

HUGHES MANAGED SD-WAN SOLUTIONS

**COMPLEXITY MADE SIMPLE:
ENTERPRISE-QUALITY NETWORK
SERVICE FOR DISTRIBUTED
LOCATIONS**

HughesON™

MANAGE EXPECTATIONS – BY MEETING THEM!

In the age of the cloud, customer and employee expectations are constantly growing. How and where people choose to shop, consume information, access applications or do business has evolved rapidly over the past few years. Expectations about network availability and response times, even in remote locations and for bandwidth-heavy applications, are sky high. All your stakeholders and customers must feel that their digital interactions with your business have been a success.

The only way to manage these expectations is to meet them. The alternative is a loss of trust.

Yet existing network infrastructures have their limitations, which means it is not easy, even for the world's largest organisations, to keep up with the pace of change. Finding a network that supports the connectivity between different offices, stores, manufacturing plants, warehouses, call centres and delivery hubs across Europe is one of the very toughest issues for distributed, multisite businesses today. Especially if they need to handle demanding apps such as cloud inventory management, point-of-sale, VoIP services and e-commerce.

If you find yourself in this situation and are asked to handle the next big digital transformation initiative, you may find that you simply have too many plates to spin!

Wide area networks are a jumble of technologies and connectivity types; the complexities therefore increase exponentially over multisite deployments, especially if they are in a heterogeneous mix of metropolitan, town centre and rural locations, and in more than one country.

If these issues sound familiar, read on!

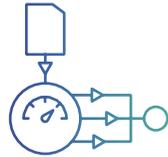
“**EVERYONE
HAS A RIGHT
TO EXPECT
PREDICTABLY
HIGH QUALITY
NETWORKED
SERVICES,
REGARDLESS
OF LOCATION.**”

**Area Manager,
European Retail Chain**



ORCHESTRATING *YOUR* SUCCESS

So, what is the answer? Until recently, many enterprises relied on expensive, dedicated, private multiprotocol label switching (MPLS) networks to connect headquarters and branch offices, stores etc., and to access applications and data in data centres. Or they deployed more cost-effective DSL networks that might be limited in capacity or subject to quality of service issues. Hence the shift to software-defined wide area networks (SD-WAN).



SD-WAN provides a software overlay to the WAN infrastructure that enables more effective management of network capacity, availability, performance and change. This “virtualisation” of the network streamlines many IT and maintenance costs, centralising management and supporting businesses in the optimum usage of all available network resources.



SD-WAN can – in theory – be used with any connectivity type and is independent of any telecommunication provider’s infrastructure. This means that it can dynamically route network traffic across any and all connection types available at a site. However, in order to achieve this in practice, the SD-WAN solution needs to be able to accommodate the individual characteristics of different connectivity types since, for example, DSL connections and LTE connections behave in different ways.

Because **Hughes Network Systems Europe is technology-agnostic**, we select, deploy and manage the optimal networking technology for your needs. We orchestrate the best-of-breed technologies that deliver on business objectives such as improving cost efficiencies while enhancing your customers’ and employees’ experience.

In short, we access the latest and best technology and provide you with a made-to-measure service that suits your needs. Eliminating complexity and optimising agility, simplicity and usability to clear technical obstacles and move your organisation forward.

HOW TO CHOOSE THE PERFECT SD-WAN SOLUTION

The answer to that question is not so simple. No single vendor is the perfect fit, especially in multi-country, hybrid deployments.

The reason is that different vendors deliver SD-WAN in different ways with a different focus. The answer, therefore, is not to go out and buy an SD-WAN, or even to shortlist vendors and choose the best. Because, in reality, the best will only be the “least-worst”. The disparate nature of the network infrastructure, and the many connectivity options, means that any choice is going to involve some trade-offs.

If your business is of a certain size, you’ll probably find the maintenance and management of hardware to be expensive and highly demanding on your precious human resources, even with the implementation of SD-WAN. If predictable, high-quality service across all locations is your goal, digital transformation must go beyond the replacement of routers with an SD-WAN platform. It must encompass a rearchitecting of the WAN to meet your precise needs and shift towards a design that can unify network functions including routing, security, and WAN optimisation.

This is why a Managed SD-WAN solution from Hughes is your best option. We are the European experts in SD-WAN. We’ll listen to your needs, understand the constraints, and architect a solution that provides the best fit. Ensuring, for example, that traffic always gets the right priority. We then build your SD-WAN solution, leveraging the complementary skills and technologies of our extensive partner ecosystem.

