Market Landscape: RAN Vendors 2025

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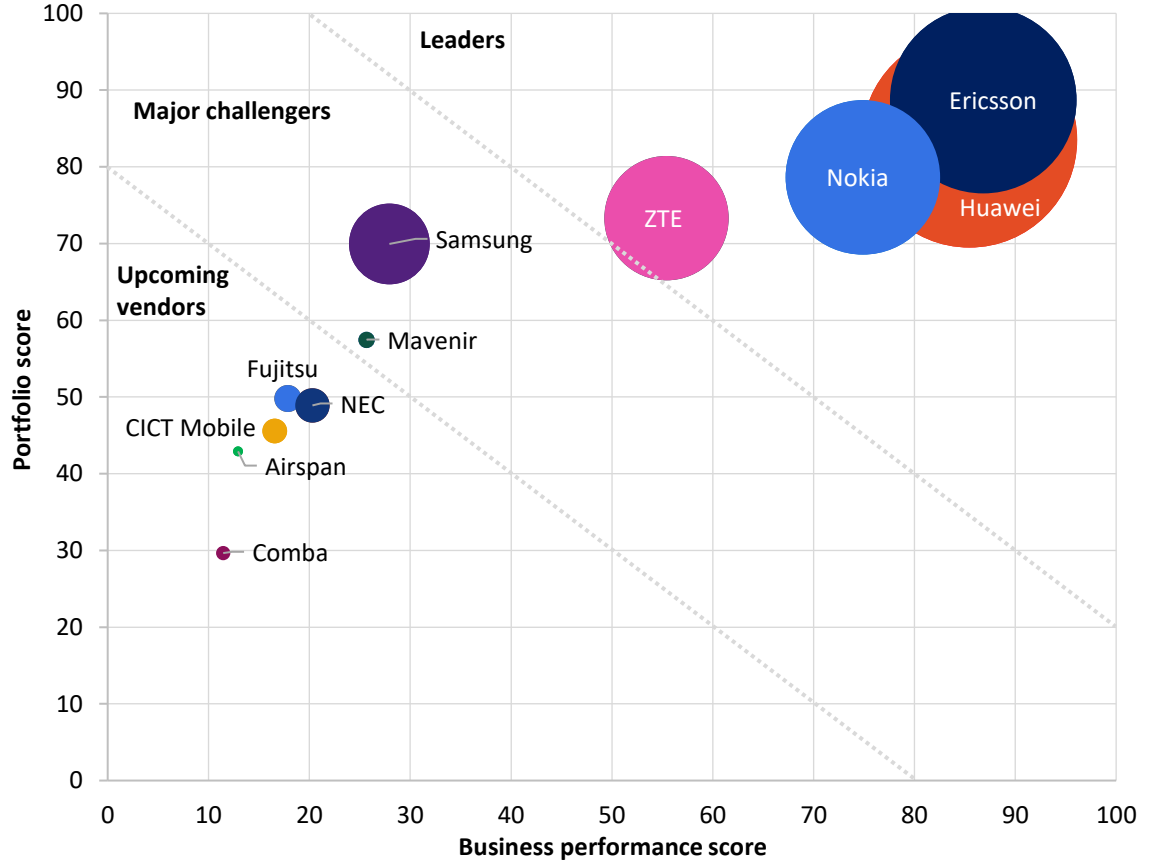
- Five vendors essentially control the radio access network (RAN) equipment market, with a combined market share of 93.6% in 2024, a slight decrease from 95.1% in 2023. The top three vendors captured 77.4% of the market revenue (versus 75.1% in 2023). With so much share concentrated among so few vendors, each vendor works to be perceived as a market leader. However, measuring leadership in this market has its challenges.
- Considering two dimensions, which are business performance and portfolio, Omdia categorized 11 RAN vendors into three groups: leaders, major challengers, and upcoming vendors.
- All vendors belong to the same group as in the 2024 edition. There are four leaders: Ericsson, Huawei, Nokia, and ZTE. Ericsson ranked first in both business performance and portfolio ; Huawei ranked second in both dimensions; Nokia third in both dimensions.
- The scores indicate each vendor's relative position in comparison with the others. For example, if a vendor has a lower portfolio score in the 2025 edition than in the 2024 edition, it does not mean that its offerings are weaker in 2025 than in 2024 but that its portfolio has not improved at the same pace as other vendors. There were also slight changes in the weighting of a few metrics that affected the scores (see methodology section).
- A twelfth vendor, Rakuten Symphony, was also scored but not on all the categories due to the unique nature of its offerings, therefore it is shown in individual sections of the report but not on this summary view.

Overall RAN vendor positioning



Note: Size of the bubble corresponds to the 2024 RAN revenue for each vendor.
Source: Omdia

Summary (2/5)

Summary of categories, score weight, and top three vendors per category

Dimensions and categories	Score weight	#1	#2	#3
Business performance	**100**	**Ericsson**	**Huawei**	**Nokia**
Total RAN revenue market share	40	Huawei	Ericsson	Nokia
5G share of total RAN revenue	15	NEC	ZTE	CICT Mobile, Fujitsu
5G deals with CSP	30	Ericsson	Huawei	Nokia
New logos	15	Nokia	Ericsson	Huawei, Mavenir
Portfolio breadth and competitiveness	**100**	**Ericsson**	**Huawei**	**Nokia**
Radio portfolio	55	Ericsson	Huawei	Nokia
Baseband portfolio	40	Ericsson	Huawei	Nokia
Partner ecosystem	5	Mavenir	Rakuten	Nokia

Source: Omdia

Summary (3/5)

Summary by vendor: Leaders

Vendor	Analysis
Ericsson	Ericsson is the leader in both the business performance dimension and the portfolio dimension. Ericsson has increased its number of 5G deals with CSPs and it also gained market shares in 2024 compared to 2023. Ericsson is strong across all categories, and especially the radio portfolio breadth, massive MIMO (mMIMO) products, and baseband units' power efficiency. Compared to the previous edition, the vendor also scored higher in the partner ecosystem category.
Huawei	Huawei is second on business performance. The vendor has the highest market share, but number of deals and new logos are a bit lower than its main competitor. Huawei is also the runner-up in the portfolio dimension, and it is the leader or co-leader in several sub-categories. Huawei's strengths include its radio portfolio breadth, massive MIMO products, and baseband units' capacity.
Nokia	Nokia ranks third in the two dimensions. Despite being the vendor with the highest number of new logos, market share loss led to a slight degradation of the vendor's business performance score. Nokia's portfolio of RAN solutions has no weaknesses, but it is less extensive than the portfolios of the other two leaders. Baseband is one of the vendor's key strengths. Its extensive partner ecosystem is also noticeable.
ZTE	ZTE entered the leaders' tier in 2023 and has continuously strengthened its portfolio since, especially radios. The Company also scored higher in the partner ecosystem category this year. In the meantime, its business performance score saw some degradation compared to the previous year due to market share loss related to a less favourable regional mix in 2024.

Source: Omdia

Summary (4/5)

Summary by vendor: Major challengers

Vendor	Analysis
Samsung	Samsung improved its portfolio score, however in the meantime it saw a degradation in its business performance due to market share losses related to a less favourable regional mix in 2024. Although it is very strong in some segments, its portfolio is less extensive than the leaders'. Samsung's key strengths are its open RAN and vRAN portfolio. Samsung's strategy to focus on a few key strategic Clients and markets automatically reduces the vendor's addressable market in terms of revenue and number of deals.
Mavenir	Mavenir entered this market landscape as a major challenger in 2024 and maintained this status in 2025. Though it is smaller than many other vendors covered in this report in terms of revenue, Mavenir benefits from a relatively high number of 5G deals with CSPs and new logos. It also has a competitive portfolio centered on open vRAN solutions and the richest partner ecosystem.

