

## Radio Access Networks (RAN) evolution: The industry perspective

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# RAN evolution: The industry perspective

In July 2023, Omdia surveyed 106 respondents from communication service providers (CSP) in North America, Europe, and Asia & Oceania (excluding China). There were respondents from both advanced and emerging markets but respondents from advanced markets represented a larger group of respondents; therefore, the results better reflect the situation in these regions and this type of market. Mobile operators and converged operators of all sizes were represented, including some with less than \$500m in annual revenue for the smallest ones, and more than \$5bn for the largest ones. Respondents primarily came from the mobile network planning and engineering, mobile network operations or R&D and technology strategy departments.

The survey covers a wide range of topics including RAN investments, procurement and vendor choice, open vRAN drivers and challenges, sustainability, 5G-advanced and 6G expectations, and more.

### Decision makers value security, service and support capabilities, and open RAN support when selecting vendors

Omdia asked service providers how they expect to invest in their RAN network next year, who will be the key beneficiaries and what are the

main decision criteria when selecting their RAN vendors. Answers show that decision makers particularly value security, service and support capabilities, and open RAN support when selecting their vendors.



Like in the 2022 survey, security was the most frequent answer to this question. Key criteria on the rise in the 2023 survey were innovation, product performance and price-to-performance ratio while the importance of products reliability declined. All aspects, including reliability, are naturally important to buyers, and the year-on-year changes only reflect the relative change in priorities.

It is also interesting to notice the regional differences. The table below presents the top 3 criteria selected by respondents from the three main regions covered by this survey.

	Europe	North America	Asia & Oceania (ex-China)
#1	Regulation (Including vendor bans)	Security	Services and support capabilities
#2	Innovation/ product roadmap	Products and software reliability	Price-to-performance ratio
#3	Product performance	Innovation/ product roadmap	Open RAN support

#### Sustainability is another priority for service providers

Sustainability is another priority for the telecom industry. When asked about the most important initiatives to reach their respective organization's sustainability goals, most CSPs believed energy efficiency is the priority, and this can be achieved primarily through better RAN software (energy savings features, AI/ML), better cell site solutions (cell site power, cooling) and better RAN hardware (radio and baseband units). For all these aspects, network equipment vendors play the key role.

Other initiatives such as sunsetting 2G-3G networks, using renewable energies, extending the lifecycle of equipment, recycling old equipment, and offsetting carbon emissions are also important, and in the direct control of service providers, but their impact appears to be more limited. 0% 10% 20% 30% 40% 50% 60% 70% Energy savings from RAN software (sleep... Energy savings from cell sites solutions... Energy savings from RAN hardware (radio... Sunsetting inefficient legacy networks (2G, ... Powering the network with rene wable ... Lengthening the network equipment lifetime Recycling or reselling decommissione d... Carbon em issions offset program Rank 1 Rank 2 Rank 3 © 2023 Omdia

#### Which of the following contribute the most to achieving your organization's sustainability