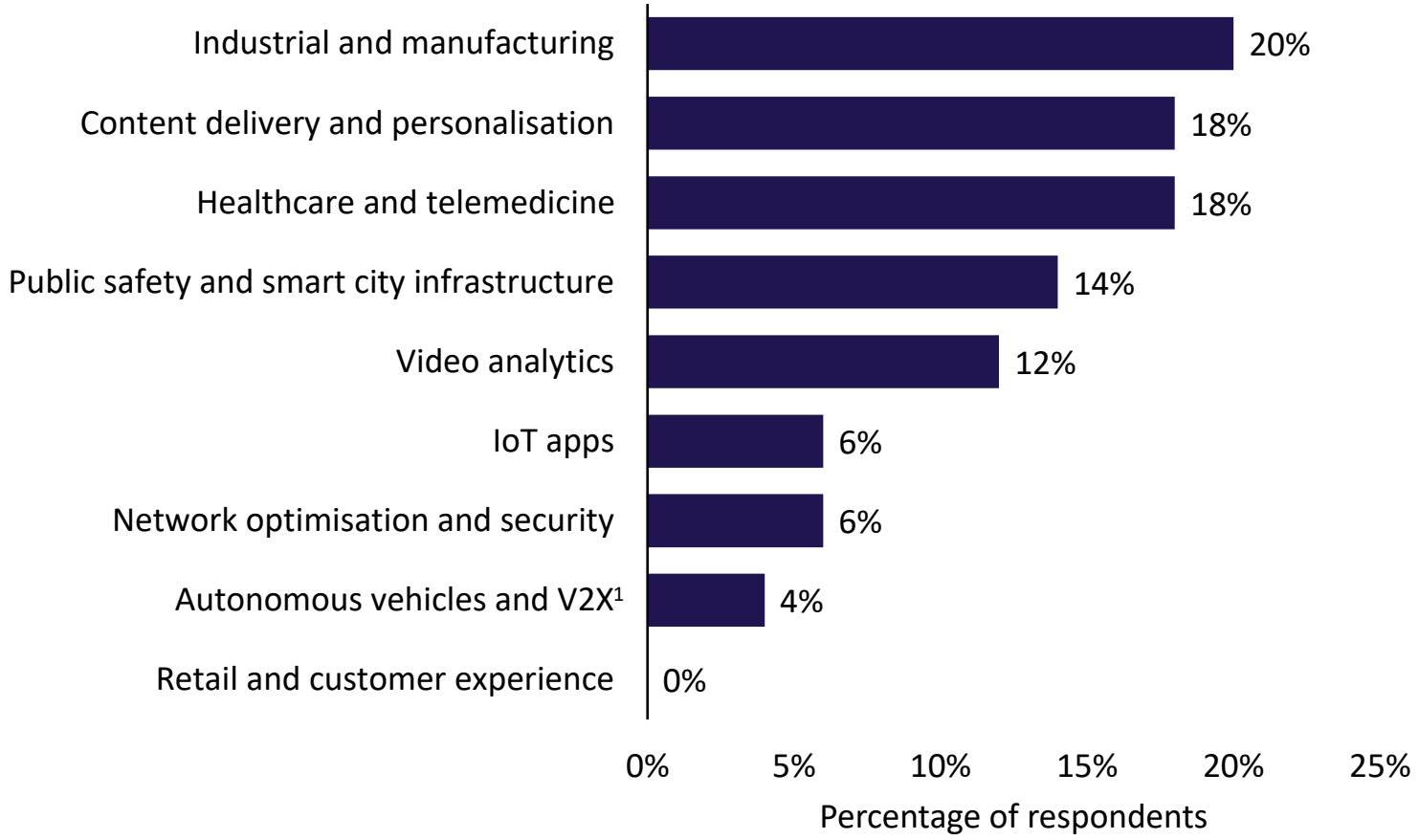
A key benefit of edge AI is the ability to deliver low-latency inferencing. This is a necessity when using AI for monitoring and/or managing industrial and manufacturing processes (for real-time video analytics and autonomous vehicles use cases, for example).

Edge AI also has utility when there is a need to support and/or aggregate inputs from a large number of concurrent users or devices without backhauling large amounts of data to centralised data centres. Applicable use cases include content delivery and personalisation, public safety and smart cities.

Additionally, edge AI is sought after for inferencing use cases that act on highly sensitive data – for example, in the healthcare sector. Using the edge avoids the need to transfer this data to far-off data centres.

The use of edge AI for mission-critical use cases will require the above properties as well as the ability to achieve strict SLAs.

What is the top AI use case that you are targeting/planning to target in the network edge?



