

# Network— Software Defined Solutions and Services

A research report comparing provider strengths, challenges and competitive differentiators

## Executive Summary

## Introduction

Definition  
Scope of Report  
Provider Classifications

## Appendix

Methodology & Team  
Author & Editor Biographies  
About Our Company & Research

03

### Managed SD-WAN

13 - 17

Who Should Read This Section  
Quadrant  
Definition & Eligibility Criteria  
Observations

10

11

11

### SDN Transformation Services (Consulting & Implementation)

19 - 25

47

48

49

Who Should Read This Section  
Quadrant  
Definition & Eligibility Criteria  
Observations  
Provider Profiles

### Enterprise Networks Technology and Service Suppliers

26 - 32

Who Should Read This Section  
Quadrant  
Definition & Eligibility Criteria  
Observations  
Provider Profiles

### SASE Solutions and Services

39 - 45

Who Should Read This Section  
Quadrant  
Definition & Eligibility Criteria  
Observations  
Provider Profiles

### Edge Technologies and Services

33 - 38

Who Should Read This Section  
Quadrant  
Definition & Eligibility Criteria  
Observations  
Provider Profiles

Report Author: Dr. Kenn D Walters

### **SD network adoption is accelerating across German enterprises of all segments and sizes**

Networks and software-defined solutions and services encompass many technological topics, business coverage areas, organizational functions and business processes and methods. They are closely tied to digitalization, enhanced security and cloudification trends of enterprises globally, with regional differences in requirements, as in Germany, having a low overall impact on their full functionality. This ISG Provider Lens™ study examines multiple network service and solution offerings related to software-defined networking (SD networks) in Germany. These offerings include managed SD-WAN and associated core and mobility technologies and services related to these segments, transformation services, edge technologies and secure access service edge (SASE).

Like many regions worldwide, German enterprises have been reeling under the impact of local and global environmental laws, the aftereffects of the global pandemic and high energy supply costs arising from the situation in Russia. They are now seeking innovative solutions to drive higher operational efficiency.

Some key drivers of the current market growth in Germany, like that in many other geographies, are the system integrators' (SI) offerings in addition to the SD-WAN adoption by traditional service providers, together with SMEs' increasing adoption of SD-WAN across all industry verticals. The increasing adoption of technologies by German enterprises into corporate networks such as big data, edge computing, enhanced security, SASE, mobility (including private 5G networks), IoT, hybrid cloud and platforms, together with greater inclusion of ML and AI, are other factors.

Enterprises across Germany are evaluating and implementing various means to decrease costs while increasing their agility, flexibility, competitiveness, security, delivery structures and remote working and continuity practices, leading to improved CX/UX. A large part of

# Managed and co-managed SD network deployments and SASE adoption are accelerating



this challenge is associated with technology use and the transformation of established processes and traditional management practices.

In SD-WAN implementations, running as they do as an overlay, existing routers and switches, or virtualized or universal customer premises equipment (vCPE or uCPE) may be retained and re-used. SD-WAN can handle various connection types and divide and protect the traffic moving via the WAN.

Many enterprises are increasingly procuring SD-WAN as part of a full SASE solution, often consumed as a fully managed SASE service from a managed services provider. SASE is the inflection point where enterprise networking and security fully converge. Germany has a strong presence of experienced industry advisors that understand not only the region, technology and enterprise scale but also enterprise requirements, business goals and industry segment implications. The region has a plethora of competent and experienced advisory and provider companies offering such services.

In Germany, some of the primary factors driving rapid changes in enterprise networks include those summarized below.

**Increasing flexibility and agility while simplifying management:** Enterprises are increasingly focusing on improving the integration, automation, security, orchestration and management of network resources and processes. This has evolved to encompass SD-networking with single-pane-of-glass management and orchestration systems.

**Reducing risk in cloud and multicloud migrations:** Enterprises also are increasingly focusing on migrating their IT and network operations to the cloud. SD networks assist with this by reducing complexities and enabling a reduced-risk migration to single or multicloud environments for enterprises.

**Increasing security across networks, including cloud-based networks:** Network security has become a major concern across business units and enterprises, with an expectation of full security from core to edge in the enterprise network. Enabling SD networks meets this expectation, which becomes vital in the risk-

free provisioning of cloud-based and hybrid networks and is foundational to simplified full SASE deployments.

**Consuming managed or co-managed services while improving CX:** Client experience can be enhanced by allowing clients to consume network services via modern payment terms and conditions. SD networking-enabled solutions can be supplied as a fully managed or co-managed service, thus reducing overall costs and implementation risks. SD networking-enabled services help enterprises retain or enhance their ability to respond quickly and seamlessly to customer inquiries and rapidly provide (often automatically) new services as required. Such CX improvement has become crucial to many enterprises.

**Fully managed versus DIY or co-managed services in Germany:** Germany lags behind the U.S. and APAC in terms of adopting fully managed services. This lag accounts for a significant percentage of the overall market consumption of enterprise networks in Germany being DIY. Many enterprises prefer adopting a DIY solution, where the enterprise

manages the entire network solution or co-manages a solution that enables network and security operations to be shared between the provider and the enterprise.

**SME SD-WAN market power:** Germany has a strong midsized enterprise market segment, which is rapidly adopting SD-WAN. SMEs have a higher probability of a distributed workforce and will often rely on cloud-based solutions for communication and collaboration. Using lower-cost SD-WAN solutions as overlays and access points to the cloud and security providers is fast becoming ubiquitous. However, not all larger SD-WAN providers cater to this market segment in Germany.

**De-risking innovative technologies and solutions in German enterprise:** Digitalization and innovations, such as intent-based networks, AI/ML-driven solutions, services and systems, intelligent edge and edge computing, SD-LAN connectivity and management, as well as SASE, require SD networks to be used fully while de-risking their implementations.



## Executive Summary

In Germany, most telecommunication service and network service providers, SIs and their significant partner ecosystems have an impressive portfolio of SD-WAN and other SD network solutions. These range from partial or function-specific solutions to complete end-to-end SD-WAN or SD network solutions, with many solutions based on the industry type or business vertical and the integration of SASE solutions across all enterprise touchpoints. Some enterprises have introduced advanced SD network-based technological innovations. This includes intent-based networks, that use ML or AI interactions and control or edge intelligence and computing solutions, together with mobility and remote location solutions, such as SD-LAN or SD-wireless sometimes coupled with LTE/5G private/public solutions.

This study considers the changing market requirements in Germany and provides a consistent market overview of these segments. It also gives concrete decision-making support to help clients evaluate and assess the offerings and performance of providers.

**SD networks are foundational in future-safe, cloud-first enterprise networks and advanced security integrations, including full SASE or security service edge (SSE) deployments**





	<b>Managed SD-WAN</b>	<b>SDN Transformation Services (Consulting &amp; Implementation)</b>	<b>Enterprise Networks Technology and Service Suppliers</b>	<b>Edge Technologies and Services</b>	<b>SASE Solutions and Services</b>
Accenture	Leader	Leader	Not In	Product Challenger	Leader
Apcela	Product Challenger	Product Challenger	Product Challenger	Not In	Not In
Arista	Not In	Product Challenger	Not In	Not In	Not In
Aruba	Not In	Not In	Rising Star ★	Market Challenger	Not In
Aryaka	Not In	Product Challenger	Not In	Not In	Not In
AT&T	Product Challenger	Not In	Product Challenger	Not In	Product Challenger
Axiens	Product Challenger	Leader	Leader	Product Challenger	Product Challenger
Bechtle	Contender	Contender	Contender	Contender	Not In
BECOM	Not In	Not In	Contender	Not In	Not In
BT	Leader	Product Challenger	Product Challenger	Not In	Leader





	<b>Managed SD-WAN</b>	<b>SDN Transformation Services (Consulting &amp; Implementation)</b>	<b>Enterprise Networks Technology and Service Suppliers</b>	<b>Edge Technologies and Services</b>	<b>SASE Solutions and Services</b>
CANCOM	Product Challenger	Leader	Market Challenger	Leader	Leader
Cato Networks	Not In	Product Challenger	Product Challenger	Product Challenger	Not In
C-C Solutions	Not In	Contender	Contender	Contender	Not In
Citrix	Not In	Not In	Not In	Product Challenger	Not In
Colt	Leader	Not In	Not In	Not In	Leader
Comcast Business	Market Challenger	Not In	Not In	Not In	Market Challenger
Computacenter	Not In	Leader	Leader	Leader	Leader
Controlware	Contender	Product Challenger	Product Challenger	Contender	Contender
Damovo	Product Challenger	Product Challenger	Leader	Product Challenger	Product Challenger
Deutsche Telekom	Leader	Leader	Leader	Leader	Leader





