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Radio access networks and small cells: worldwide market shares 2019

Roberto Kompany

RESEARCH

About this report

This report provides market share data for mobile network operator (MNO) spending on telecoms-specific radio access network (RAN) products and related services for 2019. It provides details of how the spending varied by sub-segment and vendor. The report also includes profiles of the leading vendors in the market.

It is based on several sources, including:

- interviews with CSPs and vendors worldwide
- Analysys Mason's research conducted during the past year.

KEY QUESTIONS ANSWERED IN THIS REPORT

- What was the overall size of the RAN market for the telecoms industry and what drove this spending among MNOs?
- How did the spending vary across different sub-segments of the RAN market?
- Who are the major vendors and what is their share of revenue in the RAN market?
- What are the different drivers and growth rates of MNO spending on products and professional services?

GEOGRAPHICAL COVERAGE

- Worldwide
- Central and Eastern Europe
- Developed Asia–Pacific
- Emerging Asia–Pacific
- Latin America
- Middle East and North Africa
- North America
- Sub-Saharan Africa
- Western Europe

SUB-SEGMENT COVERAGE

- 2G–4G RAN
- 5G RAN
- vRAN
- Small cells

WHO SHOULD READ THIS REPORT

- Vendors and executives in operator CTO offices that are responsible for network deployments.
- Vendor strategy teams that need to understand who the market competitors are and what their market position is.
- MNOs' strategy executives and CxOs.
- The investment community.

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MNOs' ultimate goal is to lower TCO; RAN virtualisation is a step in the right direction, but open disaggregated architecture is the key to achieving this aim

The increase in mobile data traffic and 5G deployments are challenging MNOs' business models. They must reduce network TCO to meet their financial commitments.

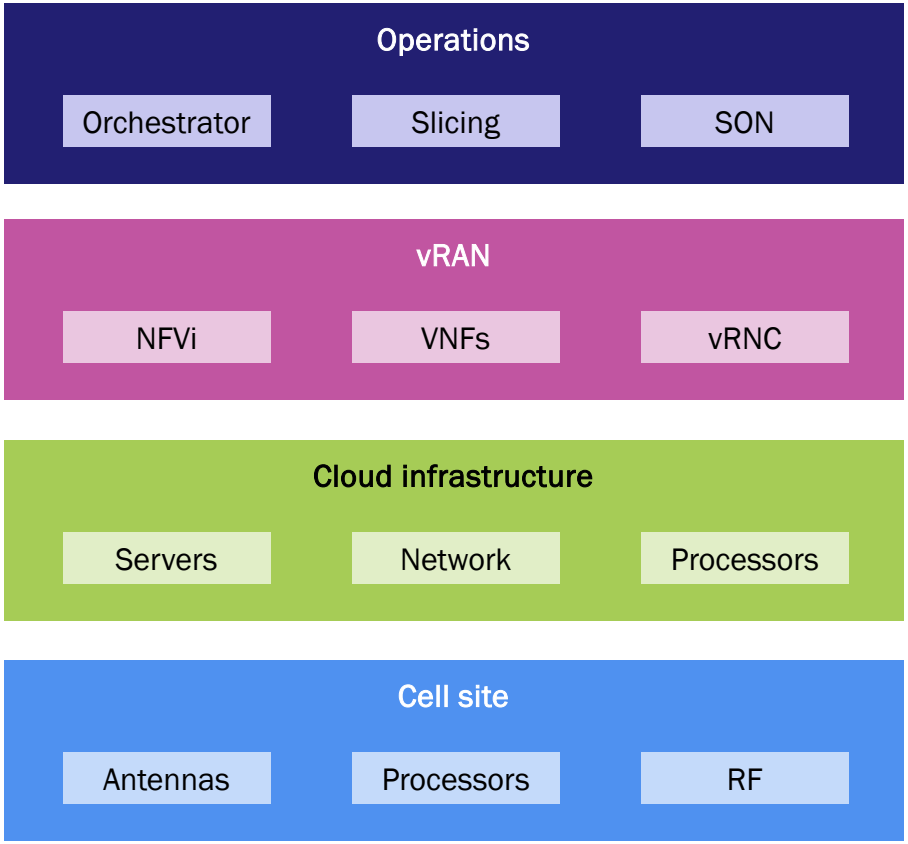
Network infrastructure is becoming increasingly virtualised, which is helping MNOs to meet their goals. However, virtualising the RAN is more challenging than for other domains (such as the core) due to the strict latency and compute requirements.

Virtualisation alone will not result in the TCO reductions that MNOs require. In particular, the first phase of RAN virtualisation will be costly to deploy given the lack of standardisation.