Source: Omdia

Summary (5/5)

Summary by vendor: Upcoming vendors

Vendor	Analysis
NEC	NEC is the leader of the upcoming vendors group. The vendor is not far from major challengers' territory, but it would need a higher RAN market share and/or number of deals and/or a broader portfolio to move up to the higher tier. Its key strength lies in baseband.
Fujitsu	Fujitsu is currently dependent on a small number of clients, but its work with Tier 1 operators in Japan, the US, and Europe give it strong credentials to win new business in other parts of the world, particularly by targeting open vRAN projects. Its key strength lies in radio.
CICT Mobile	CICT Mobile Communication Technology was formed by the merger and reorganization of Datang Mobile Communications Equipment and Wuhan Hongxin Telecommunication Technologies in 2020. CICT Mobile has a competitive baseband and radio portfolio built for the demanding domestic market. However, it is behind some competitors in business performance owing to a lack of business outside China.
Airspan	Airspan is one of the smallest players covered in this report in terms of revenue, but nonetheless, it continuously expands its competitive portfolio, including though some recent acquisitions (Corning, Jabil). Airspan sells to Tier 1 operators around the world, including in Japan, India, and the US, which validates the vendor's capabilities.
Comba	Comba is a challenger with a competitive radio portfolio, but the lack of massive MIMO active antenna units in its portfolio is an important limitation in this assessment. Like CICT Mobile, its relative lack of business outside China is another limiting factor.
Rakuten Symphony	Rakuten Symphony is a new entrant in the market landscape report this year, however the company only features in selected sections of this report. This is because Rakuten does not have its own radio portfolio. Its baseband portfolio and partners ecosystem are essentially on par with its most direct competitors.

Source: Omdia

Methodology

Methodology (1/2)

- The RAN, as covered by Omdia in this report, includes hardware and software for macro base stations and small cells. Services and solutions belonging to other network domains, such as transport and core networks, are not included.
- Making head-to-head comparisons can be difficult. To overcome this difficulty, this report focuses as much as possible on measurable and comparable metrics using the information provided by vendors themselves rather than the analyst's perceptions and opinions. Omdia also underlines some key caveats associated with the metrics used so that the reader is aware of limitations where they exist.
- Omdia selected two main dimensions for this evaluation: RAN business performance and RAN portfolio breadth and competitiveness. Each dimension is assessed by looking at different categories and metrics. Metrics mean different things to different vendors; what one vendor perceives as important (a specific technology or type of product) may not be as important to other vendors.
- For business performance, the categories are the global RAN revenue market share, the 5G share of each vendor's total RAN revenue, the number of 5G RAN commercial deals with communications service providers (CSPs), and the number of new logos.
- For the portfolio dimension, Omdia looks separately at the radio and baseband portfolios, with several sub-categories considered for each. Omdia takes into consideration the portfolio breadth (the number and variety of radios and massive MIMO products, frequency bands supported, O-RAN portfolio and eCPRI support, etc.) and competitiveness (by comparing product specifications including capacity, power consumption, and physical footprint of products with comparable configurations). Details for each category and their weighting in the total score are introduced in relevant sections of the report.
- Omdia only considers products that are available or will be available before the end of 2025. There is always a possibility that vendors may not meet all of their roadmap commitments; some of the products that are expected to become available before the end of the year could ultimately reach the market later than expected or even be canceled. The same is true when vendors present their respective roadmaps to operators.

Methodology (2/2)

- In this 2025 report, Omdia made little changes in the methodology and only slightly modified the weighting for some subcategories to reflect market trends and operators' priorities. The new logos weight was increased from 10 to 15 points, and the 5G share of RAN revenue weight was reduced from 20 to 15 points. The mmWave portfolio sub-category was integrated into the broader radio portfolio breadth category.
- The radio portfolio remains the most important category, representing 55% of the total portfolio dimension score, baseband portfolio represents 40% and the partner ecosystem represents 5%.
- Omdia does not suggest that open RAN or vRAN solutions are better or worse than integrated purpose-built RAN solutions; they are alternatives and included as such. Operators value choice, and because operators' interest in open RAN and vRAN is undeniable, these trends cannot be ignored.
- Open RAN and vRAN are considered under the portfolio dimension, but they have no impact on the business performance dimension. When measuring a vendor's business performance, a dollar from a "traditional" integrated RAN contract is worth the same as a dollar from an open RAN or vRAN contract.
- Other aspects would ideally be considered but effectively are not. Price competitiveness is critical when an operator selects a vendor, but pricing information is highly confidential and specific to each client and each project. The actual performance of solutions in real life or demonstrated during trials is another critical point of differentiation, but Omdia does not have the tools and resources to conduct lab or field tests.
- Patents portfolios and contributions to standards are other interesting metrics, but claims from different vendors tend to be contradictory, and comparisons are difficult. Omdia also believes that these criteria are not as important as the ones included in this assessment. Patents matter, but Omdia argues that they are important for other reasons, not so much when assessing a vendor's position and competitiveness.
- In addition to Rakuten Symphony, which is a new addition to this 2025 report, Omdia also considered 4 other well-established vendors. However, given that the product information available for these vendors was not as rich as for the others, their estimated position is only shown indicatively, and the vendors are anonymized. They are shown as vendors A, B, C and D on page 31.
- Omdia contacted several other RAN vendors that have chosen not to participate or have not provided sufficient information. More vendors could be included in future editions of this report, and the door is open for their participation.

Business performance

Business performance

Summary of categories, score weight, and top three vendors per category

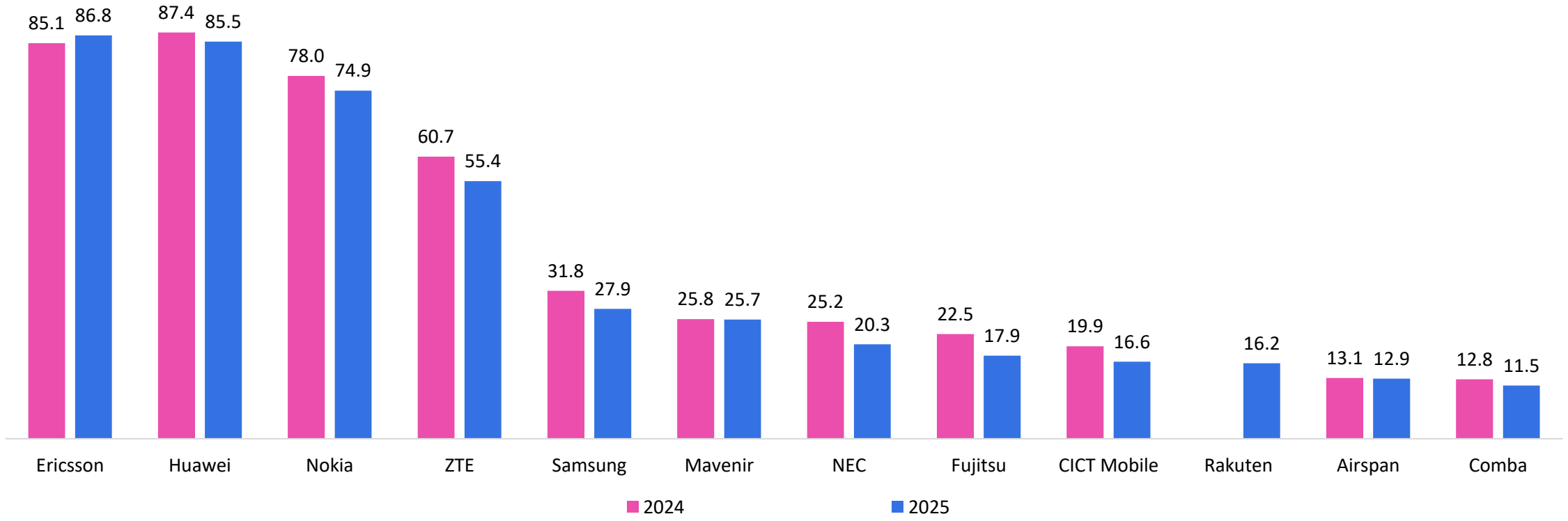
Categories	Score weight	#1	#2	#3
Total RAN revenue market share (2024)	40	Huawei	Ericsson	Nokia
5G share of total RAN revenue (2024)	15	NEC	ZTE	CICT Mobile, Fujitsu
5G RAN deals with CSP	30	Ericsson	Huawei	Nokia
New logos	15	Nokia	Ericsson	Huawei, Mavenir
Total business performance	**100**	**Ericsson 87/100**	**Huawei 85/100**	**Nokia 75/100**