	<b>Managed SD-WAN</b>	<b>SDN Transformation Services (Consulting &amp; Implementation)</b>	<b>Enterprise Networks Technology and Service Suppliers</b>	<b>Edge Technologies and Services</b>	<b>SASE Solutions and Services</b>
DXC Technology	Product Challenger	Product Challenger	Not In	Product Challenger	Rising Star ★
Extreme Networks	Not In	Leader	Leader	Leader	Not In
GTT	Leader	Not In	Not In	Not In	Not In
HCLTech	Product Challenger	Product Challenger	Product Challenger	Product Challenger	Product Challenger
Infosys	Product Challenger	Product Challenger	Product Challenger	Product Challenger	Product Challenger
Kyndryl	Product Challenger	Product Challenger	Product Challenger	Product Challenger	Not In
Logicalis	Product Challenger	Product Challenger	Leader	Product Challenger	Product Challenger
Lumen	Product Challenger	Not In	Not In	Not In	Product Challenger
NTT	Not In	Market Challenger	Leader	Not In	Not In
Open Systems	Contender	Contender	Not In	Product Challenger	Contender





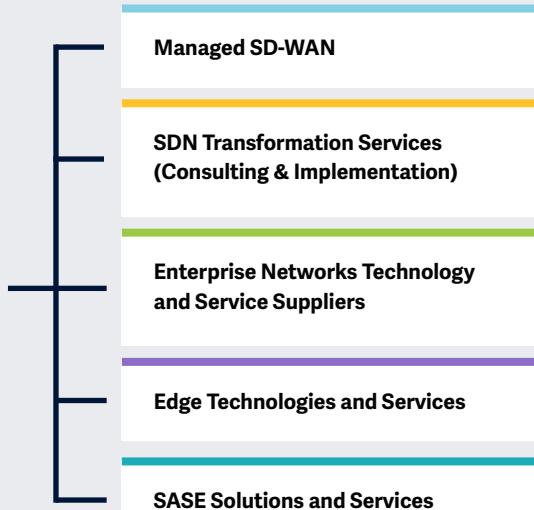
	<b>Managed SD-WAN</b>	<b>SDN Transformation Services (Consulting &amp; Implementation)</b>	<b>Enterprise Networks Technology and Service Suppliers</b>	<b>Edge Technologies and Services</b>	<b>SASE Solutions and Services</b>
Orange Business	Leader	Leader	Not In	Leader	Leader
Riedel Networks	Leader	Not In	Product Challenger	Not In	Not In
Tata Communications	Product Challenger	Not In	Not In	Not In	Product Challenger
TCS	Not In	Product Challenger	Not In	Product Challenger	Product Challenger
Tech Mahindra	Product Challenger	Leader	Product Challenger	Leader	Product Challenger
Verizon	Leader	Not In	Product Challenger	Not In	Leader
VMware	Not In	Not In	Not In	Not In	Product Challenger
Vodafone	Leader	Leader	Leader	Product Challenger	Leader
Wipro	Leader	Leader	Product Challenger	Leader	Leader



# 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 technology and services related to networks that enterprises implement and operate themselves (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.



### Scope of the Report

In this ISG Provider Lens™ quadrant report, ISG covers the following five quadrants for services/solutions: Managed SD-WAN, SDN Transformation Services (Consulting & Implementation), Enterprise Networks Technology and Service Suppliers, Edge Technologies and Services, SASE Solutions and Services.

This ISG Provider Lens™ study offers ICT decision makers with the following:

- Transparency on the strengths and weaknesses of relevant providers
- A differentiated positioning of providers by segments (quadrants)
- Focus on regional market

Our study serves as the basis for important decision-making in terms of positioning, key relationships and go-to-market considerations. ISG advisors and enterprise clients also use information from these reports to evaluate their existing vendor relationships and potential engagements.

### Provider Classifications

The provider position reflects the suitability of providers for a defined market segment (quadrant). Without further additions, the position always applies to all company sizes classes and industries. In case the service requirements from enterprise customers differ and the spectrum of providers operating in the local market is sufficiently wide, a further differentiation of the providers by performance is made according to the target group for products and services. In doing so, ISG either considers the industry requirements or the number of employees, as well as the corporate structures of customers and positions providers according to their focus area. As a result, ISG differentiates them, if necessary, into two client target groups that are defined as follows:

- **Midmarket:** Companies with 100 to 4,999 employees or revenues between \$20 million and \$999 million with central headquarters in the respective country, usually privately owned.

- **Large Accounts:** Multinational companies with more than 5,000 employees or revenue above \$1 billion, with activities worldwide and globally distributed decision-making structures.

The ISG Provider Lens™ quadrants are created using an evaluation matrix containing four segments (Leader, Product & Market Challenger and Contender), and the providers are positioned accordingly. Each ISG Provider Lens™ quadrant may include a service provider(s) which ISG believes has strong potential to move into the Leader quadrant. This type of provider can be classified as a Rising Star.

- **Number of providers in each quadrant:** ISG rates and positions the most relevant providers according to the scope of the report for each quadrant and limits the maximum of providers per quadrant to 25 (exceptions are possible).



**Provider Classifications: Quadrant Key**

**Product Challengers** offer a product and service portfolio that reflect excellent service and technology stacks. These providers and vendors deliver an unmatched broad and deep range of capabilities. They show evidence of investing to enhance their market presence and competitive strengths.

**Leaders** have a comprehensive product and service offering, a strong market presence and established competitive position. The product portfolios and competitive strategies of Leaders are strongly positioned to win business in the markets covered by the study. The Leaders also represent innovative strength and competitive stability.

**Contenders** offer services and products meeting the evaluation criteria that qualifies them to be included in the IPL quadrant. These promising service providers or vendors show evidence of rapidly investing in products/services and a follow sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months.

**Market Challengers** have a strong presence in the market and offer a significant edge over other vendors and providers based on competitive strength. Often, Market Challengers are the established and well-known vendors in the regions or vertical markets covered in the study.

★ **Rising Stars** have promising portfolios or the market experience to become a Leader, including the required roadmap and adequate focus on key market trends and customer requirements. Rising Stars also have excellent management and understanding of the local market in the studied region. These vendors and service providers give evidence of significant progress toward their goals in the last 12 months. ISG expects Rising Stars to reach the Leader quadrant within the next 12 to 24 months if they continue their delivery of above-average market impact and strength of innovation.

**Not in** means the service provider or vendor was not included in this quadrant. Among the possible reasons for this designation: ISG could not obtain enough information to position the company; the company does not provide the relevant service or solution as defined for each quadrant of a study; or the company did not meet the eligibility criteria for the study quadrant. Omission from the quadrant does not imply that the service provider or vendor does not offer or plan to offer this service or solution.





# Managed SD-WAN

### Who Should Read This Section

This report is relevant to enterprises across all industries in Germany evaluating providers offering managed network services (primarily enterprise SD-WAN or hybrid multiprotocol label switching (MPLS)/IP WAN).

This quadrant report highlights the network service and solution proficiency of selected providers, enabling enterprises to choose the right partner for network transformation.

Most enterprises in Germany started their SDN journey from a data center (DC) network and have increased their focus on SD-WAN over the last few years. SD-WAN has become mainstream now, eliminating the need for traditional routers. With work-from-home and hybrid working options, enterprises are extending SD-WAN to home offices. They have also started integrating SD-LAN deeply into the entire network, extending it from a DC to branch edges. With the growing maturity levels, the adoption of intent-based networking (IBN) is expected to increase in the future.

A shift from private to public networking in the German market has also been witnessed in the last 12 months due to the adoption of a more distributed network prompted by the pandemic. This change has triggered the integration and convergence of different domains within the network, such as LAN and WAN components. Enterprises are also increasingly focusing on improving operational efficiency through greater automation. They are directing significant efforts toward remote operations, making digital infrastructure transformation a key focus area.



#### IT and network management leaders

should read this report to understand the relative positioning and capabilities of providers that can help them consume managed SD-WAN services and other associated services.



**Cybersecurity leaders** should read this report to understand the current state of security capabilities of consulting and other SD-WAN service providers' delivery.



