



# IMPACT OF 5G AND CLOUD ON TRANSFORMATION OF TELECOM NETWORKS

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## ABSTRACT

This LightCounting report focuses on the changing marketplace facing the communications service providers (CSPs) and the impact of 5G, cloud services and new technologies on their business and networking infrastructure.

The adoption of cloud technologies represents a key inflection point for the CSPs that are changing how they build and operate their networks. Instead of working with several systems vendors for individual service introductions and specific network upgrades, the CSPs are putting in place generic hardware that will allow their networks to be programmable and software defined. The CSPs continue to work closely with vendors as they transform their networks but are working differently: they are adopting open designs and engaging with a wider community of suppliers. And once their networks are NFV- and SDN-based, the CSPs will be able to easily switch in and out vendors as required. Such a transformation represents a major upheaval for the CSPs and for the telecom industry in general.

The move to transform networks is still in early stages, but CSPs have already consigned to history the traditional way of building networks using proprietary platforms and complete software stacks from individual companies. CSPs see the embrace of cloud as defining their futures in a world experiencing unprecedented technological change and which is increasingly being led by the large-scale datacenter operators, referred to in this report as the internet content providers (ICPs).