

# **Telecom Infrastructure as a Service (IaaS) Market Forecasts to 2034 – Global Analysis By Service Type (Compute as a Service (CaaS), Storage as a Service (STaaS), Network as a Service (NaaS), Disaster Recovery as a Service (DRaaS), Data Center as a Service (DCaaS), Desktop as a Service (DaaS) Managed Hosting Services, Content Delivery Services (CDN), and High Performance Computing as a Service (HPCaaS)), Deployment Model, Component, Organization Size, Application, End User and By Geography**

<https://marketpublishers.com/r/T02367D326F0EN.html>

Date: May 2026

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: T02367D326F0EN

## **Abstracts**

According to Statistics MRC, the Global Telecom Infrastructure as a Service (IaaS) Market is accounted for \$9.7 billion in 2026 and is expected to reach \$52.3 billion by 2034 growing at a CAGR of 23.5% during the forecast period. Telecom infrastructure as a service refers to cloud-delivered telecommunications infrastructure solutions and managed platforms encompassing virtualized compute, storage, and networking resources provisioned on-demand through service-level agreements to telecommunications operators, internet service providers, and enterprise customers seeking to replace owned physical network infrastructure with subscription-based cloud infrastructure consumption models. Telecom IaaS platforms enable operators to deploy network functions, operational support systems.

## **Market Dynamics:**

**Driver:****Network Infrastructure Capital Expenditure Optimization**

Telecommunications operator financial pressure to reduce capital expenditure intensity while maintaining network capacity growth and technology modernization investments drives accelerated adoption of infrastructure-as-a-service consumption models enabling network function deployment on shared cloud infrastructure without dedicated hardware procurement. IaaS commercial models converting substantial upfront capital equipment purchases to predictable operational expenditure subscriptions improving operator cash flow, eliminating hardware obsolescence risk, and enabling flexible capacity management aligned with actual traffic demand rather than peak capacity planning requirements.

**Restraint:****Telecommunications Data Sovereignty Requirements**

Regulatory requirements across multiple jurisdictions mandating telecommunications network data processing within national geographic boundaries, restricting cross-border customer data transfer, and requiring regulatory access to network traffic create constraints on public cloud IaaS adoption for sensitive telecommunications workloads requiring dedicated infrastructure maintaining clear data sovereignty compliance. Telecommunications operators managing regulated network functions including lawful intercept systems, emergency services routing, and subscriber data management requiring compliance validation that complex shared public cloud infrastructure environments complicate.

**Opportunity:****Network Function Virtualization Cloud Migration**

Large-scale telecommunications operator programs migrating network functions virtualization infrastructure from private on-premises deployments to public and hybrid cloud IaaS platforms create substantial managed cloud infrastructure revenue opportunity for providers offering telecommunications-optimized compute, deterministic networking, and carrier-grade service level agreements. IaaS providers developing telecommunications-specific infrastructure capabilities including low-latency interconnection, network function certification programs, and regulatory compliance

frameworks creating differentiated platforms commanding premium pricing in operator cloud migration procurement.

**Threat:****Operator-Built Private Cloud Infrastructure**

Major telecommunications operators including AT&T, Deutsche Telekom, and China Mobile investing in operator-owned private cloud infrastructure platforms combining open-source cloud technology with telecommunications-specific optimizations create internal infrastructure-as-a-service capabilities reducing external IaaS procurement requirements for core network workloads. Operator private cloud investments leveraging network infrastructure assets, existing data center footprint, and specialized telecommunications engineering talent to build competitive cloud platforms that address data sovereignty requirements while avoiding public cloud vendor dependency.

**Covid-19 Impact:**

COVID-19 pandemic accelerating digital service consumption requiring telecommunications operator rapid capacity deployment for streaming, collaboration, and remote connectivity demand validated cloud IaaS adoption enabling elastic infrastructure scaling without physical hardware procurement timelines. Post-pandemic telecommunications digital transformation investment incorporating cloud-native architecture for 5G core deployment, operational support system modernization, and digital service platform development continues expanding telecom IaaS market demand.

The Telecom Operators segment is expected to be the largest during the forecast period

The Telecom Operators segment is expected to account for the largest market share during the forecast period, as primary consumers of telecommunications infrastructure-as-a-service for network function virtualization hosting, operational support system cloud migration, 5G core deployment, and digital service platform infrastructure that represents the largest single demand category for telecom-grade IaaS capabilities, generating recurring subscription revenue across multi-year cloud transformation programs undertaken by major global telecommunications operators.