Source: Omdia

- There are some caveats to basing leadership completely on market share, but market shares are important and a generally accepted way of measuring market leadership. Of all categories considered in this report, market shares carry the largest weight (40% of the business performance score and 20% of the grand total).
- Omdia prefers to use revenue rather than units for market shares because revenue is the most common indicator of business performance, and revenue data tends to be more reliable. The revenue market share shows a company's scale, business momentum, and ability to win new business.
- Omdia also looks at the number of commercial 5G RAN deals with CSPs (excluding free trials, non-revenue–generating activities, and non-CSP deals). If a vendor has several 5G contracts with the same operator in the same country, it is counted only once, but for multi-country deals with one telecom group (e.g., Vodafone UK and Vodafone Germany), each country counts for one deal.
- Omdia considers the number of deals to be less important than revenue in assessing leadership and, therefore, applies a smaller weighting to deals when calculating scores. Not all deals are equal. A deal with a Tier 1 operator in a big country tends to be worth more in monetary value than multiple deals with Tier 2 and Tier 3 operators in smaller countries.
- Nonetheless, deals indicate a vendor's reach and capacity to win requests for proposals (RFPs) and, more broadly, its business momentum, so deals are worth looking at.
- Ericsson is the leader in business performance with a score of 87/100, followed by Huawei (85/100) and Nokia (75/100).

Business performance scores, 2024 and 2025

Business performance scores (maximum 100 points)

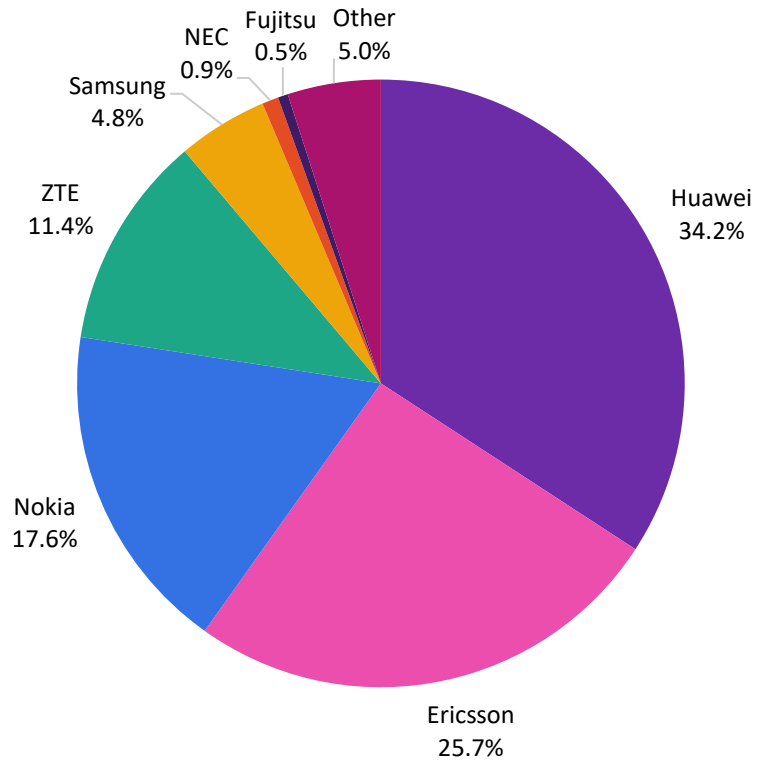


Notes: Scores are relative. If a vendor has a lower score than in the previous edition, it does not mean that this vendor's performance was necessarily weaker than before but that the status of each vendor relative to the others has changed.
Source: Omdia

Revenue market share

- In 2024, Huawei remained the RAN revenue market leader, followed by Ericsson, Nokia, ZTE, and Samsung Electronics.
- Combined, Huawei, Ericsson, and Nokia captured 77.4% of the global RAN revenue in 2024 compared with 75.1% in 2023. When adding ZTE and Samsung Electronics, the top five companies generated 93.6% of total RAN revenue in 2024 compared with 95.1% in 2023.
- Compared with 2023, Huawei and Ericsson gained market shares. Ericsson benefited mostly from market share gains in North America, while Huawei benefitted from a more favorable regional mix as well as market share gains in China and emerging markets.
- When considering the global market excluding China, for the full year 2024, the market leader was Ericsson (36.0%), followed by Nokia (24.7%), Huawei (20.9%), Samsung (6.9%), and ZTE (2.9%).
- The share of challengers (beyond the top five) was higher in 2024 than in 2023 for both the global market (6.4% vs 5.0% in 2023) and the global market excluding China (8.6% vs 7.1%). This was largely due to Tejas Networks and its work for BSNL in India.
- One thing to keep in mind is how market share fits into a vendor's strategy. Some vendors are willing to sacrifice short-term margins to gain shares, winning business thanks to lower prices. Conversely, other vendors are willing to sacrifice shares and their top line to protect their margins. A single vendor may even use both strategies depending on the geography, project, or time.
- Omdia provides extensive market share data and analysis on a quarterly basis in its *RAN Market Tracker* report series.

