



# Programmable network platform: communications service providers' progress and market forecast 2023– 2030



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## About this report

This report explains Analysys Mason's vision for programmable network platforms (PNPs). We explore the progress that communications service providers (CSPs) are making towards this vision by examining our forecasts for spending on the components of programmable connectivity.

The adoption of PNPs will allow CSPs to accommodate new revenue-generating services by creating connectivity fabrics that can be adjusted programmatically to support the specific connectivity requirements of different use cases. CSPs are currently making investments that will be essential for the implementation of PNPs, including investments in programmable cloud-native network clouds and on the data-driven operations of programmable networks.

We estimate that in 2022, USD10.1 billion was spent by CSPs to build programmable networks that will form the foundation of PNPs. This spending will grow at a CAGR of 16%, reaching USD32.6 billion in 2030.

This report uses data from the following Analysys Mason forecasts:

- *Network cloud infrastructure: worldwide forecast 2022–2027*
- *Data, AI/analytics and development platforms: worldwide forecast 2022–2027*
- *Public edge: worldwide forecast 2022–2027.*

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### KEY QUESTIONS ANSWERED IN THIS REPORT

- What are PNPs and what is driving investment in them?
- What roles do cloud-native network clouds and edge computing have in enabling PNPs?
- How must CSPs evolve their approaches to data management and AI/analytics to enable PNPs?
- What progress are CSPs making towards implementing PNPs?
- How much are CSPs spending on implementing PNPs?



### WHO SHOULD READ THIS REPORT

- Strategy teams at CSPs looking to implement PNPs or to understand how introducing programmable connectivity can unlock new revenue streams.
- Strategy teams at vendors and systems integrators (SIs) that need to understand the growth opportunities in the markets for components of PNPs.
- Network API producers that need to understand how CSPs might implement API-driven network fabrics.



**Executive summary**

Research overview

Programmable network platforms





Programmable network cloud and edge

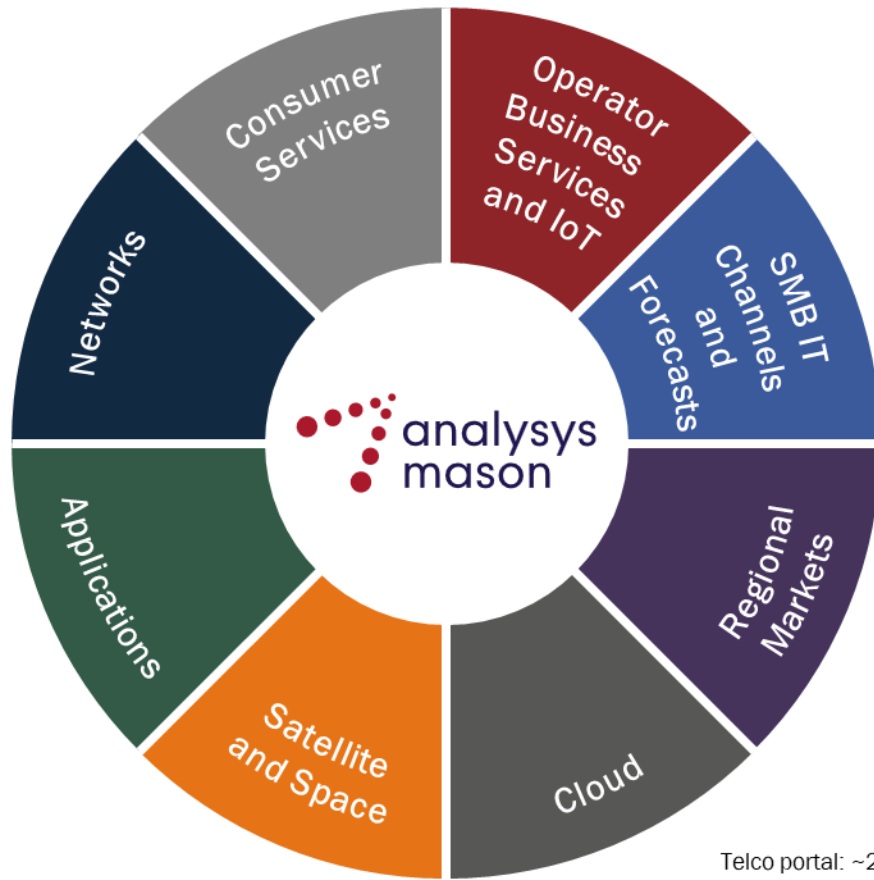
The data-driven operation of programmable networks

Appendix

About the authors and Analysys Mason

# Our research services

- 
**Consumer Services**  
 Fixed Broadband Services  
 Mobile Services  
 Fixed-Mobile Convergence  
 Smart Devices  
 Future Comms  
 Video, Gaming and Entertainment
- 
**Networks**  
 Next-Generation Wireless Networks  
 Wireless Infrastructure Strategies  
 Fibre Infrastructure Strategies  
 Operator Investment Strategies  
 Telecoms Strategy and Forecast  
 Transport Network Strategies
- 
**Applications**  
 Network Automation and Orchestration  
 Customer Engagement  
 Monetisation Platforms  
 Digital Experience  
 Automated Assurance  
 Service Design and Orchestration  
 Telecoms Software Market Shares
- 
**Satellite and Space**  
 Satellite Strategies for Telcos  
 Satellite Capacity  
 Satellite Infrastructure  
 Satellite Mobility



- Operator Business Services and IoT**   
 Enterprise Services  
 SME Services  
 IoT Services  
 Private Networks  
 Cyber Security
- SMB IT Channels and Forecasts**   
 SMB Technology Forecaster
- Regional Markets**   
 Global Telecoms Data and Financial KPIs  
 Americas  
 Asia-Pacific  
 Middle East and Africa  
 European Core Forecasts  
 European Telecoms Market Matrix  
 European Country Reports
- Cloud**   
 Cloud Infrastructure Strategies  
 Data, AI and Development Platforms  
 Edge and Media Platforms  
 Multi-Cloud Networking
- DataHub**   
 Forecast data for 80 countries  
 Telco portal: ~2800 forecast and ~320 historical metrics  
 SMB Technology Forecaster portal: ~120 000 forecast metrics

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