The Data Analytics & AI Workloads segment is expected to have the highest CAGR

during the forecast period

Over the forecast period, the Data Analytics & AI Workloads segment is predicted to witness the highest growth rate, driven by telecommunications operator deployment of artificial intelligence and machine learning workloads for network operations automation, customer experience analytics, predictive maintenance, and revenue assurance applications on cloud IaaS infrastructure offering elastic GPU compute resources and managed AI platform services enabling operator data science programs without dedicated on-premises AI infrastructure investment.

### **Region with largest share:**

During the forecast period, the North America region is expected to hold the largest market share, due to advanced telecommunications cloud transformation programs at major US operators, dominant hyperscaler IaaS provider presence with AWS, Microsoft Azure, and Google Cloud generating substantial telecommunications customer revenue, strong enterprise telecommunications IaaS consumption for cloud connectivity and managed network services, and significant technology investment creating sophisticated telecom IaaS ecosystem.

### **Region with highest CAGR:**

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR, due to large-scale 5G cloud-native infrastructure deployment programs across China, Japan, South Korea, and India requiring substantial IaaS capacity for virtualized core network functions, rapidly growing enterprise cloud adoption driving telecommunications IaaS demand, and government digital infrastructure investment programs supporting telecommunications cloud transformation across major Asian markets.

### **Key players in the market**

Some of the key players in Telecom Infrastructure as a Service (IaaS) Market include AWS (Amazon), Microsoft Azure, Google Cloud, IBM Cloud, Alibaba Cloud, Oracle Cloud, Tata Communications, NTT Communications, Lumen Technologies, Zayo Group, Equinix, Digital Realty, CenturyLink (Lumen), Windstream Enterprise, and GTT Communications.

### **Key Developments:**

In April 2026, AWS expanded its telecommunications IaaS portfolio with new carrier-grade compute instances featuring enhanced network performance, dedicated bandwidth guarantees, and telecommunications compliance certifications enabling operator deployment of critical network functions on AWS infrastructure.

In March 2026, Microsoft Azure launched an enhanced Azure for Operators platform incorporating new telecommunications-optimized IaaS services with carrier-grade SLAs, integrated network function orchestration, and expanded regulatory compliance capabilities for telecommunications operator cloud migration programs globally.

#### Service Types Covered:

Compute as a Service (CaaS)

Storage as a Service (STaaS)

Network as a Service (NaaS)

Disaster Recovery as a Service (DRaaS)

Data Center as a Service (DCaaS)

Desktop as a Service (DaaS)

Managed Hosting Services

Content Delivery Services (CDN)

High Performance Computing as a Service (HPCaaS)

#### Deployment Models Covered:

Public Cloud

Private Cloud

Hybrid Cloud

### Components Covered:

- Compute Infrastructure
- Storage Infrastructure
- Networking Infrastructure
- Other Components

### Organization Sizes Covered:

- Small & Medium Enterprises (SMEs)
- Large Enterprises

### Applications Covered:

- Network Function Virtualization (NFV)
- Virtualized Core Networks
- OSS/BSS Modernization
- Data Analytics & AI Workloads
- Content Delivery & Streaming
- Disaster Recovery & Backup
- Test & Development Environments

### End Users Covered:

Telecom Operators

Internet Service Providers (ISPs)

Data Center Providers

Enterprises using Telecom Cloud

Government & Smart City Telecom Infrastructure

#### Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

**What our report offers:**

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030,

2032 and 2034

- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

### **Free Customization Offerings:**

All the customers of this report will be entitled to receive one of the following free customization options:

#### Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

#### Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

#### Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

## Contents

### **1 EXECUTIVE SUMMARY**

- 1.1 Market Snapshot and Key Highlights
- 1.2 Growth Drivers, Challenges, and Opportunities
- 1.3 Competitive Landscape Overview
- 1.4 Strategic Insights and Recommendations

### **2 RESEARCH FRAMEWORK**

- 2.1 Study Objectives and Scope
- 2.2 Stakeholder Analysis
- 2.3 Research Assumptions and Limitations
- 2.4 Research Methodology
  - 2.4.1 Data Collection (Primary and Secondary)
  - 2.4.2 Data Modeling and Estimation Techniques
  - 2.4.3 Data Validation and Triangulation
  - 2.4.4 Analytical and Forecasting Approach

### **3 MARKET DYNAMICS AND TREND ANALYSIS**

- 3.1 Market Definition and Structure
- 3.2 Key Market Drivers
- 3.3 Market Restraints and Challenges
- 3.4 Growth Opportunities and Investment Hotspots
- 3.5 Industry Threats and Risk Assessment
- 3.6 Technology and Innovation Landscape
- 3.7 Emerging and High-Growth Markets
- 3.8 Regulatory and Policy Environment
- 3.9 Impact of COVID-19 and Recovery Outlook