RAN revenue market share, 2024

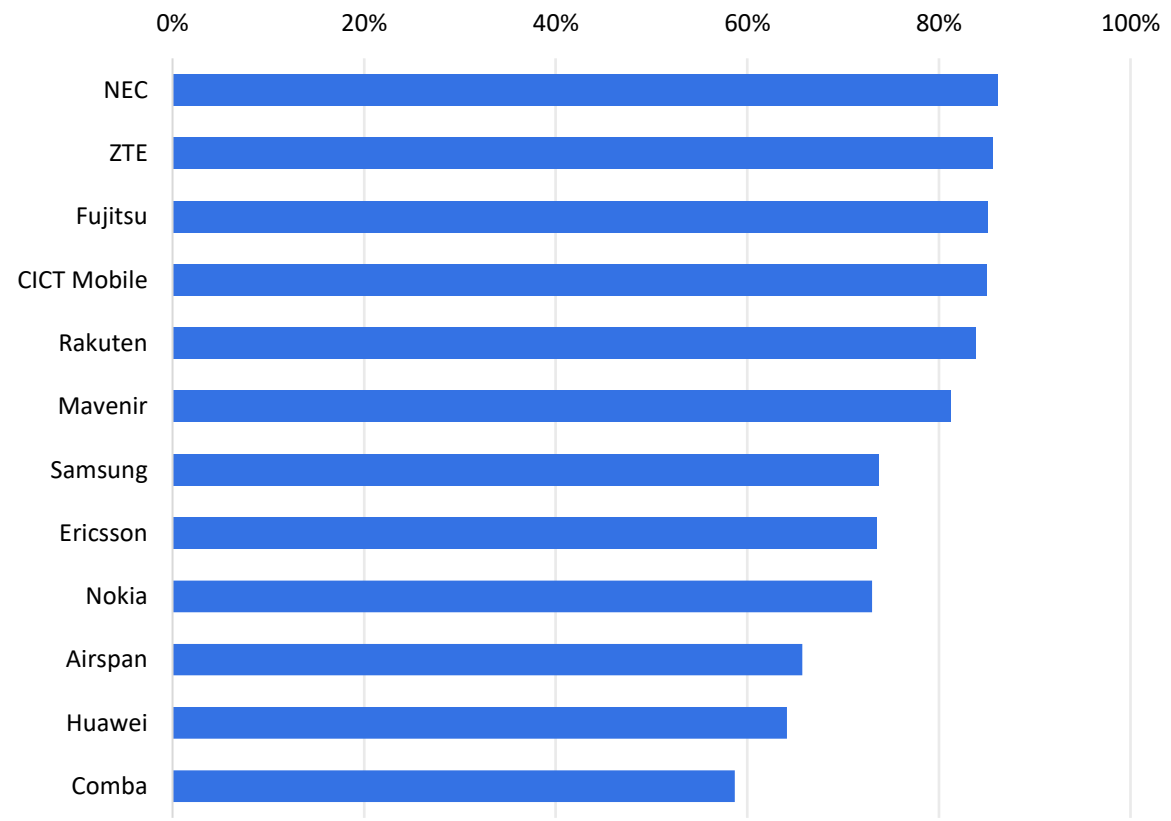


Source: Omdia

5G share of total RAN revenue

- To complement the overall RAN revenue market share analysis, Omdia also considers the share of 5G as a percentage of each vendor's total RAN revenue in 2024.
- A dollar or yuan from 2G, 3G, or 4G equipment sales holds the same value as a dollar or yuan from 5G equipment sales. Nonetheless, Omdia and our readers consider the 5G revenue to be a relevant indicator of a vendor's commercial momentum and how fast it is able to shift its revenue mix toward the only growing segment of the RAN market (i.e., 5G). It is worth noting that products initially deployed for 4G can often be upgraded to 5G via software if they support the same frequency. Revenue allocation may vary from one vendor to another.
- While for most vendors, the 5G share was higher in 2024 than in 2023 due to the natural investment shift to 5G, some of the vendors with already high percentages saw that 5G growth stopped. Sustained 4G LTE investment in selected markets and changes in sales mix explain this phenomenon. All vendors nonetheless generated more than 55% of their revenue from 5G in 2024, with the highest percentages seen at NEC, ZTE, Fujitsu and CICT Mobile (>85%).
- This metric largely depends on each vendor's revenue geographical mix. NEC and Fujitsu benefitted from their strong 5G business in their domestic market, Japan, while ZTE and CICT Mobile similarly benefitted from 5G deployments in China—both early 5G-adopting countries where most investment has already shifted from 4G to 5G.
- Inversely, Huawei, Ericsson, and Nokia are global vendors with a more diversified client base and revenue mix, including some advanced and some less advanced markets (those that are late 5G adopters), which drags the percentage down. On the other hand, for these vendors, their presence in both developed and developing markets benefits them on other metrics, including the total RAN revenue and the number of 5G deals.

5G share of each vendor's RAN revenue, 2024

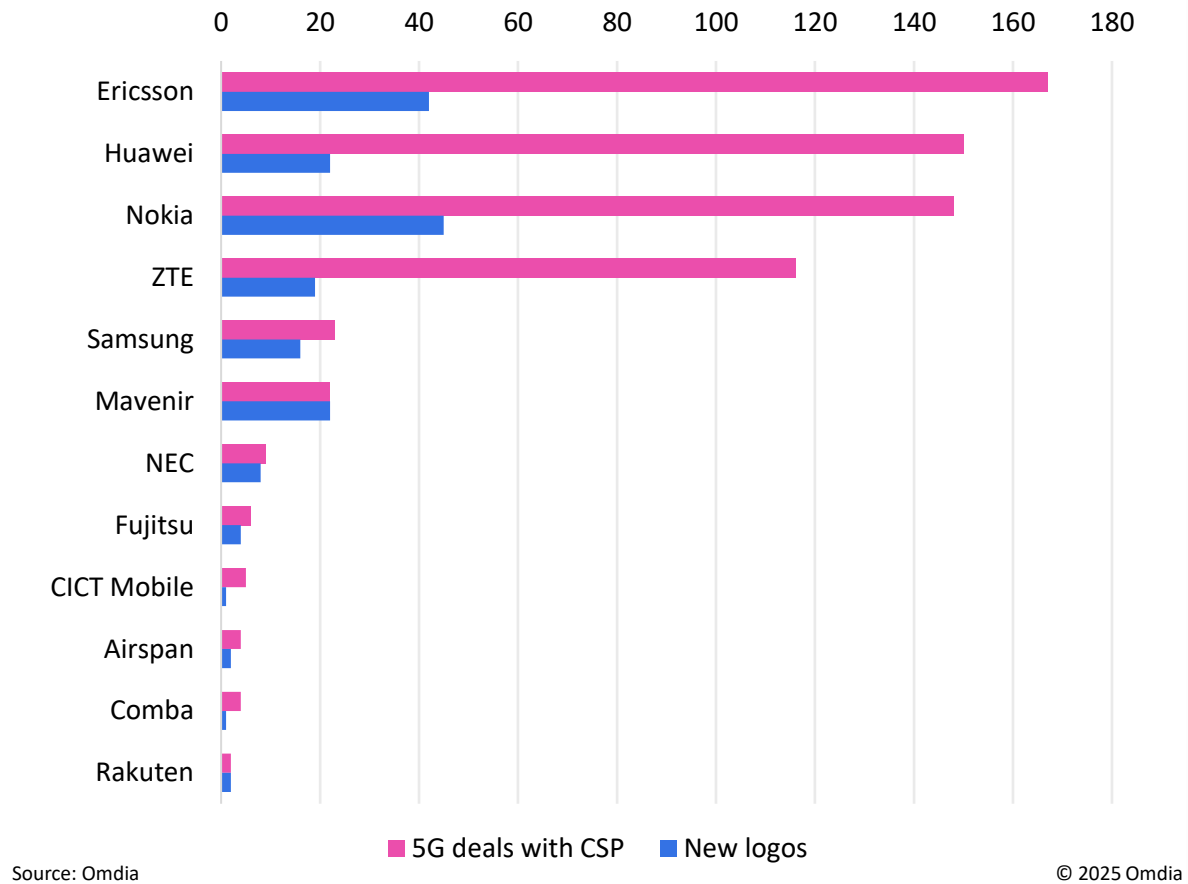


Source: Omdia

5G deals with CSPs and new logos

- Ericsson, Huawei, Nokia and ZTE are vendors with over 100 5G CSP deals each. Nokia and Ericsson have a strong presence in the fragmented European market; the high number of operators means many deals are up for grabs. Huawei has a particularly strong presence in Asia & Oceania, the Middle East & Africa, and Latin America & the Caribbean. ZTE is continuously expanding its business, especially in emerging markets.
- The new logo metric indicates whether a vendor has gained 5G business at the expense of a competitor or with a greenfield operator. With non-standalone (NSA) 5G, most operators use their existing LTE vendors to supply 5G new radio (NR), but there are exceptions. Given the tight relationship between LTE and 5G in NSA, winning 5G contracts where a vendor did not already provide LTE is a strong endorsement of its solutions. This shows that an operator is willing to rip and replace an incumbent LTE vendor or go through the challenges of interoperability between two vendors to use a different vendor's 5G kit.
- Four vendors—Nokia, Ericsson, Huawei and Mavenir—have more than 20 new logos each. Samsung has also enjoyed strong commercial momentum in the past couple of years, notably in the Five Eyes countries (Australia, Canada, New Zealand, the UK, and the US). ZTE made progress in 2024 especially in Africa, Southeast Asia and Latin America.
- Western vendors have, in some cases, benefitted from policies against Chinese vendors, especially in the Five Eyes countries and Europe. However, in other cases, new logo deals counted here have no link with Chinese vendors (for example, one European vendor swapping another European vendor). In the meantime, Chinese vendors also secured new logos, sometimes at the expense of Western vendors, especially in emerging markets.

Number of 5G deals with CSPs and new logos (as of April 2025)



Source: Omdia

Portfolio assessment

Radio portfolio

- For the portfolio breadth and competitiveness dimension, Omdia allocates 55% weight to the radio portfolio, 40% to the baseband portfolio, and 5% to the technology partner ecosystem.
- Radio portfolios encompass a much higher number of unique products and contribute a larger portion of total RAN revenue compared with the baseband portfolio at the industry level and for most vendors.
- As stated previously, these rankings are based on portfolio offerings and product specifications but not on actual performance in the field. This is because Omdia lacks the means to test the performance of vendors' gear.
- For this report, Omdia collected information on more than 2,000 radio products from 11 vendors, of which more than 600 were massive MIMO radio products and over 400 were O-RAN–compliant radios, as per vendors' claims.
- The wealth and variety of equipment are impressive, and the high number of new products added by most vendors since last year's edition testifies to this industry's continuous innovation.
- Ericsson remained the industry leader for the radio portfolio with a score of 50/55, followed by Huawei (48/55) and Nokia (41/55).