Furthermore, RAN virtualisation is not necessarily synonymous with having open interfaces. The baseband unit (BBU) can be disaggregated from the radio unit (RU) to run on generic hardware at a different location, but that does not mean that the interfaces between the RU and BBU are open.

Open interfaces are required to introduce competition in the value chain and drive down costs. Several open RAN initiatives (such as O-RAN Alliance and Telecom Infra project (TIP)) are working to deliver open disaggregated RAN architecture, but not all vendors are developing such products. Some vendors (such as Altiostar, Mavenir, Nokia and Parallel Wireless) are starting virtualised RAN trials and deployments, but these are mainly in low-traffic-density areas.

Figure 3: Key elements of the disaggregated RAN



Source: Analysys Mason

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About the author

Roberto Kompany (Senior Analyst) is a member of Analysys Mason's *Telecoms Software and Networks* research team and is the lead analyst for the *Next-Generation Wireless Networks* programme focusing on strategy and market research. He is also a Cambridge Wireless Special Interest Group (SIG) mobile broadband champion. Prior to joining Analysys Mason, Roberto worked for Dixons Carphone, where he analysed the effect on the business of shifts in the telecoms market in Europe and the UK. Previous positions included consultancy, where he helped a variety of clients worldwide with mobile-related projects, such as a capex reduction and developing a 5-year strategy for an incumbent's wireless infrastructure. Roberto holds an MSc in Mobile & Satellite Communications from University of Surrey and an MBA from IE Business School.

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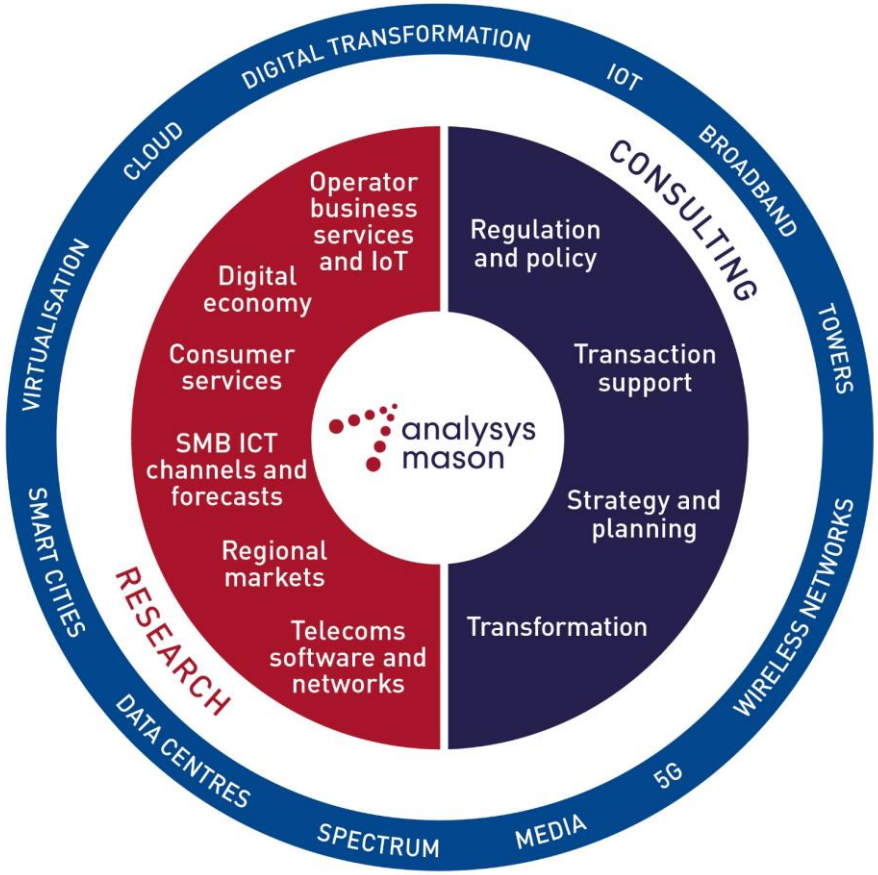