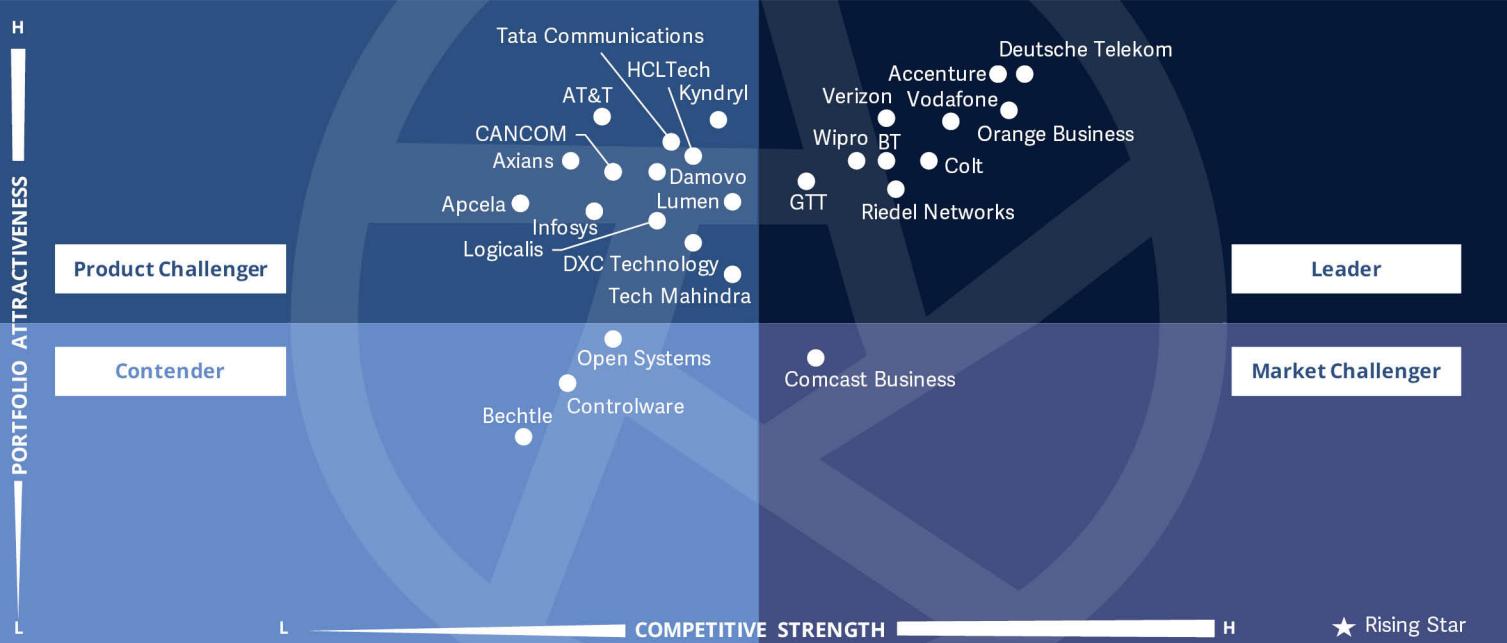
**Procurement professionals** should read this report to learn more about managed SD-WAN service suppliers' payment schemes around pay-as-you-consume or similar payment options.



**\*ISG** Provider Lens™  
Network - Software Defined Solutions and Services  
Managed SD-WAN

Source: ISG RESEARCH

Germany 2023



This quadrant analyzes the **SD-WAN** and modern or **next-generation networks** providers to German enterprises that deliver **managed solutions** and associated services to **clients to enable innovative, future-safe and de-risked networking.**

Dr. Kenn D Walters



**Definition**

This quadrant examines the providers of enterprise WAN (primarily enterprise SD-WAN or hybrid MPLS/IP WAN) that deliver managed solutions and services. These include additional associated services such as identity and access management (IAM), provided as wrap-around services directed toward streamlining enterprises' network operations. These may include new installations, replacement or upgrade installations, or hybrid cloud pathway installations accounted as networks.

SD-WAN offers the benefits of software-defined technology over traditional hardware-based networking. It is an overlay architecture with a networking foundation that is easily manageable compared to legacy WANs, essentially moving the control layer to the cloud and centralizing and simplifying network management. This overlay design abstracts software from hardware, enabling network virtualization and making the network more flexible. An SD-WAN architecture reduces recurring network costs, offers network-wide control and visibility and simplifies the technology with zero-touch deployment and

centralized management. The key aspect of an SD-WAN architecture is that it can communicate with all network endpoints without the need for external mechanisms or additional protocols. Suppliers have been increasingly active as managed service providers, offering complete managed SD-WAN solutions to enterprises (including hybrid MPLS/IP or MPLS/SDN solutions) as well as white-label products to telco providers or integrators as part of their broader strategic implementations.

**Eligibility Criteria**

1. **Scope of product/service managed WAN portfolio**
2. **Ability to deliver and manage** all hardware and software aspects
3. **Ability to rearchitect** (as required) the existing MPLS-based WANs into hybrid-WAN systems
4. **Management capability** for the needed orchestration and control of the overall architecture
5. **Flexibility** and ease in introducing new services and deployments
6. **Stability** and roadmap planning
7. **Reference** customer/site volume in deployment
8. **Competitiveness** of offerings and types of commercial terms



## Observations

Fully managed SD-WAN solutions are continuing to be one of the fastest-growing areas of enterprise networking in Germany, followed by co-managed SD-WAN in line with many companies' cloud migration and security strategies. SD-WAN, delivered as a DIY solution for enterprises, is now the third-most-popular mode of deployment, outside of some enterprise verticals requiring complete self-management and control of all data and transactions on their networks. This trend is in line with the global scenario. It can be attributed to factors such as the overall complexity of modern enterprise networks, issues that enterprises face with adding and retaining internal resources that have adequate skill sets for effective DIY operations in Germany, and the potential cost savings obtained by adopting managed solutions versus their own staff and premise operations.

The German market has seen significant growth in the last two years in integrating ever-more complex security solutions into enterprise networks. These solutions typically involve SD-

WAN and several advanced security functions that are often marketed as "SD-WAN +" or similar. They are close to full SASE solutions in many ways but may lack some of the fully integrated cross-functionalities available within the full SASE solution sets offered by providers. The complete SASE refreshes or implementations include and/or require SD-WAN as a crucial foundational component, as opposed to SSE, which does not always include the SD-WAN component.

From the 90 companies assessed for this study, 27 have qualified for this quadrant with 10 being Leaders.



**Accenture's** Cloud First Networks + 5G practice brings together more than 12,000 IT and network professionals globally under a common vision to serve three focused client segments. Two network and security labs in Aachen and Munich support this practice in Germany.

## BT

**BT** provides consulting, managed services, cloud, network, enterprise improvement services and technology to its extensive client base. It has been a longstanding Leader in the managed SD-WAN space in Germany.



**Colt** provides a single network fabric with consistent experience to ensure a reliable high-performance underlay, which is cloud optimized and links to a high volume of cloud points of presence (PoPs) with top communications service providers (CSPs). It delivers software-based, carrier-grade enterprise WAN solutions.



**Deutsche Telekom** (DT) delivers 100 percent DT-managed services, supplying secure, stable, scalable and risk-free migration of traditional networks to SD networks. It offers modern and scalable solutions in an evolving portfolio.

## GTT

**GTT** is an established player in Germany and offers a wide managed SD-WAN portfolio in the country. It offers SD-WAN services from VMware and Aruba Unity EdgeConnect SD-WAN, and Fortinet secure SD-WAN and secure edge.



**Business Services**

**Orange Business** announced that it is increasing investments in secure virtualized networks (e.g., SD-WAN, SASE and 5G) and developing a modular service platform with Orange Group and Orange Cyberdefense to implement a program for secure digitalization and automation.



## Managed SD-WAN



**Riedel Networks** focuses on providing advanced SD-WAN networks and builds and operates network services and solutions to meet specific client requirements. Its SD-WAN network is based on Cisco's stack solutions and technologies.



**Verizon** delivers advanced and powerful SD networking solutions. It is building its SD networking portfolio using a combination of technology collaborations with vendors and in-house developed integration tools and automation.

### Vodafone

**Vodafone** has expanded its managed SD-WAN services capabilities based on Cisco SD-WAN, Cisco Meraki and VMware solutions. The company has a broad-based solution with a focus on several important industry verticals.



**Wipro** is focused on delivering templated managed SD-WAN solutions for specific and cross-industry enterprises in the German market, which can be customized based on client needs. It has a vast portfolio of SD-WAN solutions, tools and platforms.





# SDN Transformation Services (Consulting & Implementation)

### Who Should Read This Section

This report is relevant to enterprises across all industries in Germany evaluating providers of SDN transformation services that involve consulting and implementation.

