ISG Provider Lens™

Network — Software Defined Solutions and Services

A research report comparing provider strengths, challenges and competitive differentiators

Customized report courtesy of:

orange Business

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The U.K. witnesses a tectonic shift in the mindset of CISOs towards security-enabled networks.

The perception of networks being the foundation for digitialsation and the business requirements of enterprises is setting in. This digitalisation, in turn, will bolster the growth of the networks and the investments required by enterprises. As enterprises progress in executing their cloud strategies by moving workloads to the cloud, especially in multicloud environments, service providers tend to structure their offerings to help customers connect to and in between clouds. This has reinforced service providers' focus on the fixed connectivity portfolio. Furthermore, customer applications have been far more distributed in the last couple of years than they were earlier, and that is expected to continue in the short to medium term.

Most of service providers have ramped up their infrastructure footprint in the last 12 months by connecting with the appropriate cloud service providers for the relevant locations. Vodafone, for instance, has been establishing several new cloud connect data centres. It expanded its internet edge capabilities to help its customers connect to the cloud and get the desired performance from the cloud service provider. Because organizations may have several users across thousands of sites, the telcos in the U.K. adopted a strategic approach to ensure the quality of the end-user experience. Since the pandemic, many work sites have become residential homes as people are working remotely, making the UX a critical parameter in driving employee productivity and well-being. A shortcoming in application performance due to connectivity services leads to an impact on business productivity. Thus, UX has become one of the major parameters in driving boardroom discussions for enterprises. In response, telcos are working closely with several hyperscalers, such as Google Cloud and Microsoft to deliver guaranteed performance to the enterprise application services over

Enterprises tend to opt for **network as a service** or **network as a subscription models** as compared to large CapEx outlay.

the internet. Furthermore, telcos have formed partnerships with consulting firms as a step towards developing vertical expertise and bringing solutions to specific verticals.

ISG expects the concept of cloud-first networking to be instrumental in the next two to three years when the industry will use multicloud applications instead of multiple cloud applications. Multicloud applications can effectually get microservices running in different kinds of clouds whilst simultaneouslyretaining information in real time. Thus, inter-cloud connectivity will be the backbone of next-gen networks, and several service and solution providers are strategising how to make it a key differentiator in this space of cloud-native network investments. These providers have invested in their intent-based infrastructure as a value proposition to these offerings, representing their vision to deliver a more autonomous network that is highly automated and orchestrated, taking up several day-to-day tasks without intervention from engineers.

Agility requirement with multicloud and SaaS applications: These operations have moved beyond concept to commercialisation. The pandemic has been driving the use of cloud-based applications, enabling users to access the network and applications from anywhere. One of the most prominent use cases is the hybrid workplace. Such workspaces are expected to continue operating even in the post-pandemic times when customers and employees would continue accessing the network remotely.

Security is no longer an afterthought: Enterprises aspire to bring security boundary closer to users, workloads and things. Thus, using hybrid and remote working as a foundation is a move towards zero trust network access (ZTNA) and adopting cloud-based security services.

Technical debt and associated security risks: One of the major reasons behind the challenges enterprises face with their network is technical debt. Each enterprise carries a technical debt that may be attributed to its tendency to prioritise other investments over technical ones, leading to the accumulation of technical debts, such as lag in the software subscription update. Many networks could not be grown during the pandemic due to a lack of available investment. Enterprises wanted to extract the best from the network to continue working remotely. On top of that, the supply chain shortages in the last 12 to 18 months have exacerbated technical debts because manufacturers have not been able to keep up with demand for networking equipment.. So, each enterprise presently has a lot of technical debt, which needs to be retired at the earliest because it adds inefficiencies, complexity and security-related risks to the network. However, 75 percent of organizations perceive cybercrime as an imminent and increasing threat, according to NTT, and 50 percent believe they already invest in network security measures to manage these risks.

Integration of AIOps and ChatOps-enabled functionalities: Whilst there has been significant work on the AIOps front in networks, and several pilots have taken place, adoption at scale is still minimal. Service providers and system integrators have expressed their interest in working with enterprises to scale these technologies. However, ISG has found instances where service providers have provided enterprises with automation- and AIOps-driven services that are anchored by the Zero Trust security framework and guided by service intelligence that improves network performance through real-time analysis. Microland, for example, has developed the Intelligeni platform, which has in-built AIOps and ChatOps capabilities that give it a self-healing network architecture. It also has features, such as AI-based anomaly detection, knowledge graphs-based dependency mapping, observability and performance dashboards.