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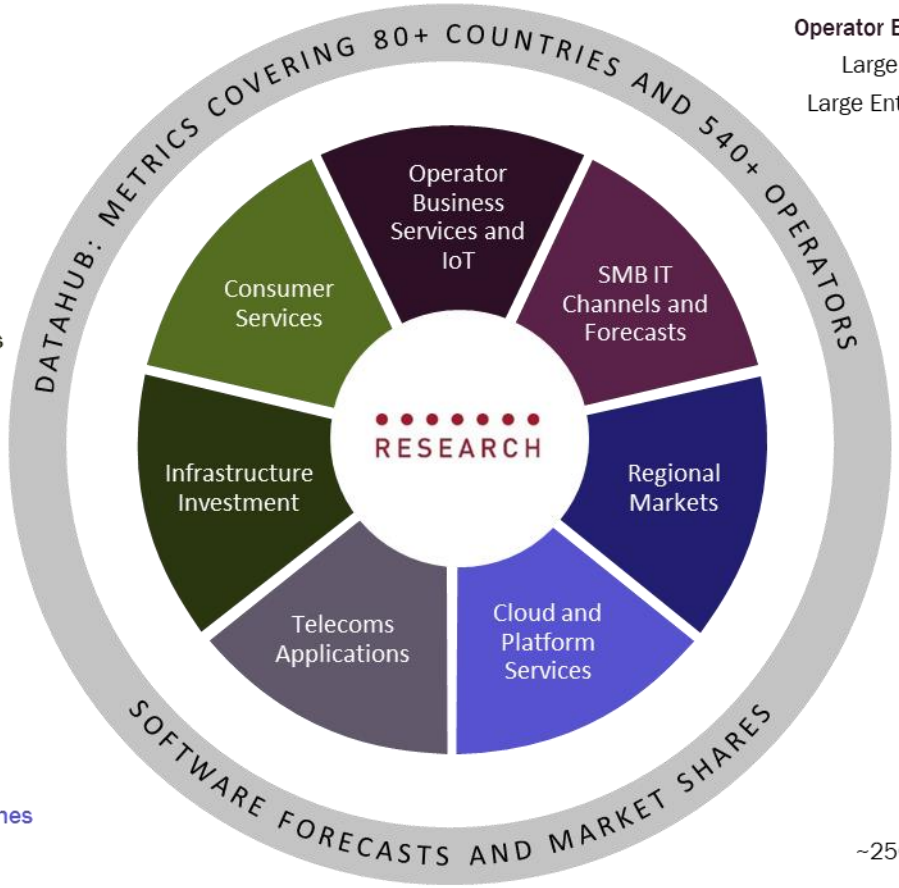

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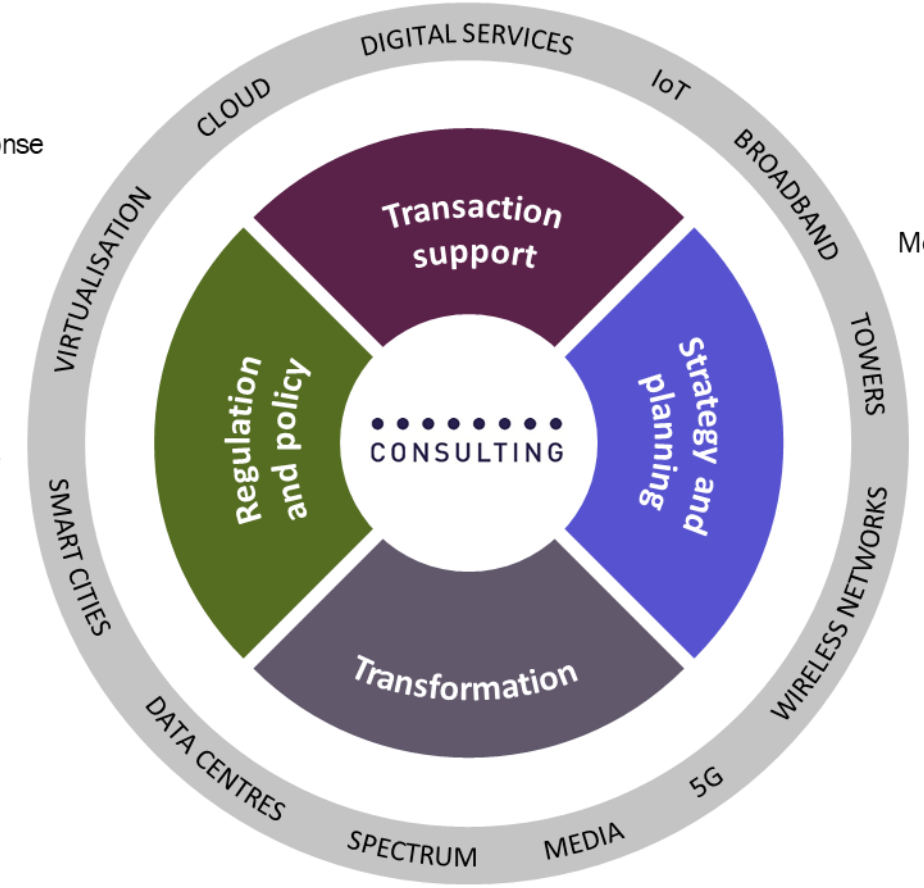

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