[1] V2X = vehicle-to-everything.

analysys mason

Deployment model: operators are increasingly using PCPs' edge stacks; they are partnering with IT vendors for their MEC platforms and DIY edges

Adoption of PCP edge stacks is increasing. This is largely a result of operators adopting a PCP edge stack alongside another edge strategy; 26% of respondents have now done this.

As MEC[1] platforms and DIY edge platforms have grown in popularity, operators are increasingly partnering with IT vendors to support their open edge network ambitions. Fully outsourced models for edge infrastructure are also gaining traction, although they are currently only used by a relatively small share of operators.

The share of operators that have implemented horizontal cloud platforms for their network edge has risen from 8% in 2024 to 18% in 2025 and to 22% in 2026. Operators increasingly recognise the need to have an open and flexible edge platform capable of supporting multiple different workload types. However, more investment may be required in these platforms to ensure they can support the diverse brands/types of AI accelerators that are expected to be used in the coming years.

Which of the following models are you adopting for your network edge strategy?

	MEC platform	DIY network edge	PCP edge stack	No plans
2026	38%	34%	60%	0%
Change since 2025	+4pp	+6pp	+26pp	–4pp
Change since 2024	+4pp	+16pp	+16pp	–2pp

Which of the following options is / will be the best suited to support your internal teams in addressing the most pressing challenges with your open edge network architecture?

	SI	NEP	PCP	Other IT	Outsourced
2026	12%	2%	24%	46%	16%
Change since 2025	–7pp	–6pp	–5pp	+9pp	+10pp
Change since 2024	–3pp	–2pp	–18pp	+17pp	+6pp

[1] MEC = multi-access edge computing.