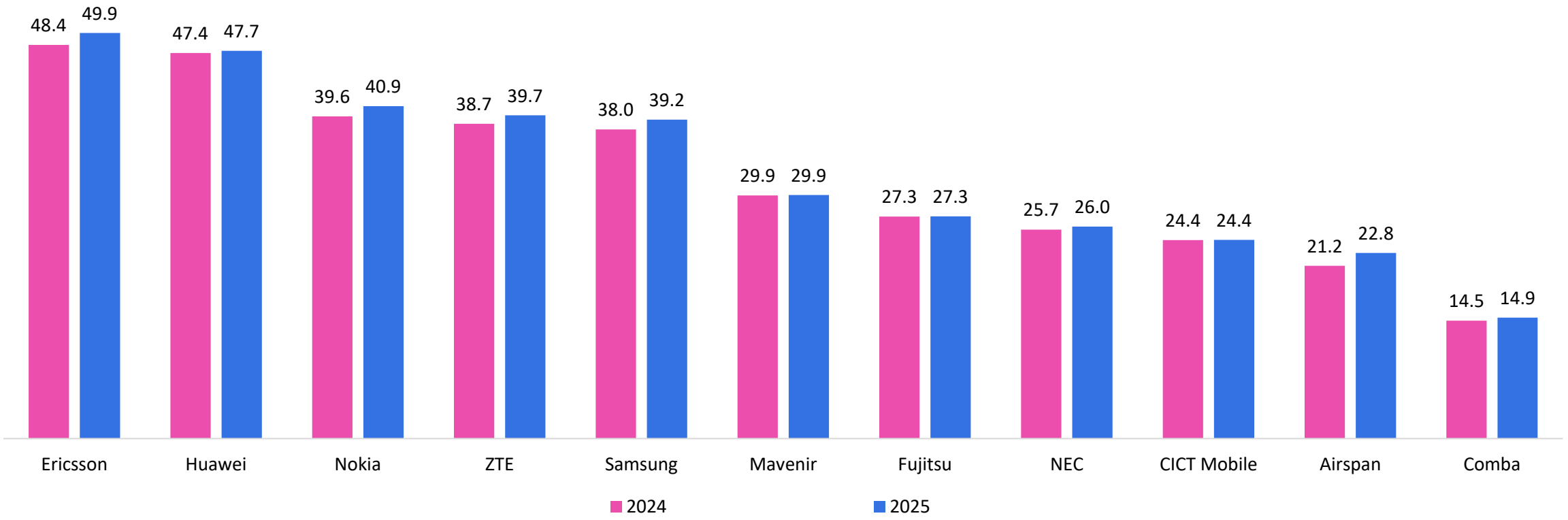
Summary of categories, score weight, and top three vendors per category

Categories	Score weight	#1	#2	#3
Radio portfolio basics	5	More than five vendors with maximum score		
Combined radio portfolio breadth metrics	20	Huawei	Ericsson	ZTE
Massive MIMO portfolio breadth and competitiveness	15	Ericsson, Huawei	ZTE	Nokia
Massive MIMO power consumption	10	Ericsson	Huawei	Nokia
Open RAN portfolio and eCPRI support	5	Ericsson	Samsung	Nokia
Total radio portfolio	55	**Ericsson 50/55**	**Huawei 48/55**	**Nokia 41/55**

Source: Omdia

Radio portfolio scores, 2024 and 2025

Radio portfolio overall scores (maximum 55 points)



Notes: Scores are relative. If a vendor has a lower score than in the previous edition, it does not mean that this vendor's portfolio is weaker in 2025 than in 2024 but that the status of each vendor relative to the others has changed. Rakuten does not show in this category due to the different nature of its portfolio and business model.
Source: Omdia

Radio portfolio basics

- The radio portfolio basics category considers the availability of 4G and 5G solutions, the variety of product types available (macro and small cells, outdoor and indoor), and the variety of radio units in terms of transceiver and receiver configurations, including the availability of 2T2R, 4T4R, and 8T8R radios for various frequency bands.
- 2T2R and 4T4R make up the bulk of all radio unit products and constitute the foundation of a competitive radio portfolio. There is an immense variety of products supporting one or several technologies, single- or multiple-frequency bands, different bandwidths and output power, and so on.
- These products are essential but generally insufficient in establishing a clear competitive advantage. Price is a key element of differentiation in this segment, but as mentioned earlier, it is not considered here.
- One area of interest is the 8T8R radio unit segment. 8T8R radios fill the gap between 4T4R radio units and massive MIMO active antennas. In the coming years, these solutions will be increasingly used for suburban and rural areas and in specific scenarios such as roads, tunnels, and rails. They are also useful for operators that want to boost capacity but may not have the financial resources to deploy massive MIMO widely, typically in emerging markets.

Radio portfolio breadth

- The radio portfolio breadth category combines several metrics, including the number of unique radio products, the range of frequency bands supported by at least one product, and the availability and variety of multi-band (dual-band and tri-band) radios.
- Huawei has the highest number of unique radio products (over 500) and supports the highest number of frequency bands (over 40) despite being prevented from accessing some markets. Ericsson is the only vendor that comes close to matching these numbers.
- Nokia, Samsung, ZTE, and Airspan also support a wide range of frequency bands (>30) albeit not with the same variety of configurations.
- ZTE stands out with its range of multi-band and multi-sector solutions, but they are increasingly common at all vendors.
- This category is not just about the sheer number of radios; the extent and variety of solutions mean that Huawei and Ericsson can address the needs of any operator with any spectrum assets anywhere in the world. The ability to serve niche scenarios and less common frequency bands enhances a vendor’s competitiveness; it translates into winning more deals and capturing a bigger share of the global market.
- However, Omdia does not suggest that other vendors should follow the same path. Developing more radios means higher R&D costs and more difficulty achieving a return on investment. Smaller vendors act rationally by not trying to develop every imaginable solution; targeting niche markets will not make economic sense for all.
- Due to the relatively limited activity in this area, the mmWave portfolio which was previously a standalone category is now considered as part of the broader radio portfolio breadth category (bands supported, variety of product configurations).

Massive MIMO portfolio breadth, competitiveness and power consumption

- **Portfolio breadth**
  - The industry considers massive MIMO the flagship segment of the radio portfolio. Most vendors have multiple massive MIMO products, but Ericsson and Huawei have more than others, with well over 100 unique products each. Comba has no mMIMO active antenna unit (AAU) product but designs the antenna element used in mMIMO.
- **Weight**
  - Omdia benchmarks products on weight and power consumption at comparable configurations. For this benchmark, Omdia selected 10 different massive MIMO products that have been identified as the most relevant for a fair comparison. Products benchmarked are active antenna units in various transceiver-receiver (32TR, 64TR), power, and band configurations. Products compared should have the same number of antenna elements and bandwidth supported, with a few minor differences between vendors in some cases. Not all vendors have all the configurations considered in the benchmark, and challengers are assessed based on their available portfolio.
  - Weight comparisons come with some caveats, but weight is more than just a marketing claim. While a few hundred grams difference between two vendors' antennas with comparable specifications may not matter much, a difference of several kilograms indicates that the vendor offering the lighter product generally uses more advanced chipsets and components and can claim superiority in product design and, most likely, performance. Also, some operators rent tower space by weight; therefore, lighter products directly affect their tower rental costs. No single vendor consistently has the lightest active antennas in the industry; it depends on the configuration. Overall Ericsson, Huawei, ZTE and Nokia stand out.
- **Power consumption**
  - Using the same selection of products, Omdia compared power consumption based on vendor data for both maximum and typical power consumption as defined by the ETSI 202 706 standard. Although many factors influence radio power consumption and comparisons are imperfect, this is a key consideration for operators that cannot be ignored. Significant differences were observed. Huawei and Ericsson dominate.
- **Conclusion**
  - For combined mMIMO categories, including portfolio breadth, weight, and power consumption, Ericsson and Huawei were co-leaders, followed by ZTE, Nokia, Samsung and Mavenir.