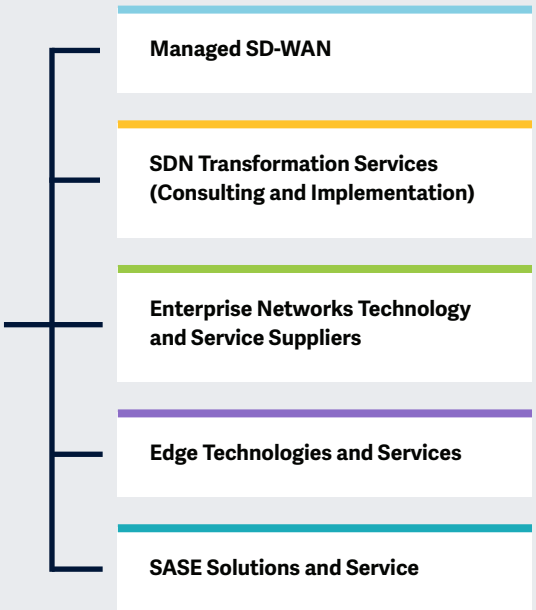
Lack of visibility: This has become a critical pain point for enterprises. Most of them do not have full visibility of their estates because some may have very old legacy infrastructure, whilst some may be new. Service providers tend to work on giving them the required visibility of that inventory and the architecture because it helps begin work on digitisation.

Limited use of predictive analytics: There are still a lot of reactive approaches to operations, and service providers are working with enterprises to bring proactive solutions. We observe extensive use of AI for network functions. AI is often used for incident management, which involves clustering and correlation. So, in case of a stream of events from a network, AI engines can cluster and group the events based on their order and the likely root cause.

Increasingly, enterprises are picking the best solution for a particular use case and then integrating it into an end-to-end proposition.

Analysis of
Enterprise Networks Solutions and Services 2023.

Simplified Illustration Source: ISG 2023



Definition

This ISG Provider Lens™ study, Network – Software-Defined Solutions and Services 2023, examines various global network offerings related to enterprise networks and software-defined networking. These include software-defined wide area networks (SD-WAN), comprising managed SD-WAN services, consulting and advisory and implementation support. Enterprise networks technology and services supply — concentrating on providers of all network-related technology and services that enterprises implement and operate (including full and partial SD-WAN solutions) — covers all areas from the network core to edge-branch technology and services. The study also looks at edge technologies and services, such as IoT, universal/virtual customer premises equipment (u/vCPE) and software-defined local area network (SD-LAN), including those delivered through mobile and 4G/5G technologies and the service offerings related to these segments. In addition, the study examines secure access service edge (SASE), which is an overarching, secure and fully integrated network environment for businesses.

ISG sets out to deliver a comprehensive research program with a clear and definitive evaluation criterion, covering the developments and deliverables of service providers and equipment suppliers in this dynamic marketplace. This study accounts for changing market requirements and provides a complete market overview of the segments, along with concrete decision-making support to help user organizations evaluate and assess the offerings and performance of providers.

Sweet Spot

Orange Business Services

Overview

Orange Business is headquartered in Paris, France and operates in 65 countries. It has more than 29,000 employees across over 100 global offices. In FY22 the company generated €7.9 billion in revenue, with IT Services as its largest segment. Orange Business delivers a strong portfolio of SD-WAN solutions. Orange Business announced new investments in core areas, including SD-WAN, in February 2023.

Key Provider Capabilities

- **Leader in ISG's Network - Software-Defined Solutions and Services study:** Orange Business was named a Leader for Germany, the U.K. and the U.S. in the 2023 IPL report for managed SD-WAN quadrant.
- **Transforming core activities:** Orange Business is increasing investments in secure virtualized networks such as SD-WAN, secure access service edge (SASE) and 5G. It is also developing a modular service platform with the Orange Group and Orange Cyberdefense to implement a secure digitalization and automation program.
- **Flexible SD-WAN:** Orange Business offers a fully automated, intelligent network with on-demand virtualized services centrally orchestrated for end-to-end performance and control. It provides a flexible and agile way to adapt the enterprise network to business needs based on best-of-breed technologies. The solution provides reliable performance, high security, multiple connection types, cost control and high-quality end-user experience for business-critical applications.
- **Industry-specific advisory and agnostic transformation solutions:** Orange Business' extensive partner ecosystem and strong internal, industry-specific advisory abilities allow the delivery of enterprise-specific, vendor-agnostic solutions.

Benefits Delivered

Orange Business collaborates with its clients to identify the best customized SD-WAN solutions and deliver:

- **Best-in-class managed SD-WAN across industries**
- **Flexible and advanced solutions**
- **Higher ROI**
- **Low-risk implementations and operations**
- **High user satisfaction through managed services**

Orange Business Services

Sweet Spot

Orange Business is refocusing its efforts and investments around automation, cloud, digitization and SD networks to address end-to-end business network transformation challenges. The company utilizes its managed services in SD-WAN to ensure long-term client flexibility, agility and success and includes options for future SASE transformations.