analysys mason

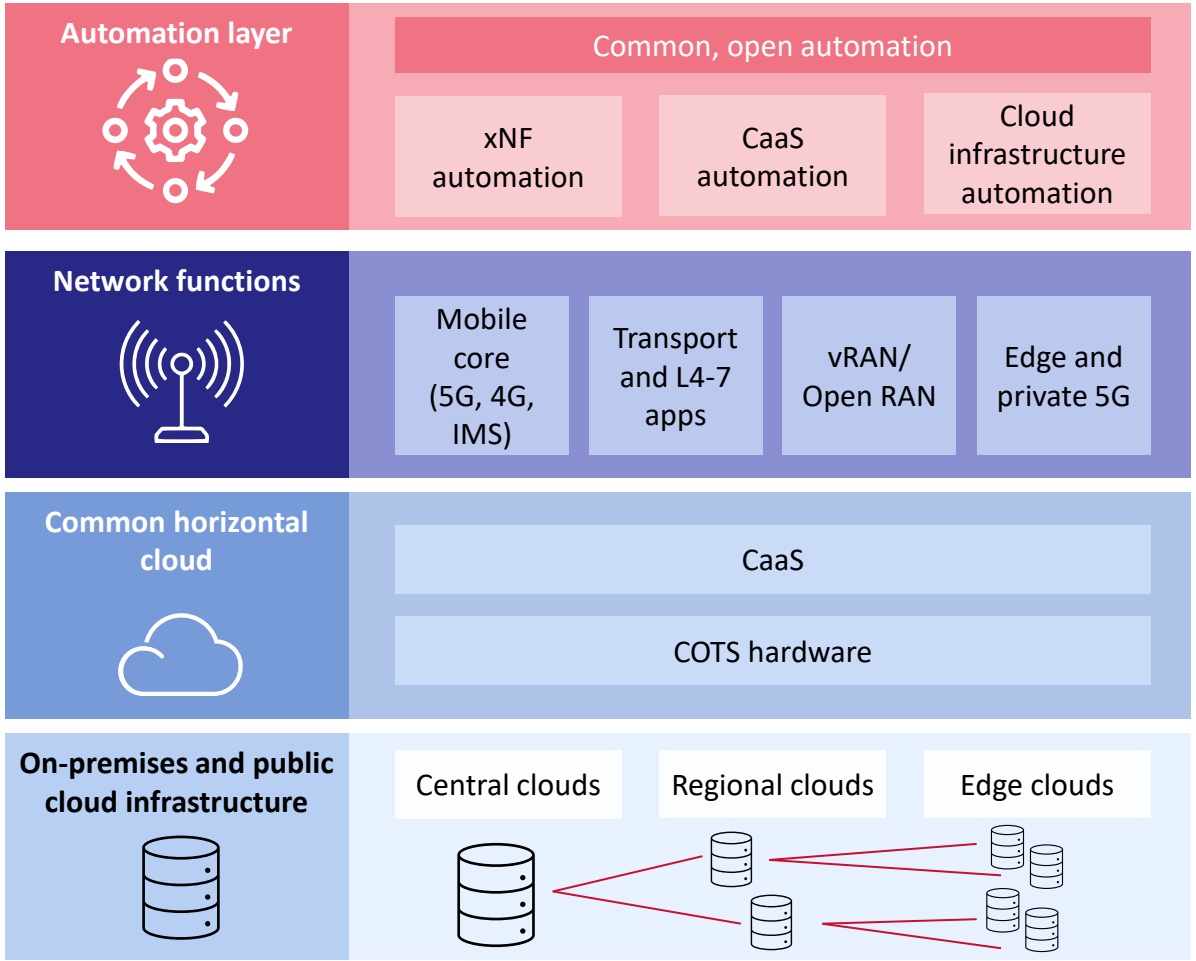
Annex

What is an open network?

Open networks are based on non-proprietary technologies and standards, including open hardware and software developed by open communities, as well as software technologies that individual vendors are exposing, typically through open application programming interfaces (APIs), to anyone who wants to use them.

Open networks draw on the work of multiple standards organisations, both telecoms-specific and, increasingly, from the general IT world. Open networks are software-driven, running on de facto standard cloud technologies on top of COTS hardware, with horizontally layered architectures that reduce dependencies on proprietary vendors across layers. In an open network, network functions of multiple types from multiple vendors can run on open, horizontal cloud software and hardware platforms.

Networks based on open technologies encourage faster and higher levels of innovation than can be achieved by a single vendor focused on proprietary, multi-layer development. Openness also lowers barriers to market entry, which in turn creates more vendor choice and deployment flexibility at each level of the open network architecture. Open networks can be managed and automated using widely available, non-proprietary tooling, which reduces operational costs.



Source: Analysys Mason

analysys mason

The Open Network Index (ONI) assesses the technical and organisational progress that operators are making towards deploying open networks

Open network domain execution

The ONI assesses deployment maturity across the mobile core, RAN and edge. It reflects operators' timelines for adopting open networks, the scale of their deployments and the maturity of their commercial models.

Adoption of open cloud

The ONI tracks operators' adoption of horizontal, vendor-agnostic and disaggregated cloud platforms as the foundational technology for open networks.

Open vendor approach

The ONI assesses operators' plans and implementation progress towards including multiple vendors in their 5G and edge deployments.

Openness vision

The ONI evaluates the importance that operators place on key aspects of open networks, as well as the commercial benefits and objectives that they aim to achieve by committing to an open network approach.

Open architecture and operational strategy

The ONI assesses how far operators are in terms of planning or implementing open architecture and operations strategies, based on horizontal cloud platforms, cloud-native automation and tooling.

Open partnerships and industry co-operation

The ONI evaluates the openness of operators to partnerships with new vendors, as well as their level of co-operation with industry alliances and standards bodies.

analysys mason

ONI operator category definitions

Category	Definition
Openness leaders	These operators have a deep commitment to open networks, as evidenced by their advanced vision for openness, supported at the highest levels of the organisation, and their roadmaps for, and progress towards, multi-vendor, 'plug-and-play' network implementations at scale, based on horizontal cloud architectures. Operators from developed Asia–Pacific and North America are most likely to be in this category.
Openness followers	Operators in this category are implementing aspects of open networks, but they are more tactical in their approach than those in the openness leaders category. These operators have a more limited vision and strategy than the leaders, and are driven by pragmatic, rather than strategic, business concerns. A number of openness followers are at a similar stage of network deployment to the openness leaders, but they have a weaker commitment to advanced horizontal cloud platforms. Other openness followers have made slower progress towards the implementation of truly open, multi-vendor and standards-based networks than openness leaders because they lack the strong level of senior executive support that the openness leaders enjoy.
Openness emerging adopters	This category includes two types of operators. Firstly, it includes operators with emerging strategies that are strikingly aligned with those of openness leaders, although they are only in the early stages of implementing the architectures and operating models they have defined. Secondly, it includes more cautious adopters with more pragmatic strategies and lower ambitions for open networks.
Openness late adopters	This category includes operators that do not have a clear concept of what an open network is, have not yet started to formulate a strategy for achieving openness and lack the senior executive support for investment in the organisational, cultural and technical change needed to support open networks. They have a low appetite for risk, and perceive significant risks associated with moving away from incumbent vendors and more 'traditional' networking approaches.