O-RAN compliance and eCPRI native support

- **O-RAN compliance**
  - Open RAN support has been factored into scoring since 2022; it refers to compliance with the O-RAN Alliance's open fronthaul specifications.
  - Despite a relatively limited take-up, operators continue to show an appetite for open RAN. When selecting suppliers, they will generally value the possibility of mixing and matching their vendors more easily.
  - Omdia forecasts that the open vRAN market will represent approximately 25% of total RAN spending by 2030, which means vendors rejecting the concept will bar themselves from a substantial portion of the total addressable market.
  - The total number of radios that vendors claim to be O-RAN compliant has considerably increased in the past year. The number is now well over 400 compared with approximately 250 in last year's edition and 150 the year before. One of the most notable evolution this year is Ericsson's increasingly extensive open RAN portfolio.
  - Ericsson, Samsung, Nokia, NEC, Mavenir and Fujitsu have wide portfolio of O-RAN–compliant radios.
- **eCPRI native support**
  - This year, we also considered eCPRI (enhanced Common Public Radio Interface) native support across the radio portfolio. This is important due to eCPRI's key role in enabling open RAN, but also because eCPRI gives higher fronthaul efficiency and improved latency and synchronization.
  - In addition to the vendors already cited in the previous paragraph, it is worth noting that Comba, Huawei and ZTE also support eCPRI in their portfolio.

Baseband portfolio

- While breadth is very important for the radio portfolio, it is somewhat less relevant for the baseband portfolio. Indeed, although some vendors have more products (Ericsson, Samsung), others have a modular platform approach (Huawei, Nokia). Both approaches have their pros and cons. Some operators may prefer one approach to the other, but it is difficult to generalize at a global market level, so breadth is not one of the criteria here.
- The baseband portfolio basics category considers the support (or lack thereof) of all radio access technologies (from 2G to 5G) and the range of options available, including dedicated solutions for outdoor deployments.
- In portfolio basics, five vendors obtained the maximum score; there is no differentiation between them in that category. Other vendors scored lower on the basics because they did not support all radio access technologies or offer the same range of options.
- As for open RAN, taking the vRAN portfolio into consideration is not an endorsement of the approach by Omdia but the valorization of increased choice and options given to operators.
- For the overall baseband portfolio, Ericsson leads with a 35/40 score, followed by Huawei (34/40) and Nokia (33/40).

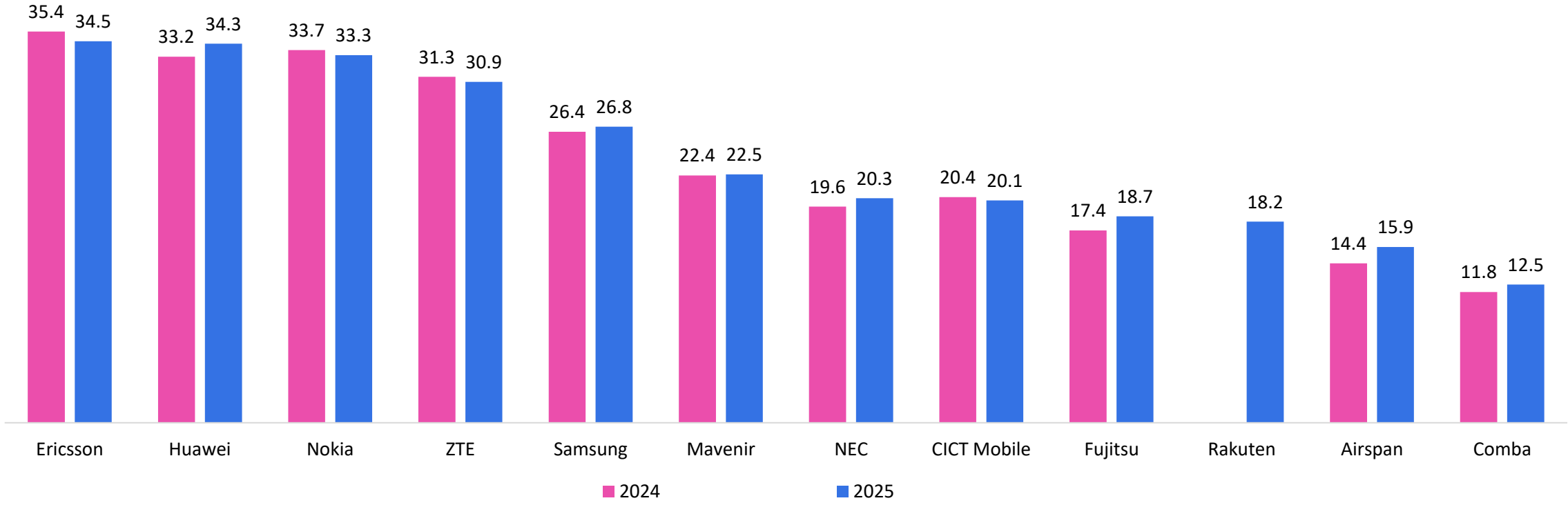
Summary of categories, score weight, and top three vendors per category

Categories	Score weight	#1	#2	#3
Baseband portfolio basics	5	More than five vendors with maximum score		
Combined capacity metrics	20	Huawei	ZTE	Ericsson
Combined power consumption metrics	10	Ericsson	Huawei	Nokia
vRAN portfolio	5	More than five vendors with maximum score		
Total baseband portfolio	**40**	**Ericsson 35/40**	**Huawei 34/40**	**Nokia 33/40**

Source: Omdia

Baseband portfolio scores, 2024 and 2025

Baseband portfolio overall scores (maximum 40 points)



Notes: Scores are relative. If a vendor has a lower score than in the previous edition, it does not mean that this vendor's portfolio is weaker in 2025 than in 2024 but that the status of each vendor relative to the others has changed.
Source: Omdia

Baseband categories

- **Baseband capacity**
  - Omdia compares the capacity of flagship baseband products by measuring both the number of LTE and 5G NR cells and the number of LTE and 5G NR users that can be supported at an equivalent volume of equipment. Equal weight is given to LTE and 5G NR. Cell capacity is given a higher weight than user capacity.
  - Assessing capacity, even at a comparable footprint, has its limits. The capacity offered by each vendor's flagship product is more than enough to cover the demand at a vast majority of sites. Deployed capacity should be adjusted to each site's needs and scaled up if and when needed.
  - This is why some vendors are prioritizing total cost of ownership (TCO) optimization (rather than maximizing capacity) and offering lower capacity but smaller footprints and more energy-efficient baseband solutions. This is taken into consideration by comparing not just high-capacity baseband units but also standard-capacity products.
  - Another difficulty is comparing purpose-built baseband unit capacity with vRAN solutions capacity. For vRAN solutions, capacity depends on the commercial off-the-shelf (COTS) server configuration, which varies between partners and hardware configurations, but more and more capacity and power consumption data points are available to Omdia, enabling to make comparisons.
  - Purpose-built solutions from Huawei, ZTE, Ericsson, Nokia or Samsung remain generally superior in terms of capacity.
- **Power consumption and efficiency**
  - Power consumption and efficiency are difficult to compare based only on theoretical product specifications. Nonetheless, Omdia believes that it is useful to consider all the available (even imperfect) data because this topic is a growing priority.
  - Even if the level of detail varies, Omdia recognizes and appreciates the efforts of most vendors that provide information about the power consumption of their products and the increasing level of detail available year after year. It is also encouraging to see that all vendors now recognize the importance of this topic and are considering power efficiency a priority and a source of potential differentiation.
  - For this metric, Omdia compares the power consumption of flagship high- and standard-capacity baseband products normalized per cell. Similar to the approach adopted in the radio section, both typical and maximum power consumption are being used across various configurations.
  - Even if the methodology and measurements vary between vendors, the differences are significant enough to identify leaders and the differences between products. In this category, Ericsson and Huawei are ahead, followed by Nokia and ZTE.
  - It is notable that Huawei introduced new more efficient boards on the BBU5910 and BBU5900 platforms since the last edition of the report.
- **vRAN support**
  - The score depends on the vendors' offerings, including virtualized central unit (vCU) and virtualized distributed unit (vDU) software that can run on a third-party server or cloud infrastructure. More than five vendors obtained the maximum score.