The quadrant report aims to highlight the proficiency of network service and solution providers that can handle network transformation from consulting to implementation.

German enterprises seek to identify functional and transformational pillars that can differentiate their businesses during challenging times. Therefore, they are significantly changing and accelerating the move of workloads to the cloud; SDN adoption and network virtualization are prominent some changes on the infrastructure side. The network model has been undergoing a paradigm shift from bespoke equipment from a single equipment manufacturer to a disaggregated model for architecting new-age,

5G-native networks, which can accommodate distributed computing and interoperability of network elements. Although enterprises are accustomed to the bespoke model due to the one-stop-shop attributes, such as packaged service and single sourcing to streamline overhead and maintenance activities, they gradually realize the value of the disaggregated model, wherein the old technologies and products can be upgraded or integrated into the new and advanced ones as technology evolves. As the components can be sourced from different suppliers, service providers can choose the best-of-breed architectures, which enhance competitive innovation and pricing. Consulting offerings thus take center stage in deals around transformation services.



#### IT and network management leaders

should read this report to understand the best way to effectively consume network transformation services, and leverage the service providers' partnership ecosystem.



#### Digital transformation professionals

should read this report to understand how network transformation service providers fit their enterprises' digital transformation initiatives and how providers are compared to one another.



**Cybersecurity leaders** should read this report to understand the current state of security capabilities associated with consulting and other SD-WAN transformation service providers.



**Procurement professionals** should read this report to learn about the payment schemes offered by transformation service suppliers, especially around pay-as-you-consume or similar payment arrangements.

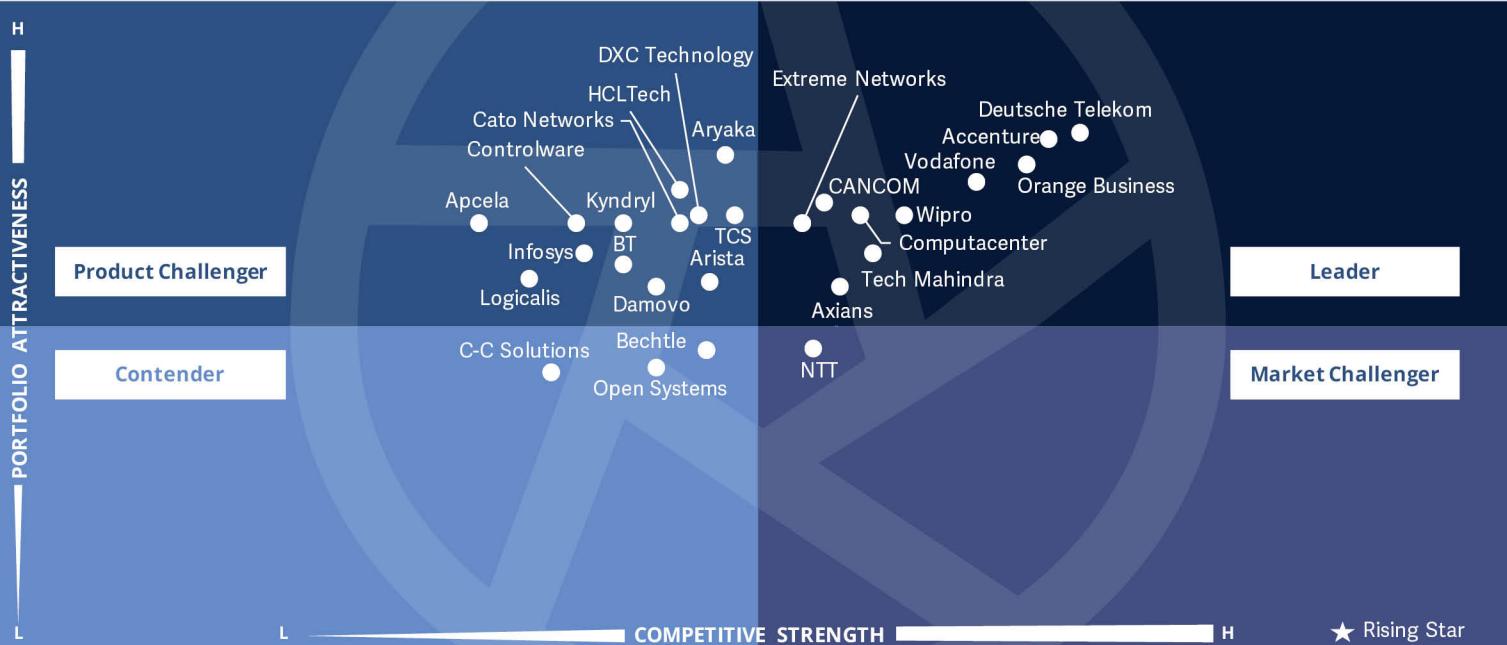




## Network - Software Defined Solutions and Services SDN Transformation Services (Consulting and Implementation)

Source: ISG RESEARCH

Germany 2023



This quadrant analyzes **providers of advisory, consulting and implementation services** that have **functional solution delivery** capability in the SD networking space and encompass initial **advisor consulting to full-service rollout**.

Dr. Kenn D Walters



## SDN Transformation Services (Consulting & Implementation)

### Definition

This quadrant analyzes providers of advisory or consulting and services associated with delivering software-defined networking and SD-WAN to enterprises, from initial advisor consulting to services delivery and rollout. Modern businesses require more agility, flexibility, automation and security across delivery areas and business domains, including private, public, hybrid and multicloud networking; mobile application usage in the workplace; IoT; Industry 4.0; infrastructure as a service (XaaS); and intent-based AI and ML networking solutions requiring a flexible network environment that can accommodate changes quickly with minimum human intervention. SD networking provides many of these benefits compared with traditional hardware-based networking and is closely related to network function virtualization (NFV), cloudification strategies and digital transformation undertakings. However, it brings challenges in managing legacy and transformed environments and highlights the lack of skilled programmers or NetOps in some enterprises.

Suppliers in this area are increasingly active as advisors or consultants for implementation, offering complete or partial solutions or programming support to enterprises. They may also act as brokers and project managers to ensure combined coalition deliveries as planned. Consulting companies, prominent vendors and managed network services providers are also actively involved in offering SD-WAN packages in this area, independently or as a part of partnerships or consortium deals.

### Eligibility Criteria

1. **Scope of product/service portfolio**
2. **Ability to provide consultation** for strategizing right through to deploying technology, including support in integration and implementation
3. **Understanding of the overall market** and contributions to the same
4. **Scope of partnerships** and offerings and management capability for the needed orchestration within a customer project
5. **Stability** and roadmap planning capabilities
6. **Reference customer or solutions post-pilot** or commercial deployment
7. **Competitiveness** of offering and types of commercial terms



## Observations

Advisory-led engagements in pre-sales settings are a normal practice in enterprise network transformation in Germany. They may be preceded by independent advisory projects delivered by traditional management or technology consulting companies to enterprises prior to any request for information (RFI) or proposal contest step for procurement. This is often due to the highly complex enterprise- and industry-specific areas of SD networking, coupled with transformation and future-state technology planning requirements, mapped to meet enterprises' business needs. Such pre-sales advisory teams often comprise highly skilled practitioners with deep industry vertical experience. However, in many cases, they are vendor-specific, if being supplied by the vendors themselves. This has led to the engagement of both traditional consulting company advisors or SIs at the strategic and tactical planning (roadmap) layer in many cases. Both deploy advisory staff in a vendor-agnostic manner and compete to establish the best-fitting plan for an enterprise's needs using their

intellectual property and partner ecosystems to deliver an implementation plan satisfying the end client.

In Germany, the involvement of consultants and SIs has led to major network service providers adding consulting and advisory teams to their business units. These teams emulate the vendor-agnostic nature of the consulting and SI companies by offering partner ecosystem solutions and their brand of services. Most providers assessed remain engaged from the advisory phase through to in-service operations of the solution chosen.

From the 90 companies assessed for this study, 27 have qualified for this quadrant, with 10 being Leaders.



**Accenture's** global and holistic advisory approach to addressing client's challenges starts with their business objectives and harnessing the power of the entire Accenture organization. The network is deemed essential to unlock the full value of the cloud.



**Axians** offers network-as-a-service (NaaS) delivery in a subscription-based model for cloud-managed SD-WAN equipment with managed services. The company and its professional services team takes a next-generation SD-WAN approach to network architecture.



**CANCOM** offers consulting and implementation services in the SDN and SD-WAN space. Its offerings include strategic consulting, use case analysis, implementation support and high- and low-level design workshops.



