

# Top-10 predictions for the telecoms, media and technology sectors 2017

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Analysys Mason's annual telecoms, media and technology (TMT) predictions reveal which trends will make an impact in the next 12 months. Network operators and their suppliers must pay close attention to these trends for their decision-making in 2017.

## Analysys Mason's top-10 predictions for 2017

1. eSIMs will begin to appear on smartphones, and will expand their presence on companion devices.
2. WhatsApp will take significant chunks of mobile voice traffic.
3. Network operators will increasingly use digital experience initiatives to appeal to digital natives.
4. An increase in the volume of mobile video traffic will lead network operators to invest in virtualised video delivery and traffic management solutions.
5. Network operators will accelerate their efforts to generate more revenue from IoT products and services.
6. Narrowband (NB)-IoT networks will begin to generate revenue.
7. Network operators will increasingly focus on enterprises, which will force them to shift their software-defined networking (SDN) efforts from the data centre to the wide-area network (WAN).
8. A few leading network operators will blaze the trail for 5G fixed access.
9. Network operators will focus most of their 5G-related efforts on the non-radio aspects: cloud RAN, increased fibre penetration and virtualised networks.
10. Network operators' virtualisation efforts will slow down as they reassess goals and approaches.

## Analysys Mason's top-10 predictions in more detail

Our predictions are based on our continuing research and collaboration in the global telecoms industry.

Our research division publishes numerous reports every month with in-depth analysis supported by real-world data. This top-10 list is a snapshot of our analysis. Here are our predictions in more detail.

**1. eSIMs will begin to appear on smartphones, and will expand their presence on companion devices.**

The impact that eSIMs will have on the smartphone market will depend on the business models and bundling tactics that operators choose to adopt. We expect challenger operators to embrace broader device ecosystems and channel partnerships, while incumbents will prefer more-traditional bundling approaches.

**2. WhatsApp will take significant chunks of mobile voice traffic.**

Convenience and an improved feature set will make VoIP mainstream. We expect a 10% reduction in the volume of voice calls in Western Europe between 2016 and 2021, largely driven by substitution to WhatsApp.

**3. Network operators will increasingly use digital experience initiatives to appeal to digital natives.**

Over 75% of telecoms operators will have active programmes for offering a digitalised consumer experience to meet the needs of the digital natives who have been conditioned by the web-scale Internet companies. Operators will introduce more-automated customer engagement services, including AI-based chatbots, and will continue to move toward fully automated customer service.

**4. An increase in the volume of mobile video traffic will lead network operators to invest in virtualised video delivery and traffic management solutions.**

The volume of video traffic will continue to increase. In particular, mobile video will lead network operators to the virtualisation and orchestration of key video delivery components such as content management systems and content delivery networks.

Virtualisation will enable network operators to scale capacity on demand, reduce stranded capex and cost-effectively deliver multi-screen, OTT and 4K video services. Our research indicates, for example, that the benefits of virtualised video management and delivery can lead to opex reductions of 59% compared with standard physical approaches.

**5. Network operators will accelerate their efforts to generate more revenue from IoT products and services.**

Telecoms operators will feel pressure to generate IoT revenue more quickly, possibly through acquisition. For most operators, IoT revenue accounts for less than 1% of the total. Even at 1% of revenue and an annual growth rate of 20% (roughly in line with current growth rates for operators' IoT businesses), it will take until 2025 for IoT revenue to exceed 5%, assuming top-line revenue is flat. This may be too long for senior managers in operators who may want to explore acquisitions or investments. Verizon was one of the few operators to make big, bold moves in 2016, spending over USD3 billion on Fleetmatics, Telogis and some other smaller firms. Others may follow Verizon's example in 2017.

**6. NB-IoT networks will begin to generate revenue.**

The first truly commercial NB-IoT networks will be launched. There was a flurry of releases in 4Q 2016, but we are still yet to see a truly commercial NB-IoT network (that is, one that charges customers for use of the network). We expect to see the first customers paying for access in 2017, possibly even in 1Q. That said, we do not expect significant ramp up until the end of the year, as more modules become available and network coverage increases. We may even see the first contracts for more than 1 million NB-IoT devices; this is certainly possible given the interest from large gas and water utilities.

**7. Network operators will increasingly focus on enterprises, which will force them to shift their SDN efforts from the data centre to the WAN.**

Most of network operators' USD1.9 billion SDN-related spending in 2017 will shift from the data centre to the WAN. Network operators will invest in both SDN-based service launches (vCPE, cloud VPN, SD-WAN and multi-cloud bursting) and new approaches to integrating the management of IP and optical layers in a programmable WAN. These investments will allow CSPs to provide less-expensive and more-flexible enterprise services.

**8. A few leading network operators will blaze the trail for 5G fixed access.**

3GPP will come close to finalising the first standards for 5G, but 5G will remain confined to a few operators and their rarefied, if headline-grabbing, trials. Instead, network

operators will focus on near-term use cases for 5G, such as for high-speed access in the final mile.

**9. Network operators will focus most of their 5G-related efforts on the non-radio aspects: cloud RAN, increased fibre penetration and virtualised networks.**

Importantly for 5G, operators will become increasingly confident in non-radio aspects of the mobile platform, which will start to transform the mobile network, starting with LTE-A, into an open, flexible IT platform, through which implementing a new generation radio will be a relatively simple task. Despite barriers including lack of fibre and uncertain cost models, our mobile network operator surveys indicate that the number of cloud-RAN ‘trailblazers’ will jump from 4% in 2016 to 10% in 2017 as the benefits of flexible resource allocation, opex reduction and capacity improvement become more apparent and network operators prepare for 5G-related opportunities.

**10. Network operators’ virtualisation efforts will slow down as they reassess goals and approaches.**

Network operator spending on cloud, network function virtualisation (NFV) and SDN products and services will reach USD11.9 billion in 2017. This represents a slow down in the growth rate and is the result of many network operators pausing to reassess their NFV/SDN transformation results, expectations, goals, solutions and partnerships before adjusting their strategies and renewing their transformation efforts in 2018.