



# Service design and orchestration: worldwide market shares 2020



Justin van der Lande, Anil Rao and Michelle Lam

## About this report

This report provides market share data for communications service provider (CSP) spending on telecoms-specific service design and orchestration (SDO) software systems and related services for 2020. It provides details of how the spending varied by delivery model, service type, vendor and region. 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 market (service design and orchestration software systems and services for the telecoms industry) and what drove this spending among CSPs?
- What were the investment trends in 2020 that are likely to make a big impact in the next few years?
- Who are the major vendors and what is their share of revenue in the service design and orchestration systems market?
- What are the different drivers and growth rates of CSP 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

### WHO SHOULD READ THIS REPORT

- Vendor strategy teams that need to understand the key areas of growth.
- Product management teams responsible for feature functionality and product marketing teams responsible for market share growth.
- Market intelligence teams at vendors that want to understand how their competitors compare with each other.
- CSPs that are planning digital transformation journeys and want to ensure that their current vendors are staying up to date.

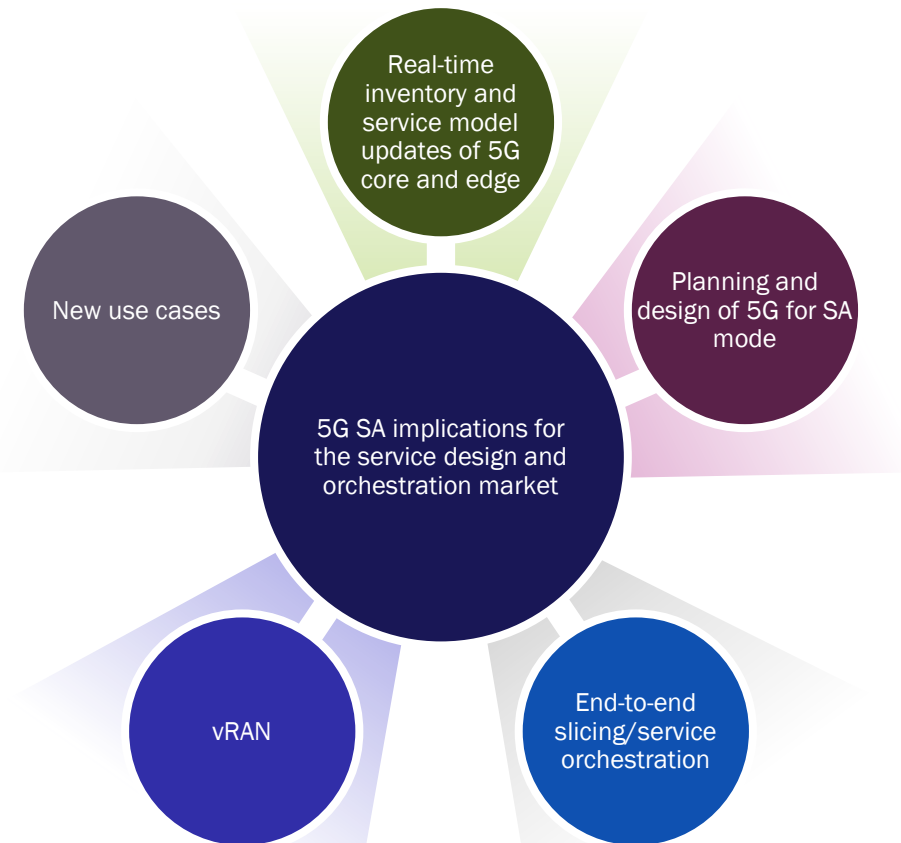
## 5G continues to be a key driver for automated SDO, both in terms of traditional requirements and as an enabler of a range of new diverse use cases

CSPs continued to roll out 5G in 2020, which expanded the use of planning, design and optimisation of 5G cell sites. CSPs are also working to optimise the performance and bandwidth of their existing 4G mobile infrastructure. CSPs are increasingly using analytics data such as cell site statistics in conjunction with customer data such as ARPU to inform actions regarding optimisation and capacity expansion.

Some CSPs started to roll out 5G standalone (SA), which is expected to have a greater impact on CSPs' processes and systems. The need for real-time inventory and service model updates pertaining to the dynamic 5G core and edge cloud environments will necessitate upgrades to SDO systems. 5G SA will enable CSPs to offer network slice-based differentiated services to enterprises; this will increase the demand for end-to-end multi-domain service orchestration software and services.

Analysys Mason estimates that vRAN will account for about 20% of the total addressable RAN market by 2025. This, together with the development of Open RAN specifications, will have significant implications for SDO technology. For example, network engineering functions must synchronise with cloud infrastructure plans to provide optimal vRAN performance; they must also work with the vRAN domain orchestrator to drive performance optimisation in order to deliver the best experience to customers. In addition, systems will need to support vRAN and traditional RAN simultaneously to provide CSPs with optimised operations.

**Figure 2: Key 5G-related market drivers and their impact on the service design and orchestration market**



Source: Analysys Mason



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**About the authors and Analysys Mason**

## About the authors



**Justin van der Lande (Research Director)** leads the Applications practice, which is part of Analysys Mason's Telecoms Software and Networks research stream. He specialises in business intelligence and analytics tools, which are used in all telecoms business processes and systems. In addition, Justin provides technical expertise for Analysys Mason in consultancy and bespoke large-scale custom research projects. He has more than 20 years' experience in the communications industry in software development, marketing and research. He has held senior positions at NCR/AT&T, Micromuse (IBM), Granite Systems (Telcordia) and at the TM Forum. Justin holds a BSc in Management Science and Computer Studies from the University of Wales.