**Computacenter** has significant expertise in designing an optimal SD-WAN multicloud architecture. Its in-house resources are used for advisory services, solution design and implementation.



**Deutsche Telekom** and its owned entities have more than 500 highly skilled and experienced consultants and experts. With the integration of T-Systems' functions, these teams have increased and are supported by the owned consultancy division Detecon.



## SDN Transformation Services (Consulting & Implementation)

### Extreme Networks

**Extreme Networks** advises clients on the overall network transition and develops and delivers innovative AI-based solutions for edge and wireless network infrastructure equipment and solutions based on SD networks and multicloud.



**Orange Business** leverages a vast regional and global partner ecosystem and its internal knowledge and resources. Such capabilities enable the company to deliver enterprise-specific, vendor-agnostic advanced solutions.

### Tech Mahindra

**Tech Mahindra** offers industry-experienced advisory services, tools and processes to deliver networks in as-a-service models. Its advisory practice is ably supported by advanced managed services, engineering services and support.

### Vodafone

**Vodafone** is a well-positioned transformation provider in Germany with an experienced staff that advises clients on the best portfolio fit and customization. It leverages both local and global solution partners and network partners to offer integrated solutions.



**Wipro's** services include consulting, planning, designing, procurement, implementation, testing and management. It has vast advisory and transformational consulting expertise backed by an extensive portfolio of innovative products, tools and services.





"Computacenter offers evolving, innovative and powerful solutions for SD multicloud networking. It also uses its excellent transformation advisory methods and implementation skills to cater to clients."

*Dr. Kenn D Walters*

# Computacenter

## Overview

Computacenter is headquartered in Hatfield, U.K., and operates in 23 countries. It has more than 20,000 employees and clients across 70 countries. Computacenter has strong brand recognition in Germany; it has an integration and service center at its German headquarters in Kerpen, service centers in Erfurt, Berlin, Leipzig, Dresden, Nuremberg and Ludwigshafen am Rhein and many regional offices across the region. The company has expert knowledge in all relevant areas of designing an optimal SD-WAN multicloud architecture. It uses its in-house resources for advisory services, solution design and implementation.

## Strengths

**Network automation for implementation:** Computacenter's new network automation implementation service follows its network transformation approach and is part of an overall framework driving network automation. The company extends service capabilities by developing and releasing the Zero Touch Deployment toolbox based on API, Ansible and Terraform tools. The network automation 'kick start' service is designed to accelerate software defined network transformations by advancing the actionable automation design and programming skills of in-house network operational teams.

**Expert professional services unit:** The company's design implementation service expertise integrates networking hardware as underlay technologies to vendor-specific

and multivendor software-defined overlays. Its partner ecosystem leverages expertise focusing on Cisco, Arista, Aruba, Juniper, Extreme Networks, Fortinet and Dell Networking.

**SD multicloud networking advisory services:** Computacenter's multicloud advisory service helps organizations optimize and seamlessly connect public and private platforms' security underpinned by automation (design and implementation). Its multicloud software defined network advisory service includes security transformation and is tightly aligned with the company's cloud landing zone transformational approach.

## Caution

Computacenter focuses on midsize and large accounts with its strong future network/SASE strategy. This is a highly competitive area of network transformation in Germany. Computacenter is well-placed to profit from multicloud and SASE networking trends but must consider intensifying its marketing efforts in the region.





# Enterprise Networks Technology and Service Suppliers

### Who Should Read This Section

This report is relevant to enterprises across all industries in Germany evaluating suppliers of network technologies.

In this quadrant report, ISG lays out the current market positioning of enterprise network technology and service suppliers in Germany and how they address the key challenges faced by enterprises in the region.

German enterprises are analyzing ways to achieve a sufficient degree of flexibility, speed and collaboration internally and across and outside of enterprise boundaries. They also want to mitigate challenges to deliver benefits to themselves and their (ever-more mobile) customers and users, including at the edge of the business and the traditional network. Enterprise agility goes far beyond traditional network abilities and provisioning capabilities, mainly in a constantly changing competitive environment.

This adjustment and the speed at which it is realized are relevant and critical for the entire enterprise organization and value stream. Chief executive and technology officers must understand that software-defined networking works together with cloudification, intelligent edge and mobility strategies, along with digital business transformation areas such as AI, IoT, automation and collaboration.



**IT and network management leaders** involved in strategy, architecture, and operations should read this report to understand how suppliers are partnering with telcos to deliver enterprise DIY solutions.



**Cybersecurity leaders** should read this report to understand the current state of security capabilities associated with the direct suppliers of SD-WAN technology and services.



**Procurement professionals** should read this report to learn more about network technology and service suppliers because packaging and pricing models deviate from traditional networking solutions.

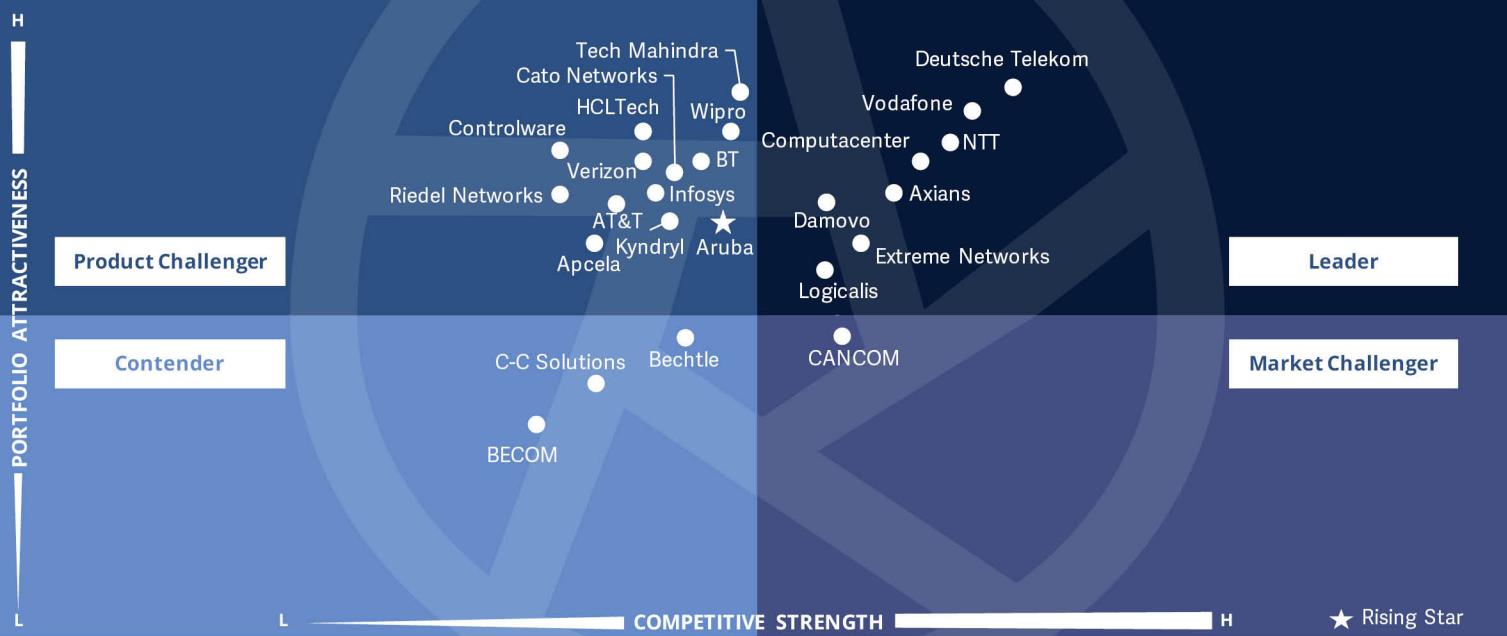




## Network - Software Defined Solutions and Services Enterprise Networks Technology and Service Suppliers

Source: ISG RESEARCH

Germany 2023



This quadrant analyzes SD networking core to edge technology and service providers for **enterprise's own operations (DIY)**, including **management systems and end-device control**, in the German marketplace.

Dr. Kenn D Walters



### Definition

This quadrant analyzes providers of software-defined networking from core to edge technology and services, purchased by either service providers for specific projects or enterprises for their operations or equipment delivery. This includes SD-WAN implementations or partial implementations, which do not include managed services. It also includes specific OSS/BSS (operations support systems/business support systems) solutions, SD-LAN, 4G/5G mobility-targeted services or solutions, applications, management systems and methods, including software-defined networks' end-device control and management that can be integrated into an enterprise's SD-WAN strategy from the primary enterprise location to branches or remote office locations.