Partner ecosystem

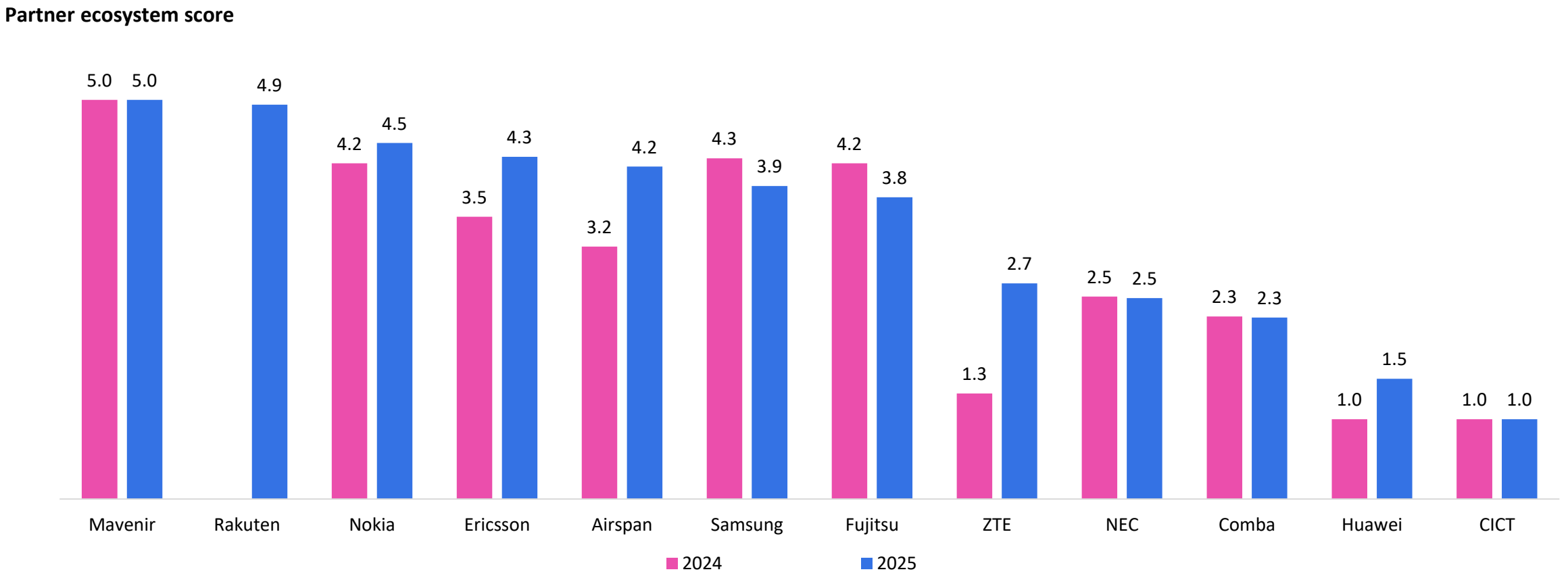
Why this category?

- Omdia introduced this new category in 2024 to reflect the growing importance of RAN vendors' assembling and fostering an ecosystem of technology partners.
- There are several reasons why having a strong partner ecosystem is key to vendor competitiveness:
  - Expansion of offerings: Partnerships enable a vendor to expand their offerings with complementary solutions. Typically, a software specialist can work with a hardware specialist, a radio specialist can work with a baseband specialist, and so on. This also applies to services and support, which is why partnerships with system integrators and test companies are also considered in this category.
  - Innovation: Even if leading vendors have sufficient resources to invest heavily in their own R&D, there is no single company that can alone do everything that the industry can do collectively. Partnerships enable the combination of resources and expertise from various parties.
  - Operators are asking for it: While some operators are still happy to buy most of their RAN from a single vendor, there is a clear movement toward supply chain diversification. This is often associated with open RAN, but supply chain diversification can also take other forms.
  - Risk management: By diversifying its partners, a vendor can reduce its dependence on any single partner/supplier and mitigate risks associated with changes in technology, market conditions, or regulations.

Assessment

- For this category, Omdia considers partnerships in the following areas: radio units, CU/DU software, servers and cloud infrastructure, semiconductors, systems integration, test and measurement and SMO, RIC, and x/rApps. A company can have its own solution in a given category and still have one or several partners for that same category.
- Omdia considers the variety of partnerships (zero, one, or several partners in each area) and the nature of these partnerships. For example, when two vendors have completed interoperability between their solutions or are jointly deployed in a live commercial network, this is regarded higher than signing a memorandum of understanding (MOU) or announcing a partnership between two vendors without any concrete activities. Naturally, today's MOUs can become tomorrow's live deployments; therefore, they are not disregarded, just not given the same weighting.
- While vendors involved in open RAN for years like Mavenir and Rakuten tend to have a higher number of partners, other vendors also have their own partners and scores in this metric (see details on the next page).

Partner ecosystem scores, 2024 and 2025

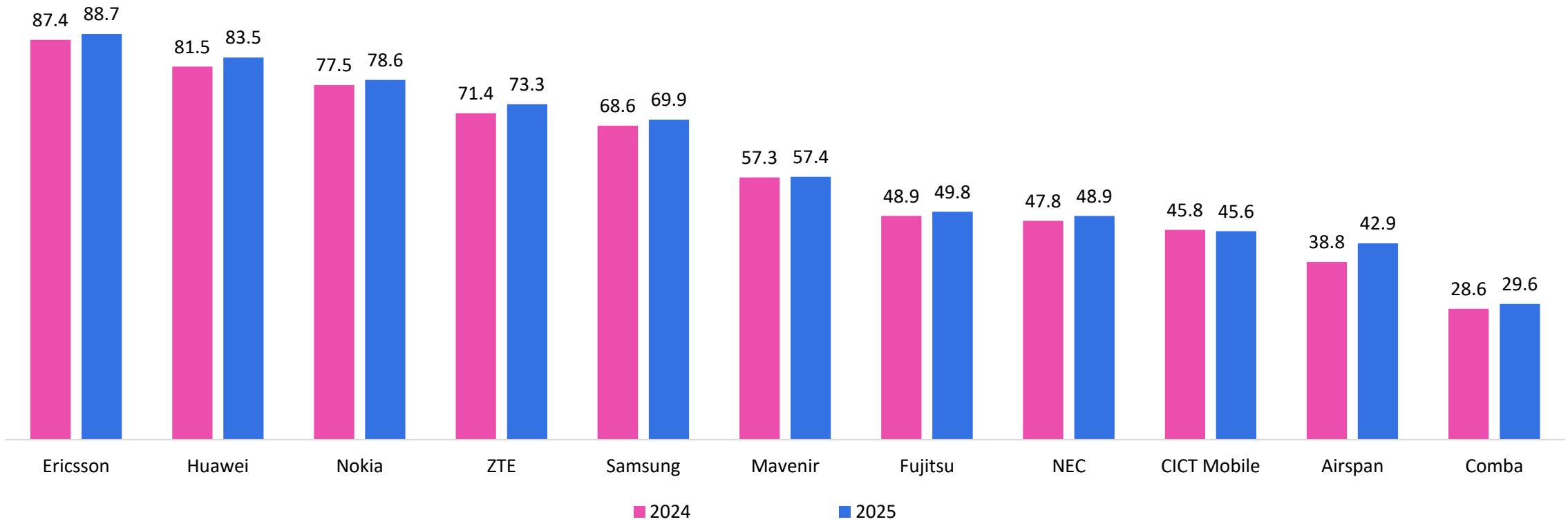


Notes: Scores are relative. If a vendor has a lower score than in the previous edition, it does not mean that this vendor's partner ecosystem is weaker in 2025 than in 2024 but that the status of each vendor relative to the others has changed.
Source: Omdia