Network cloud infrastructure deployment model definitions

Model	Definition
Vertically integrated/pre-integrated stack	Traditional network equipment providers (NEPs) such as Ericsson, Huawei and Nokia supply the entire 5G core or RAN cloud (or a large part of it) as a vertically integrated stack (such as Ericsson xNFs and Ericsson CNIS) or pre-integrated stack (such as Nokia xNFs and Red Hat OpenShift). We consider the combined, single xNF vendor-based Nokia and Red Hat OpenShift stack in this category, unless the operator expands it into a multi-vendor, horizontal cloud platform.
Do-it-yourself (DIY) private cloud	Operators build their own disaggregated and multi-vendor private network cloud platforms using software from a software-only cloud platform provider (such as Red Hat, SUSE, VMware and Wind River) and/or an open-source/in-house developed platform running on IT commercial-off-the-shelf (COTS) hardware.
Public cloud provider (PCP) cloud stacks	A public cloud provider (such as AWS, Azure and Google Cloud) supplies the cloud stack to create a private/hybrid network cloud platform, often via a managed service model.

About Analysys Mason

We are the leading specialist consultancy, creating lasting value in technology-intensive industries, including telecoms, digital infrastructure, software, IT services, space, defence, manufacturing and logistics.

Established in 1985 as a pioneer in telecoms research and advisory, the firm built its reputation on deep analytical insight and advanced economic modelling.

Over more than four decades, Analysys Mason has evolved into a trusted adviser to businesses, investors and governments worldwide. Our experts deliver high-impact results and transformative change across our clients' most critical strategic, regulatory, technology, transaction and transformation initiatives.

Shaping the next

analysys mason

Our Research and Insights portfolio puts clients at the forefront of change

Our **qualitative and quantitative research** is the go-to-resource that telecoms operators, vendors, investors, satellite operators, digital infrastructure companies, utilities, information services, regulators, industry associations and systems integrators rely on for **strategic planning, investment decisions and marketing**.

At the core are the **Analysys Mason Knowledge Centre and DataHub**, our leading market intelligence platforms, where subscribers have instant access to reports, insights, forecasts and 110 million data points.

Business Services	Consumer Services	Networks and Cloud	Operational Applications	Space	Communications Infrastructure Data	Telecoms and Media Data	SMB IT Spend Data
• Enterprise Services • IoT Services • Private Networks • SME Services	• Fixed Services • Fixed–Mobile Convergence • Mobile Services	• AI and Data Platforms • Cloud and AI Infrastructure • Fixed Infrastructure • NaaS Platforms and Infrastructure • Operator Spending • Sustainable Networks • Wireless Infrastructure • Wireless Technologies	• Applications Data and Strategies • Automated Assurance • Customer Engagement • Monetisation Platforms • Network Automation and Orchestration • Service Design and Orchestration	• Defence and Sovereign Space • Earth Observation • Emerging Space Applications • Non-GEO Constellations Analysis Toolkit (NCAT) • Satellite Broadband • Satellite Capacity • Satellite D2D • Satellite Manufacturing and Launch • Satellite Mobility • Satellite Networking Technologies	• Cell Sites • Data Centres • Space Spectrum • Submarine Cables	• Developed Asia–Pacific Metrics and Forecasts • Emerging Asia–Pacific Metrics and Forecasts • European Core Forecasts • European Country Reports • European Quarterly Metrics • Global Pay-TV and Video Metrics and Forecasts • Global Telecoms Data and Financial KPIs • Latin America Metrics and Forecasts • Middle East and Africa Metrics and Forecasts • North America Metrics and Forecasts	• Business Applications • Cyber Security • Devices and Peripherals • IT Infrastructure • IT and Managed Services • UC and Digital Services

We support clients with decision-making and complex change journeys

What we do

Strategy Practice

We unlock value from complex technologies, with commercial strategies for businesses and regulatory strategies for governments and regulators, so they can **maximise opportunities**

Transaction Practice

We assess the commercial viability and long-term value of investments in technology-intensive industries, so clients can **make confident investment decisions**

Transformation Practice

We manage and de-risk the transition from strategy to execution to make our clients' organisations future-ready, ensuring that strategies **deliver measurable value**

Research

We provide insights and data on foundational technology and digital infrastructure that helps clients anticipate the future, enabling them to make **evidence-based, robust decisions**

analysys mason

PUBLISHED BY ANALYSYS MASON LIMITED IN JULY 2026

Analysys Mason Limited. Registered in England and Wales with company number 5177472. Registered office: 5th Floor, 22 Upper Ground, London, SE1 9PD, UK.

www.analysysmason.com | enquiries@analysysmason.com

Bonn Dubai Dublin Frankfurt Kolkata London Madrid Manchester Milan Munich New Delhi New York Oslo Paris Riyadh Singapore Stockholm