SD-WAN is virtual and allows enterprises to bundle multiple WAN technologies and equip themselves with the required bandwidth. It determines the transmission path for data packets and the medium to be used; if a connection has excess load, an alternate path is automatically taken. The virtual connections consist of multiple paths that are

used simultaneously, along with core network functionality. One of the key aspects of the architecture is that it can communicate with all network endpoints, allowing ease in branch and remote setup and management.

Suppliers have been increasingly active in selling SD-WAN solutions to enterprises for their DIY (non-managed) implementations and are partnering with licensed telcos or service providers in this space. In addition, many suppliers focus on specific discrete parts of the overall network (for example, OSS/BSS) and supply just these components or similar discrete, partial solutions.

### Eligibility Criteria

1. Product **portfolio coverage**, focus areas, completeness of modular delivery and integration with broader solutions
2. **Ability to deliver** equipment and service to customers, including requisite training
3. Ability to deliver **value-added services** within a modern enterprise environment, using software-defined methods
4. Understanding of the **overall market**, technology environment and evolutions and **contributions** to the same
5. **Scope of partnerships and offerings** and management capability of a customer project
6. Openness of offerings to **avoid vendor lock-in**
7. Reference customers or **solutions** post proof of concept (PoC) or pilot **in commercial deployment**
8. Competitiveness of offerings and types of **commercial terms** such as shared risk models



### Observations

Supplying network solutions or partial network solutions directly to enterprises for their own management and operations is still a high-growth segment in the global market but varies in terms of market penetration and popularity by region. In Germany, the supply of fully managed, or increasingly, co-managed solutions, is trending, with some previous DIY operators moving back toward suppliers via the co-managed route. Exceptions to the overall trend more often exist in specific industry sectors and in some heavily regulated industry and government areas, where complete end-to-end management and control of user and customer data are required by the enterprise administration. The increase in managed or co-managed solutions adoption can be attributed to the increasing overall network complexity, coupled with staff training and skillset issues in a difficult recruiting market in Germany. This is in line with global trends faced by enterprises that previously managed and operated networks internally.

This quadrant extensively covers all supplier types, from licensed telco service providers (carriers) and other service providers to SI and vendors, relying on wide partner ecosystems to enable fully cover client requirements.

From the 90 companies assessed for this study, 25 have qualified for this quadrant with eight being Leaders and one Rising Star.



**Axians** is an SI working with a strong partner ecosystem of solution providers. It builds individual tailored solutions through its partner ecosystem and adds competencies, products and solutions to ensure client-specific implementations.



**Computacenter** delivers technology and consulting-led SD network transformation services to organizations. Its clients benefit most from the proof-of-concept services and its ability to integrate elements from different vendors into one solution.



**Damovo** enables seamless connections across people, processes and systems, creating transparency and agility while providing network stability and security that customers require in today's business environment.

### Extreme Networks

**Extreme Networks** develops proprietary industry-specific packages and offers tailored solutions for its clients. The company also has a large partner network of solution and service providers.



**Logicalis** has a wide range of advanced core SDx services that encompass multivendor, multitechnology environments. For SD-WAN, these are primarily Cisco-led solutions. In Germany, Logicalis helps its clients transform into service-defined companies.



## NTT DATA

**NTT**, collectively with NTT DATA, offers a broad choice of transmission, technology and products, together with SD networking and cloud solutions through its own resources and partner offerings.

## Vodafone

**Vodafone** offers packaged and fast-start standard solutions. It also creates customized client-led solutions using suitable components from its portfolio into DIY and co-managed solution sets to meet client requirements.

## Aruba

**Aruba's** (Rising Star) Aruba Assist is a service for enterprises that need assistance with SD-WAN DIY deployment. This provides enterprise customers with technical assistance through the deployment phase of the Aruba EdgeConnect SD-WAN platform.





Leader

"Computacenter has powerful and evolving solutions for the SD multicloud networking space and proven transformation and implementation skills."

Dr. Kenn D Walters

# Computacenter

## Overview

Computacenter is headquartered in Hatfield, U.K., and operates in 23 countries. It has over 20,000 employees and clients across 70 countries. The company has strong brand recognition in Germany and an integration and service center at its German headquarters in Kerpen; it also has many additional service centers and local offices across the region. The company delivers technology and network transformations to large corporate and public-sector organizations, including consulting-led SD network transformation services. Its clients benefit most from its PoC services and its ability to integrate elements from different vendors into one solution to fit clients' requirements.

## Strengths

### Digital transformation focus:

Computacenter is focused on digital business transformation and has bundled several business units and solutions under specific categories. SD networking, within the Digital Connect brand, is a strategic part of its digital transformation portfolio.

### Professional services and partner ecosystems:

The company's expertise in design implementation services integrates networking hardware as underlay technologies to vendor-specific and multivendor software-defined overlays. It also has an expert partner ecosystem expertise with a strong focus on Cisco, Arista, Aruba, Juniper, Extreme Networks, Fortinet and Dell Networking.

## Network automation during implementation:

Computacenter's new network automation implementation service follows its network transformation approach, which is a part of an overall framework driving network automation. The network automation 'kick start' service is designed to accelerate SD network transformations by advancing the actionable automation design and programming skills of in-house network operational teams.

### Lab concept simulation and PoCs:

Computacenter can set up customer-simulated environments in its German test labs and run concept-proving trials on solutions and products before installation at customer sites; this reduces the risks associated with commercial deployments.

## Caution

Computacenter focuses on midsize and large accounts with its strong future network/SASE strategy; this is a highly competitive space of network transformation in Germany. Although the company is well-placed to profit from this trend, it should focus on strong marketing in the region.





# Edge Technologies and Services

### Who Should Read This Section

This report is relevant to enterprises across all industries in Germany evaluating providers delivering technologies and services for the network edge space. These offerings cover hardware and software, management or reporting tools and applications, and other services associated with network edge.

In this quadrant report, ISG lays out the current market positioning of edge technologies and service providers in Germany.

Automation and orchestration added many proactive attributes to the network. However, with expectations rising on the business performance front, multicloud and edge tend to become more important, especially in large, business-critical facilities.

With the spike in the adoption of IoT networks, enterprise clients are seeking end-to-end connectivity to analyze data at the edge. Therefore, enterprises are exploring ways of expediting these capabilities through Wi-Fi 6 and 5G networks.

They are also readying their customers for bigger public 5G rollouts, wherein the bandwidths and frequencies would be chunked into allocating a certain spectrum for enterprises. The new technologies are likely to fuel the way for IIoT to scale up and edge computing to grow. Thus, a more inclusive ecosystem is required for the cloud to support this. The cloud model, which was predominantly a storage-related or application-related concept in the past, has evolved into a holistic cobweb of technologies on the network side with components of SDN such as WAN, LAN and Wi-Fi 6 management.



**IT and network management leaders** should read this report to understand the relative positioning and capabilities of providers that can help them effectively consume mobile network services.



**Digital transformation leaders** should read this report to understand how mobile network service providers fit their enterprises' digital transformation initiatives to the enterprise strategy, as well as partnership ecosystems.



**Cybersecurity leaders** should read this report to understand the security posture associated with mobile network service providers, and associated vulnerabilities that are inferred with digital assets.

