About this report

This report provides market share data for communications service provider (CSP) spending on telecoms-specific network automation and orchestration software systems and related services for 2018. It provides details of how the spending varied by delivery model, service type, vendor and region. The report also includes ‘snapshots’ of the leading vendors in the market and their positions as well as a table of specialist vendors of note.

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 (network automation and orchestration software systems for the telecoms industry) and what drove this spending among CSPs?
- How did the spending vary across different sub-segments of the network automation and orchestration market?
- Who are the major vendors and what is their share of revenue in the network automation and orchestration systems market?
- What are the different drivers and growth rates of CSP spending on products, product-related services and professional services?

WHO SHOULD READ THIS REPORT

- Vendor strategy teams that need to understand where revenue growth is slowing and where it is increasing across different network automation and orchestration (NAO) sub-segments.
- Product management teams that are responsible for feature functionality and geographical focus, and product marketing teams that are responsible for market-share growth.
- Market intelligence teams at vendors that want to understand how their competitors compare to each other and themselves.
- CSPs that are planning digital transformation journeys and want to understand the competitiveness of the incumbent and vendors.

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

- Network control and orchestration (NCO), which includes:
  - network orchestrators
  - virtual infrastructure managers (VIM)
  - WAN SDN products
- Element and network management systems (EMS/NMS)
Network automation and orchestration: worldwide market shares 2018

Dashboard: network automation and orchestration revenue market shares

Figure 3: Network automation and orchestration total revenue by vendor, worldwide, 2018

- The NAO market revenue as a whole grew by just over 13% (from our updated 2017 base) due to spending growth in all NCO segments.
- Vendor A remained in first position in terms of NAO revenue by virtue of its bigger fixed and mobile infrastructure business and related NMS/EMS, but Vendor B shrank the revenue gap and edged closer to Vendor A than in 2017. Vendor F’s sixth-place showing is more a vestige of its infrastructure business than its NFV/SDN strength.
- The other top-six vendors in the market have been more successful than Huawei and ZTE at moving more of their NAO business into the high-growth NFV/SDN-related segments.

Figure 2: Network automation and orchestration total revenue by type, worldwide, 2018

KEY MARKET DEVELOPMENTS IN 2018

- The NAO market revenue as a whole grew by just over 13% (from our updated 2017 base) due to spending growth in all NCO segments.
- Vendor A remained in first position in terms of NAO revenue by virtue of its bigger fixed and mobile infrastructure business and related NMS/EMS, but Vendor B shrank the revenue gap and edged closer to Vendor A than in 2017. Vendor F’s sixth-place showing is more a vestige of its infrastructure business than its NFV/SDN strength.
- The other top-six vendors in the market have been more successful than Huawei and ZTE at moving more of their NAO business into the high-growth NFV/SDN-related segments.

Table: Vendor Revenue (USD million)

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Revenue (USD million)</th>
</tr>
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<tbody>
<tr>
<td>Vendor A</td>
<td>1680</td>
</tr>
<tr>
<td>Vendor B</td>
<td>1627</td>
</tr>
<tr>
<td>Vendor C</td>
<td>1144</td>
</tr>
<tr>
<td>Vendor D</td>
<td>786</td>
</tr>
<tr>
<td>Vendor E</td>
<td>457</td>
</tr>
<tr>
<td>Vendor F</td>
<td>408</td>
</tr>
<tr>
<td>Other</td>
<td>2520</td>
</tr>
<tr>
<td>Total</td>
<td>8622</td>
</tr>
</tbody>
</table>

Source: Analysys Mason

1 Note that the shares may not sum to 100% due to rounding.
2 Significant vendors in the ‘Other’ category include...
Network orchestration (NO) market summary

**KEY MARKET DEVELOPMENTS IN 2018**

- We raised our 2017 baseline for NO spending by USD80 million to USD337 million based on new data from several vendors. The market more than doubled (106% growth) in 2018 to USD694 million, driven by an increase in all three types of NFV deployments: use case-based ones (such as vEPC managed by VNFM but not orchestrated by an NFVO), domain orchestration (such as multiple VNFs orchestrated on vCPE by an NFVO) and full cross-domain orchestration (which typically would require both SDN and NFV to orchestrate an application across domains using a platform such as Telefónica’s UNICA).
- Vendor A extended its leading NO revenue share (combined product and professional services) by 5 percentage points to 23%. Vendor B also increased its share by 4 percentage points to 11% and took second place. Vendor C dropped to third position after its share fell by 2 percentage points.
- The main keys to Vendor A’s increasing success in the NO market include a very flexible, modular platform (NC12), solid professional services capabilities and pre-integrated solutions that solve specific CSP challenges and make NFV/SDN deployments easier.
- Vendors B and C derive their strong market positions from a combination of strong platforms, their own VNFs (vEPC, vIMS and SD-WAN) which often get them in the CSP’s door, tools and integration capabilities to assemble what a customer needs.
- Vendors D, E and F round out the NO top-six vendors with a 7% share each. Vendor F, as an SI, is focused on professional services. The other two have not yet assembled the broad go-to-market capabilities that sets the three leaders apart from the pack.

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1 NO includes NFVO, VNFM and CD-NO. See appendix for more information.
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About the author and Analysys Mason
About the author

Dana Cooperson (Research Director) is the research director for Analysys Mason’s network-focused software research programmes. Her area of expertise is intelligent fixed and mobile network infrastructure. Her goal is to help customers strengthen their link in the communications value chain while evolving their business operations to benefit from, rather than be threatened by, shifts in the market. The key network infrastructure trends Dana focuses on include the integration of communications and IT assets and the drive towards software-controlled, virtual networking.
Analysys Mason’s consulting and research are uniquely positioned

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- Postal sector

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- Technical due diligence
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