“ WITH HUGHES, YOU HAVE FLEXIBILITY IN CHOOSING THE BEST SERVICE OPTIONS, BUT A SINGLE POINT OF CONTACT FOR OPERATIONAL SUPPORT. ”

CIO, Construction Company

LEAVE NOTHING TO CHANCE

Nothing is more important in networking than security. In distributed enterprises, the challenge is to achieve the right level of protection against security breaches while maintaining high service levels and productivity. Both are critically important to your reputation.

Here’s how Hughes will keep your Managed SD-WAN secure while maintaining “business as usual” quality of service at all times:

- 1 We determine if your optimal SD-WAN technology has adequate security built in. Some might require a complementary security solution.
- 2 We ensure that the solution is compliant with all the certifications and standards that your industry requires, such as Payment Card Industry Data Security Standards (PCI DSS).
- 3 We consider what approach best fits your WAN architecture. Some SD-WAN solutions have edge-based security (at individual locations) while others are cloud-based, a more centralised approach. It largely depends on whether your network is designed for intra-branch traffic or just SaaS-based traffic, with most traffic transferred through a cloud environment directly to a data centre. The answer dictates which security solutions will work for your company.

“ WE ARE VERY IT SECURITY CONSCIOUS AND HUGHES’ APPROACH TO UNIFIED THREAT MANAGEMENT ALIGNS WITH OUR OWN. ”

IT Security Manager,
Financial Services

DESIGNED FOR AVAILABILITY

Our SD-WAN solutions enable high performance by delivering dual path connectivity that enables your network traffic to travel over the best available route for consistent quality of service and “always-on” applications.

This approach also ensures built in resilience should either circuit fail, giving you confidence that your business-critical applications will be supported with the connectivity they rely on.

ARCHITECTED TO EXPLOIT PUBLIC AND PRIVATE CLOUD SERVICES

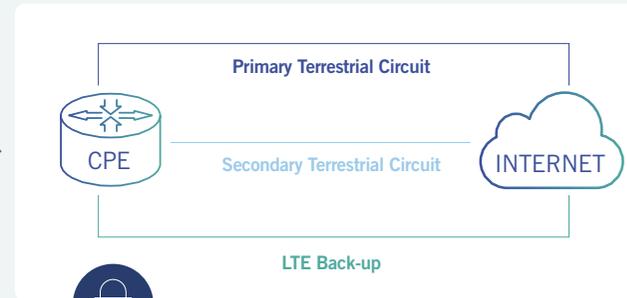
The Hughes Managed SD-WAN transport topology is essentially a hub and spoke model with communication taking place primarily between branch locations and central locations such as the cloud, the Hughes European Network Operations Centre (NOC), or your company headquarters.

Our Managed SD-WAN solutions deliver high-performance, resilient, secure networks across your distributed estate.

Deliver relevant applications and technology locally



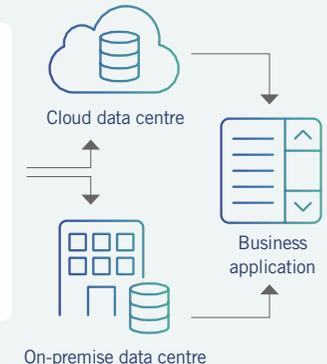
Customer experience



With security built in

All across a highly available, high-performance SD-WAN solution

While delivering centralised policy management



On-premise data centre



With full visibility of what's happening

THE HUGHES DIFFERENCE

Working with Hughes to deliver your Managed SD-WAN Solution offers many advantages.

Connectivity and platform options

We are technology agnostic. This means we offer you the best choice of connectivity and platform options to create the optimum solution.

Hughes uses several different underlying connectivity technologies to provide the connectivity element of the SD-WAN managed service. The connectivity types include wired (xDSL, cable and fibre) and non-wired (satellite and cellular) with networks tending to be a hybrid mix of these across your estate, overlaid with seamless management and SLA service components.

Hughes has selected a broad range of vendors and platforms for their unique strengths that can be matched to your specific business requirements. We recognise that you may have already made your own choice of platform; if so, we will support this when working with you to implement the optimum solution for your needs.

A smooth migration to SD-WAN

Transitioning to SD-WAN can be difficult. This is another reason why a Hughes Managed SD-WAN solution is the best option. With more than 35,000 SD-WAN sites deployed globally, Hughes has the experience and expertise to transition your organisation to an SD-WAN network without service disruption.

Hughes Managed SD-WAN services integrate customer branch locations into a dedicated and specifically designed WAN infrastructure containing private and public elements such as customer data centres, regional or global headquarters, or services hosted in the cloud.

All services are delivered and managed via the Hughes European NOC, which is located in Griesheim near Frankfurt, Germany.

