

# Nokia overtook Huawei to lead the USD66.1 billion telecoms software and services market in 2018

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The telecoms software and services (TSS) market grew by 1% between 2017 and 2018 to reach USD66.1 billion. The vendors that had the greatest market shares in 2017 were not equally exposed to the high-growth TSS markets in 2018. For example, Nokia performed well in fast-growing markets such as network orchestration and was able to jump ahead of Huawei and claim the top spot overall. This comment provides a broad perspective on TSS market drivers and the top vendors in the market, and examines market dynamics to help inform market players' strategies.

## Network automation and AI and analytics spending grew the most in 2018

The increase in communications service provider (CSP) spending in 2018 came from AI and analytics (AIA, up 3.7%) and network automation and orchestration (NAO, up 13.1%); spending in all other segments (customer engagement, service design and orchestration, and video and identity management) was either roughly flat or decreased by more than 1% (monetisation platforms and automated assurance).

CSPs invested increasingly in:

- broadening the scope of automation to tackle challenges end-to-end, and significantly improve efficiency and the customer experience
- harnessing general IT technologies and practices such as open-source software and SaaS and cloud delivery to lower expenses and improve business agility
- preparing for 5G by deploying digital infrastructure and network orchestration software and evolving to virtual and cloud-native networks.

Spending growth was concentrated in the newer, smaller AIA and NAO segments, but all of the other segments also had new pockets of investment for vendors to exploit.

## Nokia edged past Huawei and Ericsson to become the market leader

2018 was a good year for Nokia in telecoms software and related services. The market as a whole grew by 1% in 2018, but Nokia's revenue grew by 3%. In contrast, the revenue for Huawei (the 2017 leader) and Ericsson fell by 5% and 2%, respectively. Figure 1 compares the top-six vendors' market share of spend in 2018 and 2017.

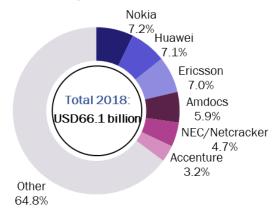
For more information, see Analysys Mason's Telecoms software and services: worldwide market shares 2018. Note that some of our market definitions and baselines have changed since our 2017 market share report.



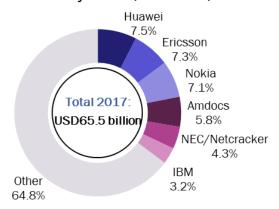


Figure 1: Comparison of vendor market share, 2018 and 2017

#### Telecoms software and services total revenue by vendor, worldwide, 2018



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Source: Analysys Mason, 2019

Two thirds of telecoms software and services spending went to niche suppliers, each of which had a market share of less than 3%. There are hundreds of such suppliers: some of them are telecoms specialists (such as Infinera), while others (such as Amazon Web Services) supply the telecoms vertical as well as many other industries. The top-six vendors in Figure 1 account for just over 35% of all CSP spending; the top-20 vendors account for 60%.

Nokia became the revenue market share leader in 2018 thanks to business growth in multiple segments. Nokia's performance was notably strong in high-growth areas such as network orchestration and automation, where it offers a wide range of products and professional service capabilities to help its customers make the NFV/SDN leap. These high-growth areas are a big challenge for CSPs as the 5G era approaches. Nokia's investment in its Common Software Foundation and its cloud-native product portfolio should help it to further strengthen its market position in 2019.

**Huawei**'s business is under pressure due to many factors, including geopolitical issues. Its TSS business declined, but it performed better overall than one might have expected given that its carrier business unit, which accounted for 41% of its 2018 revenue, posted a revenue decline. Its TSS revenue decline is also a result of its 2017 pull-back from BSS markets, and the fact that it was less successful than Nokia and Ericsson in turning NFV/SDN opportunities into revenue.

Ericsson's Digital Services business remained challenged in 2018 (BSS sales slumped by 11% in Swedish krona), but OSS and cloud core sales grew (not included in our TSS data). Ericsson faltered a bit in productrelated revenue (it was ranked fourth behind Nokia, Huawei and Amdocs), but it remained the leading professional services supplier ahead of Nokia and Huawei. It has a strong revenue base and supports a broad array of CSPs in all regions of the world with a wide range of professional services.

Amdocs retained strength in service design and orchestration; it led in terms of product-related revenue in this area due to strong business from established customers and new customer wins in segments such as inventory management, engineering systems for LTE and 5G networks and monetisation platforms. Europe was a particular bright spot for Amdocs; its revenue grew by 17% in the region. Amdocs has not been as successful at attacking growth in NAO as its key rivals; it is being held back by its relatively weak position in networking (SDN) and its slowness in developing NFV solutions that are easy for CSPs to consume.



**NEC/Netcracker** improved more than a revenue share increase of just one percentage point might imply. Netcracker had a particularly strong year in monetisation platform product sales, and registered double-digit revenue growth on the back of multiple new deals and expansions of existing ones. It nearly doubled its network control and orchestration revenue due to almost 160% growth in network orchestration revenue. Overall, Netcracker's deals for OSS/BSS transformation and network virtualisation operationalisation professional services grew strongly (both in terms of the number of deals and the size of the deals).

Accenture pushed ahead of IBM to become one of the top-six suppliers in the TSS market. Its core focus area of providing support to CSPs' BSS operations, particularly for monetisation platforms, has enabled it to become the fourth-largest vendor in terms of professional services revenue. It maintains a big lead in AIA professional services. It is also increasingly winning NFV/SDN-related deals, such as those for SD-WAN strategy, product development and roll-out, NFVI roll-out, NFV stack monitoring and VNF onboarding services.

### We expect that there will be more changes to the market positions of the top vendors in 2019

Two tenths of a share point (less than USD125 million in revenue) separates the top-three vendors, and Amdocs and Netcracker are not far behind them. The vendors that are faring best in the TSS market are the vendors that are most successfully turning what could be threats from automation, IT technologies and practices and 5Grelated investments into opportunities. We expect that opportunities in these three areas will become more plentiful in 2019 and beyond, and lead to further shifts in market leadership.