**Anil Rao (Research Director)** is the lead analyst on network and service automation research that includes the *Network Automation and Orchestration*, *Automated Assurance* and *Service Design and Orchestration* research programmes, covering a broad range of topics on the existing and new-age operational systems that will power operators' digital transformations. His main areas of focus include service creation, provisioning and service operations in NFV/SDN-based networks, 5G, IoT and edge clouds; the use of analytics, ML and AI to increase operations efficiency and agility; and the broader imperatives around operations automation and zero touch networks. Anil is also a frequent speaker and chair at industry events, and holds a BEng in Computer Science from the University of Mysore and an MBA from Lancaster University Management School, UK.



**Michelle Lam (Research Analyst)** is a member of the Applications practice within the Telecoms Software and Networks research team in London. She holds a BSc in physics and an MSc in quantum technologies from University College London (UCL), where she was an academic representative to the Students' Union and assisted with research at the UCL Centre for Blockchain Technologies. She has also worked as a data analyst in machine learning and experimental physics, and has undertaken quantum computing research at the London Centre for Nanotechnology.

# We are experts in the telecoms, media and technology sector



## Strategy

- Corporate growth strategy
- Business unit strategy
- Infrastructure strategy



## Transformation

- Business transformation
- Digitalisation
- Operational excellence
- Data, BI, steering and insights
- Change and programme management
- Sustainability



## Transaction support

- Commercial due diligence and market review
- Technical due diligence
- Post-merger integration
- Periodical business monitoring and loan technical advisory
- Opportunity scouting and pre-deal support



## Regulation and policy



- Network and platform
- Public sector broadband intervention
- Accelerating digital transformation of society
- Price controls and cost modelling
- Regulatory accounting
- Regulatory benchmarking and analysis
- Spectrum management and policy
- Expert witness and litigation support
- Postal regulation and policy

## Subscription research







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- Operator Business Services and IoT Applications
- SMB IT Channels and Forecasts
- Cloud Networks

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  - Fixed-Mobile Convergence
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  - Video, Gaming and Entertainment
  - Digital Services
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  - Wireless Infrastructure Strategies
  - Fibre Infrastructure Strategies
  - Operator Investment Strategies
- 
**Applications programmes**
  - Network Automation and Orchestration
  - Customer Engagement
  - Monetisation Platforms
  - Digital Experience
  - Automated Assurance
  - Service Design and Orchestration
- 
**Cloud programmes**
  - Cloud Infrastructure Strategies
  - Data, AI and Development Platforms
  - Edge and Media Platforms



- 
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  - Large Enterprise Strategies
  - SME Strategies
  - IoT and M2M Services
  - Private Networks
- 
**SMB IT Channels and Forecasts programmes**
  - Cyber Security
- 
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    - Americas
    - Asia-Pacific
    - Middle East and Africa
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  - European Telecoms Market Matrix
  - European Country Reports
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  - Regional results and worldwide totals
  - Operator historical data

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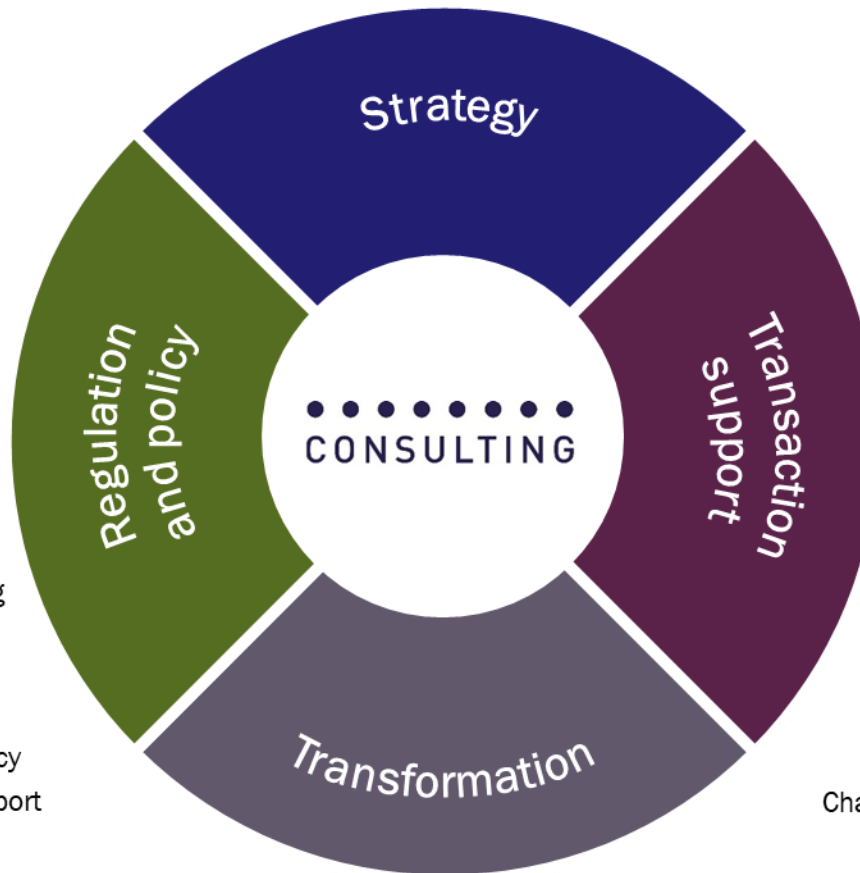
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