Conclusion

Total portfolio scores, 2024 and 2025

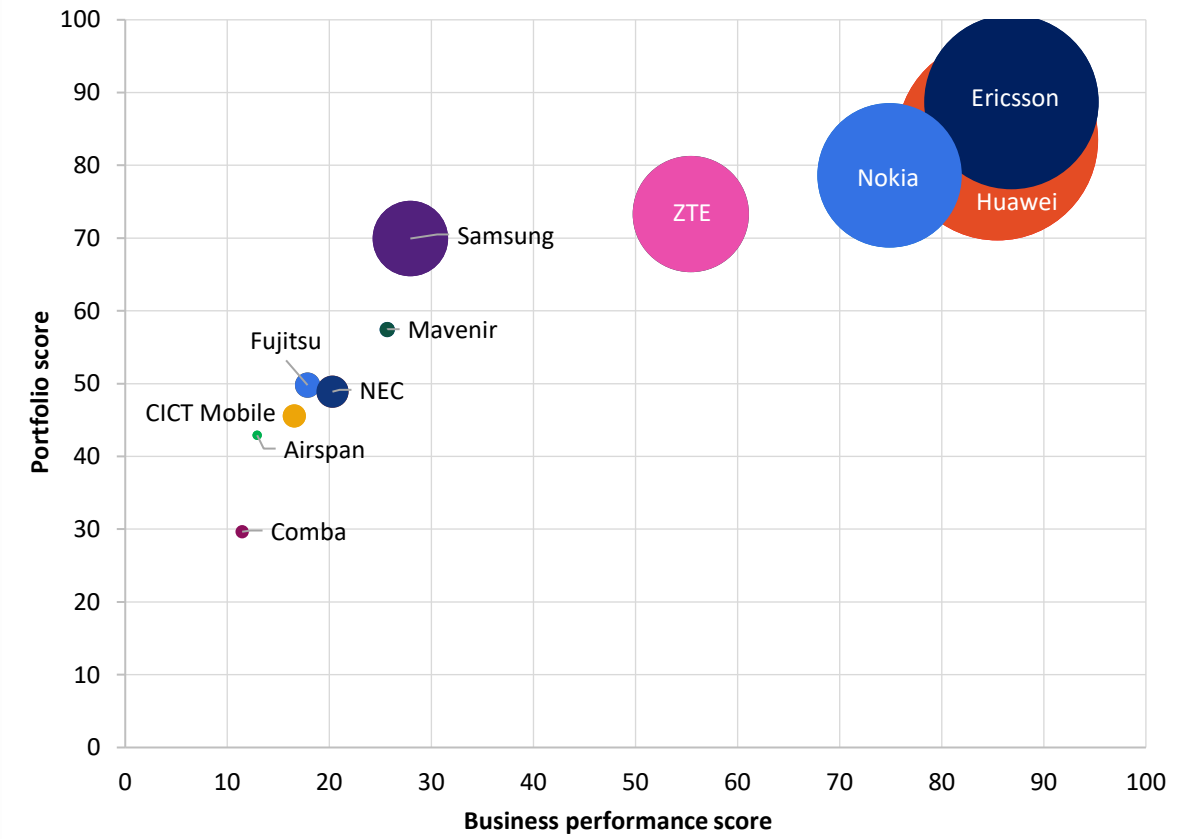
Total portfolio scores (maximum 100 points): Sum of radio, baseband, and partner ecosystem scores



Notes: Scores are relative. If a vendor has a lower score than in the previous edition, it does not mean that this vendor's portfolio is weaker in 2025 than in 2024 but that the status of each vendor relative to the others has changed. Rakuten does not show here as the company is not scored in the radio category.
Source: Omdia

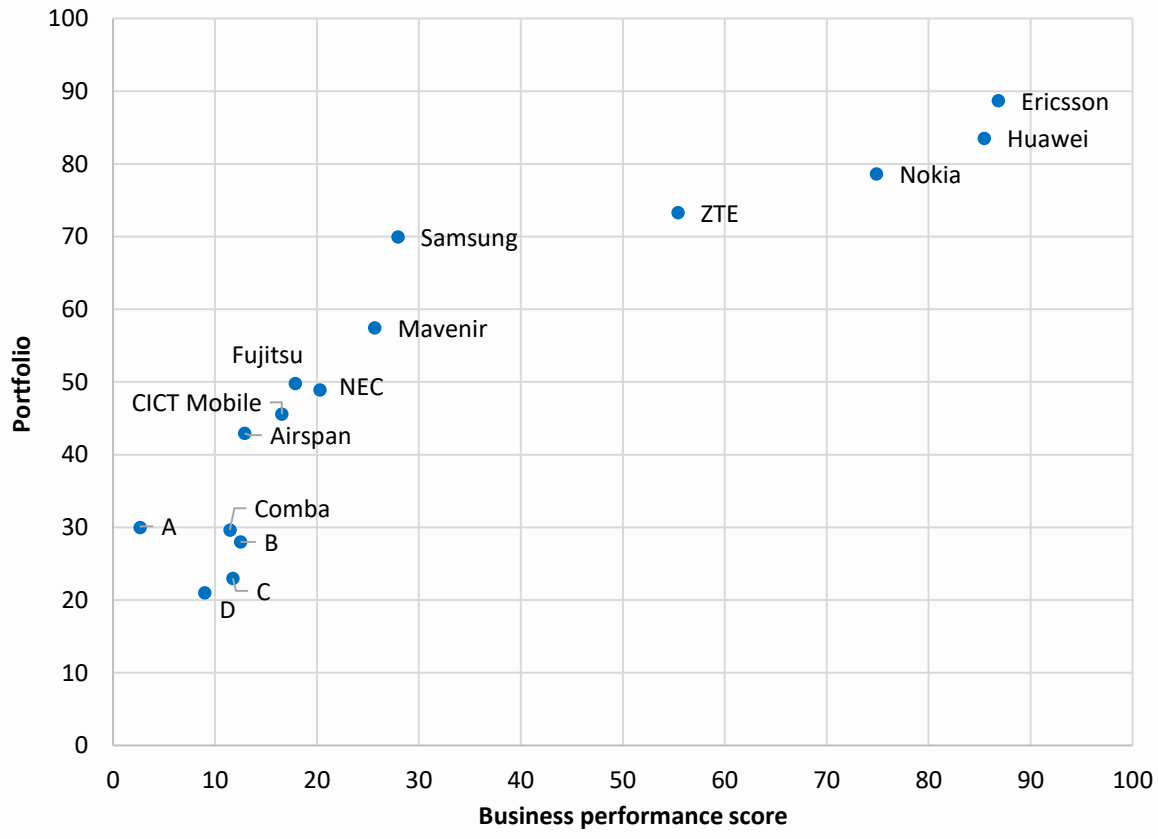
Conclusion

Overall RAN vendor positioning



Note: Size of the bubble corresponds to the 2024 RAN revenue for each vendor.
Source: Omdia

Overall RAN vendor positioning (with same-sized bubbles)



Note: vendors A, B, C and D are well-established RAN vendors for which the product information available was not as rich. Their estimated position is only shown indicatively, and the vendors are anonymized.
Source: Omdia

Appendix

Appendix

Further reading

Open vRAN and vRAN Market Tracker – 1H25 Data (April 2025)

RAN Market Tracker – 4Q24 and FY24 Data (February 2025)

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