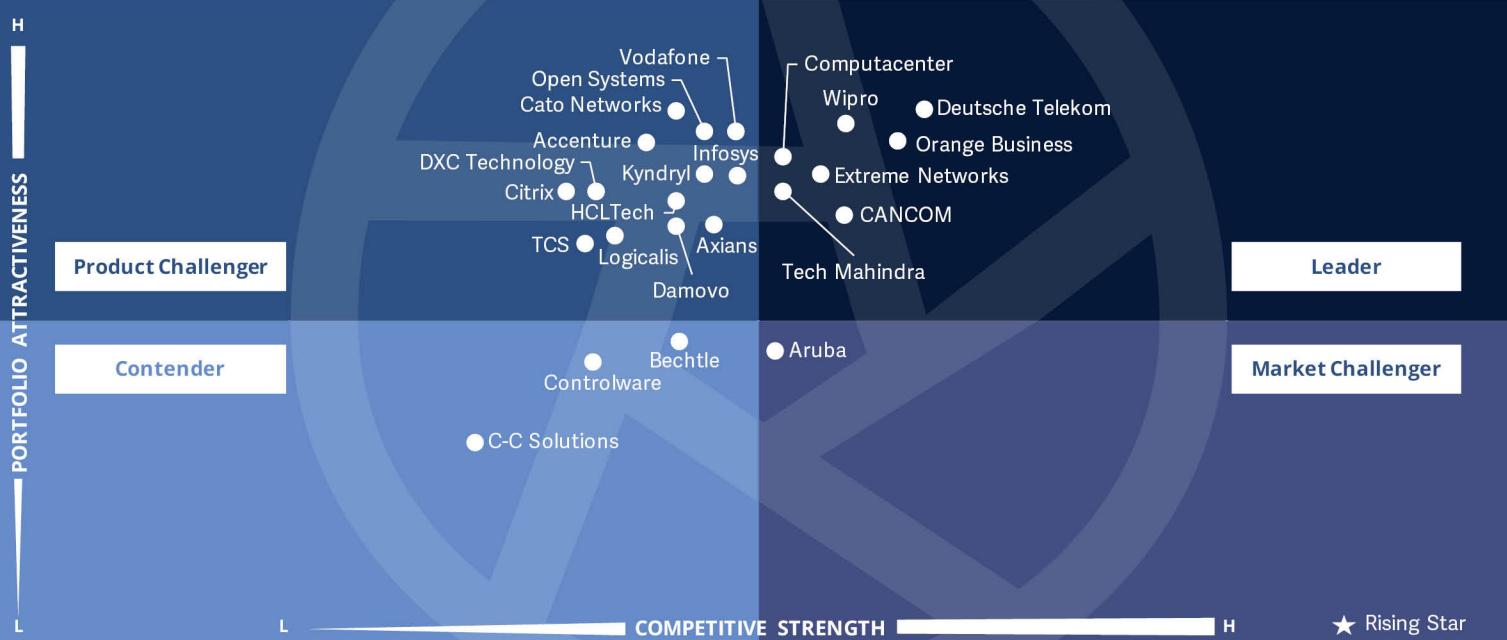




## Network - Software Defined Solutions and Services Edge Technologies and Services

Source: ISG RESEARCH

Germany 2023



This quadrant analyzes providers delivering hardware and software solutions, including **management tools, applications, private 5G and partial or full services** specifically for **enterprise network edge** across multiple verticals.

Dr. Kenn D Walters



### Definition

This quadrant analyzes vendors that deliver technologies across hardware and software, management or reporting tools, and applications and services associated with edge network technology to enterprises.

Edge technologies, services and computing are current trends in IoT and IIoT. With the localized processing of data, security and privacy have improved as any breach can be managed locally and not passed on to the WAN or cloud and thus back to the central enterprise to defend. In IoT edge computing and networking, data from various connected devices in the IoT ecosystem is typically collected in a local device, analyzed on the network, and then transferred to the central data center or cloud. As the number of connected devices has increased exponentially, the volume of data generated is multifold. Thus, interim processing is required to ensure cost reduction and increased efficiency. This, in turn, places high importance on efficient and software-driven edge capability networks and connectivity capabilities.

Edge components can be managed in the same manner as core and SD-WAN components.

Software-defined capabilities include branch and edge functionalities, along with all customer premises equipment (uCPE or vCPE) and associated software-defined mobile networks (SDMNs) and SD-LANs that include both wireless (SD-WLAN) and mobile (SD-WMLAN), as well as IoT or IIoT sensors and devices or control/security devices.

### Eligibility Criteria

1. Product portfolio coverage, focus areas, and **completeness of modular or area solutions**, together with integration into broader solutions
2. Ability to **deliver requisite training** and education to clients, with POC or studio
3. Understanding of the overall market, technology environment and evolutions and contributions to the same, together with **industry-specific knowledge and experience**
4. Scope of partnerships and offerings and **management capability of disparate providers and solutions** within a customer project
5. **Reference customers** or solutions in POC or pilot deployments or commercial deployments
6. Competitiveness of offerings and **types of commercial terms**



## Observations

Edge (edge compute, network edge, branch edge and remote edge) has seen continuous and rapid expansion over the last four years, with exponential expansion during the global pandemic. The rise in popularity of the hybrid working model, where much of the workforce is situated in remote locations or working from their homes for at least part of the working week, was a key driver.

In Germany, in line with much of the developed world, new technology and process models make this quadrant both a complex and fast-growing business area and one of the key focus areas for enterprise executives. These technologies and models include IoT (which also covers IoT and IIoT sensors and devices and control/security devices), SD networking via multicloud, SD-LAN, SD-WLAN or SD-MWLAN with high-security functionalities, such as SSE requirements. In the strong German industry vertical space, covering global trends such as manufacturing and Industry 4.0,

robotic devices, telematics and telemetry and metaverse, this area is still accelerating in terms of overall YoY growth and enterprise adoption.

From the 90 companies assessed for this study, 24 have qualified for this quadrant, with seven being Leaders.

## CANCOM

**CANCOM** offers a comprehensive SD services portfolio with its own global backbone and data center infrastructure in Germany. Its overall strategy is to use managed services such as XaaS offerings.



**Computacenter** has practices for the enterprise edge, including edge computing, IIoT platform strategy, IIoT platform maturity analysis, migration of shopfloor applications, cost radar for platform services and blueprint development.



**Deutsche Telekom's** edge offering EdgAIR integrates the edge-cloud ecosystems of AWS, Microsoft Azure and Google Cloud. Enterprise customers benefit from an end-to-end ecosystem consisting of connectivity, cloud-edge and digital solutions.

## Extreme Networks

**Extreme Networks'** Smart OmniEdge network solution provides a unified wired/wireless infrastructure for cloud or on-premises deployment, with AI applications and single-pane-of-glass management and monitoring.



**Orange Business** leverages its industry-leading partners and deep technical knowledge to create value-added edge solutions in various technologies and industry segments in Germany.

## Tech Mahindra

**Tech Mahindra** delivers pre-integrated, secured end-to-end enterprise digital solutions enabled by 5G and multi-access edge computing (MEC). This package also includes secure private networks, edge computing powers, interconnected premises and cloud over SD-WAN.



**Wipro's** BoundaryLess Universal Edge (BLUE) and BoundaryLess Enterprise (BLE) are comprehensive suites containing an end-to-end solution set of platforms and services from cloud to edge.





"Computacenter has an extended range of products and services in the edge space backed by differentiated delivery capabilities and strong references."

Dr. Kenn D Walters

# Computacenter

## Overview

Computacenter is headquartered in Hatfield, U.K. and operates in 16 countries. It has more than 20,000 employees across over 70 global offices. Computacenter Germany has its integration and service center in its Kerpen headquarters and 24 additional regional offices across the country. The company delivers technology and network transformation to large corporate and public-sector organizations, offering consulting-led SD network transformation services. Its clients benefit most from its PoC services and its ability to integrate elements from different vendors into one solution to fit clients' requirements.

## Strengths

**Range of edge-focused practices:** These practices are designed to deliver flexibility and scalability to the enterprise edge. They include edge computing, IIoT platform strategy, IIoT platform maturity analysis, shopfloor application migrations, cost radar for platform services and blueprint development.

**Risk reduction through labs:** Computacenter can set up customer-simulated environments in its German test labs and run concept-proving trials on solutions and products before installation at customer sites. This reduces the risks associated with commercial deployments.

## Computacenter differentiation:

Computacenter has the ability to consistently deliver global solutions across its portfolio. From an edge technologies perspective, it has capabilities to deliver global surveys, cabling and technologies such as sensors, cameras and wireless solutions that support a wide range of edge solutions.

**Industry vertical coverage:** Computacenter delivers specific industry solutions from its competence center in Germany; however, these associated solutions and consultancy services also can be used by enterprises in other countries. The company's wide range of vendor solutions positions it as a leading provider of edge tech and services.

## Caution

Computacenter focuses on midmarket and large accounts through the direct sales channel in Germany. Solution service providers and SI increasingly approach many of these potential customers. Thus, the company should focus on clear marketing of its differentiators with German reference cases to maintain leadership.





# SASE Solutions and Services

### Who Should Read This Section

This report is relevant to enterprises across all industries in Germany evaluating enterprise SASE service providers.

In this quadrant report, ISG lays out the current market positioning of SASE service providers in Germany and how they address the key challenges that enterprises face in the region.

There has been a strong push across the enterprise landscape to embed security services and associated network services into the network fabric instead of keeping security as a separate function. In the last few years, architectures such as SASE and Zero Trust Network Access (ZTNA) have gradually emerged from the whiteboard and reached the stage of being rolled out by technology providers, leading to a positive consolidation in the market. With convergence being driven in the services and technology space, system integrators are advancing their service offerings to the next level.

For example, they are developing their proficiency in managing necessary speed and scale, as well as digitalizing their services and solutions, best practices and ways of working.