### **4 COMPETITIVE AND STRATEGIC ASSESSMENT**

- 4.1 Porter's Five Forces Analysis
  - 4.1.1 Supplier Bargaining Power
  - 4.1.2 Buyer Bargaining Power
  - 4.1.3 Threat of Substitutes
  - 4.1.4 Threat of New Entrants

- 4.1.5 Competitive Rivalry
- 4.2 Market Share Analysis of Key Players
- 4.3 Product Benchmarking and Performance Comparison

## **5 GLOBAL TELECOM INFRASTRUCTURE AS A SERVICE (IAAS) MARKET, BY SERVICE TYPE**

- 5.1 Compute as a Service (CaaS)
- 5.2 Storage as a Service (STaaS)
- 5.3 Network as a Service (NaaS)
- 5.4 Disaster Recovery as a Service (DRaaS)
- 5.5 Data Center as a Service (DCaaS)
- 5.6 Desktop as a Service (DaaS)
- 5.7 Managed Hosting Services
- 5.8 Content Delivery Services (CDN)
- 5.9 High Performance Computing as a Service (HPCaaS)

## **6 GLOBAL TELECOM INFRASTRUCTURE AS A SERVICE (IAAS) MARKET, BY DEPLOYMENT MODEL**

- 6.1 Public Cloud
- 6.2 Private Cloud
- 6.3 Hybrid Cloud

## **7 GLOBAL TELECOM INFRASTRUCTURE AS A SERVICE (IAAS) MARKET, BY COMPONENT**

- 7.1 Compute Infrastructure
- 7.2 Storage Infrastructure
- 7.3 Networking Infrastructure
- 7.4 Other Components

## **8 GLOBAL TELECOM INFRASTRUCTURE AS A SERVICE (IAAS) MARKET, BY ORGANIZATION SIZE**

- 8.1 Small & Medium Enterprises (SMEs)
- 8.2 Large Enterprises

## **9 GLOBAL TELECOM INFRASTRUCTURE AS A SERVICE (IAAS) MARKET, BY**

## **APPLICATION**

- 9.1 Network Function Virtualization (NFV)
- 9.2 Virtualized Core Networks
- 9.3 OSS/BSS Modernization
- 9.4 Data Analytics & AI Workloads
- 9.5 Content Delivery & Streaming
- 9.6 Disaster Recovery & Backup
- 9.7 Test & Development Environments

## **10 GLOBAL TELECOM INFRASTRUCTURE AS A SERVICE (IAAS) MARKET, BY END USER**

- 10.1 Telecom Operators
- 10.2 Internet Service Providers (ISPs)
- 10.3 Data Center Providers
- 10.4 Enterprises using Telecom Cloud
- 10.5 Government & Smart City Telecom Infrastructure

## **11 GLOBAL TELECOM INFRASTRUCTURE AS A SERVICE (IAAS) MARKET, BY GEOGRAPHY**

- 11.1 North America
  - 11.1.1 United States
  - 11.1.2 Canada
  - 11.1.3 Mexico
- 11.2 Europe
  - 11.2.1 United Kingdom
  - 11.2.2 Germany
  - 11.2.3 France
  - 11.2.4 Italy
  - 11.2.5 Spain
  - 11.2.6 Netherlands
  - 11.2.7 Belgium
  - 11.2.8 Sweden
  - 11.2.9 Switzerland
  - 11.2.10 Poland
  - 11.2.11 Rest of Europe
- 11.3 Asia Pacific

- 11.3.1 China
- 11.3.2 Japan
- 11.3.3 India
- 11.3.4 South Korea
- 11.3.5 Australia
- 11.3.6 Indonesia
- 11.3.7 Thailand
- 11.3.8 Malaysia
- 11.3.9 Singapore
- 11.3.10 Vietnam
- 11.3.11 Rest of Asia Pacific
- 11.4 South America
  - 11.4.1 Brazil
  - 11.4.2 Argentina
  - 11.4.3 Colombia
  - 11.4.4 Chile
  - 11.4.5 Peru
  - 11.4.6 Rest of South America
- 11.5 Rest of the World (RoW)
  - 11.5.1 Middle East
    - 11.5.1.1 Saudi Arabia
    - 11.5.1.2 United Arab Emirates
    - 11.5.1.3 Qatar
    - 11.5.1.4 Israel
    - 11.5.1.5 Rest of Middle East
  - 11.5.2 Africa
    - 11.5.2.1 South Africa
    - 11.5.2.2 Egypt
    - 11.5.2.3 Morocco
    - 11.5.2.4 Rest of Africa

## **12 STRATEGIC MARKET INTELLIGENCE**

- 12.1 Industry Value Network and Supply Chain Assessment
- 12.2 White-Space and Opportunity Mapping
- 12.3 Product Evolution and Market Life Cycle Analysis
- 12.4 Channel, Distributor, and Go-to-Market Assessment