Some key strengths brought to bear include:

- Orange Business' professional services and best practices enable clients to adopt sustainable solutions based on standardized business processes.
- Its managed services facilitate reduced support costs and uninterrupted services throughout the transformation to advanced SD-WAN and beyond.
- It has a vast reference base of successfully delivered SD-WAN transformation to managed SD-WAN globally, utilizing the flagship flexible SD-WAN solution portfolio.
- Orange Business has a strategic initiative to focus on transforming and revitalizing its enterprise business. The company aims to become the leading network and digital integrator by building on its connectivity, cloud and cybersecurity strengths.
- The company uses its international OpenLab platforms to test new technologies with its customers and partners to simulate end-state results and ensure successful outcomes.
- Orange Business strategically plans on accompanying customers across sectors from a consultative phase up to a running solution, enabling key digital services and services integration with the managed SD-WAN solution.
- Orange Business' flexible SD-WAN supporting SASE is a fully automated, intelligent network with on-demand virtualized services. The solution is centrally orchestrated, providing reliable performance, improved security, support for multiple connection types and integration with SASE architecture.

Future roadmap

Orange Business strategically intends to advance its managed SD-WAN offering while enhancing more future-facing solutions, including:

- Enhanced AI orchestration and the introduction of its Next Gen Hub with flexible SD-WAN inclusion
- Introduction and mass deployment of its managed secure access services and offering clients full SASE or partial security upgrade solutions
- Integrating security-driven networking technology into its Evolution Platform, reinforcing security and networking convergence while optimizing performance. With built-in integration and automation, this seamless approach ensures real-time service updates and exceptional CX.

Appendix

Methodology & Team

The ISG Provider Lens™ 2023 – Network – Software Defined Solutions and Services research study analyzes the relevant software vendors/service providers in the U.K. market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research methodology.

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The research and analysis presented in this report includes research from the ISG Provider Lens program, ongoing ISG Research programs, interviews with ISG advisors, briefings with services providers and analysis of publicly available market information from multiple sources. The data collected for this report represents information that ISG believes to be current as of March 2023, for providers who actively participated as well as for providers who did not. ISG recognizes that many mergers and acquisitions have taken place since that time, but those changes are not reflected in this report.

All revenue references are in U.S. dollars ($US) unless noted.

The study was divided into the following steps:

1. Definition of Network - Software Defined Solutions and Services market
2. Use of questionnaire-based surveys of service providers/ vendor across all trend topics
3. Interactive discussions with service providers/vendors on capabilities & use cases
4. Leverage ISG's internal databases & advisor knowledge & experience (wherever applicable)
5. Use of Star of Excellence CX-Data
6. Detailed analysis & evaluation of services & service documentation based on the facts & figures received from providers & other sources.
7. Use of the following key evaluation criteria:
   * Strategy & vision
   * Tech Innovation
   * Brand awareness and presence in the market
   * Sales and partner landscape
   * Breadth and depth of portfolio of services offered
   * CX and Recommendation

Lead Author

Avimanyu Basu
Distinguished Lead Analyst

Avimanyu Basu brings over 10 years of extensive research experience to handle telecommunication and engineering and R&D services specific research deliverables for the program called ISG Provider Lens™ that is designed to deliver research on service provider intelligence. He is responsible for authoring reports on software defined networks and network function virtualisation (SDN/NFV) and engineering services. He is also responsible for key vertical-oriented reports and thought leadership papers for manufacturing along with whitepapers revolving around specialized technologies showcased by different cross-section of enterprises.

IPL Product Owner

Jan Erik Aase
Partner and Global Head – ISG Provider Lens™

Mr. Aase brings extensive experience in the implementation and research of service integration and management of both IT and business processes. With over 35 years of experience, he is highly skilled at analyzing vendor governance trends and methodologies, identifying inefficiencies in current processes, and advising the industry. Jan Erik has experience on all four sides of the sourcing and vendor governance lifecycle - as a client, an industry analyst, a service provider and an advisor.

Now as a partner and global head of ISG Provider Lens™, he is very well positioned to assess and report on the state of the industry and make recommendations for both enterprises and service provider clients.

ISG Provider Lens™

The ISG Provider Lens™ Quadrant research series is the only service provider evaluation of its kind to combine empirical, data-driven research and market analysis with the real-world experience and observations of ISG's global advisory team. Enterprises will find a wealth of detailed data and market analysis to help guide their selection of appropriate sourcing partners, while ISG advisors use the reports to validate their own market knowledge and make recommendations to ISG's enterprise clients. The research currently covers providers offering their services across multiple geographies globally.

For more information about ISG Provider Lens™ research, please visit this webpage.

ISG Research™

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ISG

ISG (Information Services Group) (Nasdaq: III) is a leading global technology research and advisory firm. A trusted business partner to more than 900 clients, including more than 75 of the world's top 100 enterprises, ISG is committed to helping corporations, public sector organizations, and service and technology providers achieve operational excellence and faster growth. The firm specializes in digital transformation services, including automation, cloud and data analytics; sourcing advisory; managed governance and risk services; network carrier services; strategy and operations design; change management; market intelligence and technology research and analysis.

Founded in 2006, and based in Stamford, Conn., ISG employs more than 1,600 digital-ready professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data.

For more information, visit isg-one.com.

ISG Provider Lens™

JUNE, 2023

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