**IT and network management leaders** should read this report to understand the capabilities of providers, helping them to effectively consume SASE services, and manage their technical assets and partnerships.



**Cybersecurity leaders** should read this report to understand the current state of security capabilities associated with consulting and other SASE service providers' delivery.



**Procurement professionals** should read this report to learn about SASE service suppliers' payment schemes, which are often based on SLAs and KPIs, including the levels and quality of services.





## Network - Software Defined Solutions and Services SASE Solutions and Services

Source: ISG RESEARCH

Germany 2023



This quadrant analyzes **SASE solutions and services** as integrated networks and security solutions delivering a **secure network from core to edge**. This SASE solution should **fully integrate with** existing **enterprise IT** and other systems as required.

Dr. Kenn D Walters



## Definition

This quadrant analyzes SASE solutions, which are offered to enterprises as overarching integrated networks and security solutions from the enterprise core to the edge. These include solutions moving into pilots and solutions currently commercially deployed into production.

Enterprises are increasingly focused on migrating their ICT and network operations to the cloud while enhancing security in all touchpoint areas. Software-defined networks have proven to be efficient in assisting with this by reducing complexity and facilitating risk-reduced migration to single or multicloud environments for enterprises. Network-integrated security has been evolving continuously, with the inclusion of components such as proactive detection and response solutions, zero-trust networking, and identity-based security and authentication. Many providers supply a combination of identity-based authentication, SASE and network security to create a holistic, secure-by-design approach for the network of the future.

The major components of SASE include SD-WAN, cloud access security broker (CASB), next-generation firewall (NGFW) and firewall-as-a-service (FWaaS), zero-trust network access (ZTNA) and secure web gateways. These encompass secure and integrated access from the data center (which may include network function virtualization [NFV]) to branch or edge, including SD-LAN or its wireless or mobile variant.

Suppliers in this area have been increasingly active as advisors or consultants for implementation, supplying complete proofs of concept, pilots and solutions to enterprises. Prominent vendors and managed network service providers are also actively involved in offering SASE.

## Eligibility Criteria

1. Product portfolio coverage, focus areas, **completeness of solutions**, fully integrated broader solutions linking to data centers or other enterprise IT applications and systems
2. Membership or affiliation (including inputs) with **global SASE technical and trade groups**
3. Ability to enable clients to **reuse the existing network** and ICT solutions, instead of just rip and replace
4. Ability to deliver training and **provide both POC or studio simulations and testing** for clients
5. **Industry-specific knowledge** and experience mapped to the client type
6. Scope of partnerships and offerings plus management capability for the needed **orchestration within a customer project**
7. **Reference customers or solutions** in pilot moving into commercial deployment
8. **Competitiveness of offerings** and types of commercial terms



## Observations

In the German market, the definition of integrated secure enterprise networks (ISEN) has been known for a number of years but has gained popularity with the term SASE over the last few years. There is now agreement on the detailed constituent components of SASE, thus bringing it from the pilot domain into many commercial rollouts, with core-to-edge security and zero trust with integrated SD-WAN, backed by strong solution offerings from a range of highly reputable global providers. SASE has become one of the highest growth areas in the overall enterprise transformation and network business in Germany currently, and its growth will likely accelerate across all enterprises and industry verticals in the coming years.

The newer term security service edge (SSE) may be confusing to many; it is described as an evolving stack of different cloud-based security tools, including cloud access security broker, secure web gateways, FWaaS and ZTNA. These form approximately half to two-thirds of a full SASE architecture, which, as described in our

quadrant definition, is the convergence and integration of networking and security tools within a cloud infrastructure.

From the 90 companies assessed for this study, 25 have qualified for this quadrant, with 10 being Leaders and one Rising Star.



**Accenture's** solutions are secure, predictable, scalable and flexible. The result is a modern software-defined, cloud-native network that enables SASE in a modern network for enterprises delivered by its Cloud First Networks + 5G unit.



**BT** effectively provides single or multivendor SASE architectures with integrated service management through a broad range of leading solution partners. The company has a strong brand image in Germany.



**CANCOM** offers a full SASE-as-a-service portfolio. The key point of the portfolio is that the company can position each key technology as a service on its own while focusing on the whole SASE architecture.



**COLT** delivers a fully integrated SASE, integrating Colt's SD-WAN and Security Integration with full work-from-anywhere remote secure access, and is cloud-delivered securely (through more than 50 SASE gateways) globally.



**Computacenter** offers strategic consultancy to support business case development, vendor assessment, selection and sourcing, architectural design and professional services to build and implement SASE in Germany.



**Deutsche Telekom's** SASE solutions are considered the next step for SD-WAN, enabling scalability, automated cloud-native connectivity and cost-effectiveness with flexible licensing. Its Magenta SASE introduces a powerful solution set into the overall portfolio.



**Orange Business** is integrating security-driven networking technology into its Evolution Platform. This will reinforce security and networking convergence while optimizing performance.



## SASE Solutions and Services



**Verizon's** Advanced SASE provides a distributed networking and security platform that ensures secure connectivity for end users and devices across all locations. The company offers a full best-of-suite solution for SASE across the enterprise.

### Vodafone

**Vodafone** offers both single-vendor (Cisco) and multivendor SASE solutions with a choice of SD-WAN and SSE providers, such as Zscaler, Prisma and VMware or Zscaler orchestration.



**Wipro** leverages SASE and ZTNA security frameworks and has strategic alliances with SASE product vendors, offering joint solutions as required. Its integration platforms build a powerful and integrated architecture with prerequisite security tools for enterprises.



**DXC Technology** (Rising Star) has a wide range of modernized vendor-agnostic transport and software defined network solutions (SD-WAN, SASE, SD-LAN, SD data center [SDDC] and cloud network) that can be delivered at a global scale with central orchestration and zero-touch provisioning.





Leader

"Computacenter offers effective provider-agnostic SASE advisory, planning, design and implementation services for German clients."

Dr. Kenn D Walters

# Computacenter

## Overview

Computacenter is headquartered in Hatfield, U.K. and operates in 16 countries. It has more than 20,000 employees across over 70 global offices. Computacenter Germany has its integration and service center in its Kerpen headquarters and 24 additional regional offices across the country. In the SASE area, it mainly offers advisory and vendor-agnostic selection services. The company offers strategic consultancy to support business case development, vendor assessment, selection and sourcing, architectural design and professional services to build and implement.

## Strengths

**Vendor-agnostic advisory to implementation:** Computacenter does not sell its own SASE technology or products; it supplies consultancy, professional services for SASE architectures and sourcing of SASE technologies without a vendor bias.

**Strategic validation:** Computacenter can validate customer business drivers and ensure SASE solution benefits. It outlines key activities that should be undertaken while explaining the essential architectural concepts that must be incorporated into any design.

### Architecture recommendations:

Computacenter provides best practice recommendations on how to design and implement SASE architecture. This covers

location and cloud connectivity, optimal cloud service access, network and additional security, controlled internet access and user access.

**Provider selection assessment:** The company evaluates providers against the unique requirements and target architecture needs of specific customers. These ratings can be used to compare different options and identify the SASE solution that best fits the client's needs.

### Assessment output to implementation:

By using the assessment output, Computacenter produces a specific design and deployment plan covering costs, timelines and dependencies that can be leveraged by professional services.

## Caution

Computacenter currently focuses on advisory to implementation as a professional service in Germany. As the market matures, more reference cases in the region will be required to continue its leadership in this non-product supply area of SASE.





# 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 German 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 April 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 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*

**Dr. Kenn D Walters**  
**Distinguished Lead Analyst**

Dr. Kenn Walters is a highly skilled senior executive with over 40 years of experience in directing and managing major transformational technology projects, research and development programs, as well as extensive experience within providers and in global industry research and management consultancy. For ISG, Kenn has written over 100 articles as a distinguished lead analyst for ISG Insights in areas such as digital transformation, cloud-managed networks, SD networking, SDN and digital disruptors.

He is a distinguished lead analyst and author for multiple regions in the Provider Lens™ reports (<https://isg-one.com/research/isg-provider-lens>) in such areas as Networks – Software Defined Networking, Digital Business Software and Services, Contact Center as a service, and CC CX. He holds a BSc, MSc, and Ph.D. in computer science and communications systems.



*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™

ISG Research™ provides subscription research, advisory consulting and executive event services focused on market trends and disruptive technologies driving change in business computing. ISG Research™ delivers guidance that helps businesses accelerate growth and create more value.

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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.

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**REPORT: NETWORK - SOFTWARE DEFINED SOLUTIONS AND SERVICES**