

Carrier Network Infrastructure

AN IDC CONTINUOUS INTELLIGENCE SERVICE

IDC's *Carrier Network Infrastructure* (CNI) service analyzes emerging technologies, strategies, and deployment models as telecom carriers transform using cloud/MEC, digital, and virtualized network infrastructure. In addition, this service examines interactions between leading telecom hardware and software vendors, wireless and wireline carriers, and cloud service providers (SPs), in addition to exploring how those partnerships are driving overall industry transformation. It also analyzes applicability of as-a-service models (NaaS, IaaS, and SaaS) to telecom networks. Finally, this service broadly covers both trends related to public and private networks, including how wireless (e.g., cellular) and wireline networking is being applied for enterprise customers. Research includes quantitative and qualitative market assessments as well as forecasts of market trends, technology requirements, and deployment strategies.

Markets and Subjects Analyzed

- Telco cloud ecosystem: Evaluating strategies employed by leading hardware/software vendors, comms SPs, cloud providers, and third-party value-added players
- Carrier multi-access edge (MEC)
- Network transformation strategies of comms SPs
- Technology convergence of the wireline and wireless infrastructure including Optical, HFC, FMC, and software
- 5G infrastructure: Technology and business implications for key stakeholders such as comms SPs, cloud providers, equipment vendors, enterprises, and industry verticals in the 5G ecosystem
- Network core, access, and transport strategy deployed within cable, mobile, content, and wireline service providers
- SD-WAN and virtual network services
- IP and optical convergence in comms SPs' routing and switching platforms

Core Research

- Telco Cloud Forecast: NFV/SDN, NFVI and Cloud-Native Networking
- Carrier MEC Software Forecast
- Worldwide SD-WAN forecast
- Worldwide Carrier Routing Equipment Forecast
- Virtual vCPE/uCPE Market Forecast
- Worldwide 5G Network Infrastructure Forecast
- Worldwide Private LTE/5G Network Infrastructure Forecast
- Worldwide LTE/5G Wireless Router Forecasts
- Carrier Ethernet (Routing and Switching) Forecast and Opportunities
- Carrier Market Analysis Perspective (MAP)

In addition to the insight provided in this service, IDC may conduct research on specific topics or emerging market segments via research offerings that require additional IDC funding and client investment. To learn more about the analysts and published research, please visit: [Carrier Network Infrastructure](#).

Key Questions Answered

1. How and why is capex and opex spending transforming within fixed and mobile network operators?
2. Which business use cases will drive NFV/SDN and NFVI growth in cable, content, mobile, and wireline networks?
3. How will MEC transform comms SPs and enterprises' infrastructure?
4. How are network equipment providers positioning themselves to enable the service provider network transformation?
5. What are the business and technology implications of open software platforms on vendor product road maps?
6. What will the technology value chain look like in a public and private 5G era?
7. What role will cloud providers play as more network workloads are hosted on public and private cloud infrastructure?

Companies Analyzed

This service reviews the strategies, market positioning, and future direction of several providers in the carrier network infrastructure market, including:

Airvana, Akamai Technologies, Alef Mobitech, Aruba, AWS, CellMining, Cellwize, Cisco, Cobham, CommScope, Dialogic, Ericsson, F5 Networks, Fujitsu, Google, Hewlett Packard Enterprise, Huawei, IBM, Intel, iPass, JMA Wireless, Juniper, Kineto, LG Electronics, Meta Platforms, Microsoft, Motorola Solutions, NEC, NETSCOUT SYSTEMS, Nokia Networks, Oracle Communications Group, Qualcomm, Samsung, Taqua, Vasona, and ZTE. The service also tracks the network deployment and migration strategies of major mobile network operators in various regions of the world, including América Móvil, AT&T, Axiata Group, Bell Mobility, Bharti, BSNL, BT, China Mobile, China Unicom,

Cincinnati Bell, Claro, C Spire, Deutsche Telekom, Everything Everywhere, iBASIS, KDDI, Kuwait Telecom, nTelos, NTT DOCOMO, Oi, Orange, PCCW, Reliance, Rogers, SAP Mobile, Saudi telecom, Singtel, SK Telecom, Syniverse, Tata Communications, Tata Teleservices, Telefónica, Telekom Austria, Telenor, TeliaSonera, Telstra, TELUS, TIM, T-Mobile, Verizon, and Vodafone.