You want your network up and running quickly but you need to be sure it's right first time. That's why we have a highly specialised team on hand to manage all aspects of your deployment, from network implementation to ongoing maintenance and support. Our professional services team acts as your single-source provider for planning, staging, configuration, deployment, management, monitoring and troubleshooting, ticketing, and remedial action.

We are confident in our ability to deliver an exceptional service, so we give you visibility of what's happening on your network through our HughesON portal. You can see the status of devices, circuits and tickets. You can follow the progress of projects; you can make change requests and you can even track engineers who are expected on site for installation or maintenance services.

Quality – but at an affordable cost

You are probably thinking all this sounds great, but what will it cost?

The answer is that we size and cost the solution based on multiple low-cost broadband technologies rather than dedicated higher cost circuit products. Because SD-WAN technology optimises traffic flow across lower cost connectivity technologies, you still achieve the high availability experience of dedicated circuits but without the associated price tag. This makes Hughes Managed SD-WAN solutions especially cost-effective for networks requiring multi-country coverage and hybrid deployments using several technologies.

The move to SD-WAN will therefore drive down the total cost of ownership through either reduced connectivity costs or reduced management overhead. We'll also work out a pricing plan that gives you maximum transparency and predictability.

“ THE TRANSITION TO SD-WAN WAS TOTALLY SEAMLESS. ALL THE USERS NOTICED WAS AN UPLIFT IN NETWORK QUALITY AND FASTER RESPONSE TIMES. ”

Infrastructure Manager,
Petroleum Retail

PRISM – OUR METHODOLOGY TO ENSURE YOUR SUCCESS

PRISM is our methodology for understanding what you need to achieve from your network and to access the value you rely on to deliver competitive differentiation. We leverage our specialist knowledge to get inside your network so we can craft the optimal network solution to make this happen.



Plan

We audit, design and provide consultancy for your network



Resource

We can source, procure and licence all your network connectivity and equipment requirements



Implement

We stage, test, install, and project manage all aspects of your network solution



Support

We deliver full support for your network with an integrated solution for your incident management, maintenance and adds, moves and changes



Manage

We proactively monitor and manage your network to ensure optimised performance for resilience and application availability

A NAME YOU CAN TRUST

Our flexible networking solutions combined with our multi-vendor approach means we take modern technology capabilities and identify the right solution to meet our customers' commercial needs. Our long-standing relationships with our customers, which span many years, are testament to our collaborative and quality-focused approach. We deliver our services throughout Europe with offices in the UK, Germany and Italy and offer a single point of contact with a single, aggregated service level agreement for all sites irrespective of size or location. As the European business unit for Hughes, we work in collaboration with our sister business units in North America, South America, India and International to deliver fully integrated solutions on a global scale.

For further details about our products and services contact us today.



\$1.85
BILLION

Dollars
in revenue



Supporting **425,000**
business and government
sites worldwide



2,100
employees globally



7+ million terminals of all
types delivered in **more than**
100 countries



Deployed **35,000**
SD-WAN sites to date



Customers on
6 continents



5 decades of
networking expertise

WANT TO KNOW MORE? GET IN TOUCH



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About Hughes Network Systems

Hughes Network Systems, LLC (HUGHES) is the global leader in broadband satellite technology and services for home and office. Its flagship high-speed satellite Internet service is HughesNet®, the world's largest satellite network with over 1.3 million residential and business customers across the Americas. For large enterprises and governments, the company's HughesON™ managed network services provide complete connectivity solutions employing an optimized mix of satellite and terrestrial technologies. The JUPITER™ System is the world's most widely deployed High-Throughput Satellite (HTS) platform, operating on more than 20 satellites by leading service providers, delivering a wide range of broadband enterprise, mobility, and cellular backhaul applications. To date, Hughes has shipped more than 7 million terminals of all types to customers in over 100 countries, representing approximately 50 percent market share, and its technology is powering broadband services to aircraft around the world. In Europe alone, where we have been helping our customers to achieve optimal value from their network infrastructure for more than 30 years, we manage 55000 sites, across 28 countries supporting more than 5 billion transactions every year. Headquartered outside Washington, D.C., in Germantown, Maryland, USA, Hughes operates sales and support offices worldwide, and is a wholly owned subsidiary of EchoStar Corporation (NASDAQ: SATS), a premier global provider of satellite operations. For additional information about Hughes, please visit www.hughes.com and follow @HughesConnects on Twitter.

About EchoStar

EchoStar Corporation (NASDAQ: SATS) is a premier global provider of satellite communication solutions. Headquartered in Englewood, Colo., and conducting business around the globe, EchoStar is a pioneer in secure communications technologies through its Hughes Network Systems and EchoStar Satellite Services business segments. For more information, visit echostar.com. Follow @EchoStar on Twitter.

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