## **13 INDUSTRY DEVELOPMENTS AND STRATEGIC INITIATIVES**

- 13.1 Mergers and Acquisitions
- 13.2 Partnerships, Alliances, and Joint Ventures
- 13.3 New Product Launches and Certifications
- 13.4 Capacity Expansion and Investments
- 13.5 Other Strategic Initiatives

## **14 COMPANY PROFILES**

- 14.1 Amazon Web Services, Inc.
- 14.2 Microsoft Corporation
- 14.3 Google LLC
- 14.4 International Business Machines Corporation
- 14.5 Oracle Corporation
- 14.6 Cisco Systems, Inc.
- 14.7 VMware, Inc.
- 14.8 Dell Technologies Inc.
- 14.9 Hewlett Packard Enterprise
- 14.10 Fujitsu Limited
- 14.11 Alibaba Cloud
- 14.12 Tencent Cloud
- 14.13 Huawei Technologies Co., Ltd.
- 14.14 Rackspace Technology, Inc.
- 14.15 NTT Communications Corporation

## List Of Tables

### LIST OF TABLES

Table 1 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Region (2023-2034) (\$MN)

Table 2 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Service Type (2023-2034) (\$MN)

Table 3 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Compute as a Service (CaaS) (2023-2034) (\$MN)

Table 4 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Storage as a Service (STaaS) (2023-2034) (\$MN)

Table 5 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Network as a Service (NaaS) (2023-2034) (\$MN)

Table 6 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Disaster Recovery as a Service (DRaaS) (2023-2034) (\$MN)

Table 7 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Data Center as a Service (DCaaS) (2023-2034) (\$MN)

Table 8 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Desktop as a Service (DaaS) (2023-2034) (\$MN)

Table 9 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Managed Hosting Services (2023-2034) (\$MN)

Table 10 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Content Delivery Services (CDN) (2023-2034) (\$MN)

Table 11 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By High Performance Computing as a Service (HPCaaS) (2023-2034) (\$MN)

Table 12 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Deployment Model (2023-2034) (\$MN)

Table 13 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Public Cloud (2023-2034) (\$MN)

Table 14 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Private Cloud (2023-2034) (\$MN)

Table 15 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Hybrid Cloud (2023-2034) (\$MN)

Table 16 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Component (2023-2034) (\$MN)

Table 17 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Compute Infrastructure (2023-2034) (\$MN)

Table 18 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Storage

Infrastructure (2023-2034) (\$MN)

Table 19 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Networking Infrastructure (2023-2034) (\$MN)

Table 20 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Other Components (2023-2034) (\$MN)

Table 21 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Organization Size (2023-2034) (\$MN)

Table 22 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Small & Medium Enterprises (SMEs) (2023-2034) (\$MN)

Table 23 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Large Enterprises (2023-2034) (\$MN)

Table 24 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Application (2023-2034) (\$MN)

Table 25 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Network Function Virtualization (NFV) (2023-2034) (\$MN)

Table 26 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Virtualized Core Networks (2023-2034) (\$MN)

Table 27 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By OSS/BSS Modernization (2023-2034) (\$MN)

Table 28 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Data Analytics & AI Workloads (2023-2034) (\$MN)

Table 29 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Content Delivery & Streaming (2023-2034) (\$MN)

Table 30 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Disaster Recovery & Backup (2023-2034) (\$MN)

Table 31 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Test & Development Environments (2023-2034) (\$MN)

Table 32 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By End User (2023-2034) (\$MN)

Table 33 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Telecom Operators (2023-2034) (\$MN)

Table 34 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Internet Service Providers (ISPs) (2023-2034) (\$MN)

Table 35 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Data Center Providers (2023-2034) (\$MN)

Table 36 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Enterprises using Telecom Cloud (2023-2034) (\$MN)

Table 37 Global Telecom Infrastructure as a Service (IaaS) Market Outlook, By Government & Smart City Telecom Infrastructure (2023-2034) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Rest of the World (RoW) are also represented in the same manner as above.

## I would like to order

Product name: Telecom Infrastructure as a Service (IaaS) Market Forecasts to 2034 – Global Analysis By Service Type (Compute as a Service (CaaS), Storage as a Service (STaaS), Network as a Service (NaaS), Disaster Recovery as a Service (DRaaS), Data Center as a Service (DCaaS), Desktop as a Service (DaaS) Managed Hosting Services, Content Delivery Services (CDN), and High Performance Computing as a Service (HPCaaS)), Deployment Model, Component, Organization Size, Application, End User and By Geography

Product link: <https://marketpublishers.com/r/T02367D326F0EN.html>

Price: US\$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/T02367D326F0EN.html>