Vodafone Business Internet Portfolio

Presented by
00 Month 0000

vodafone
business
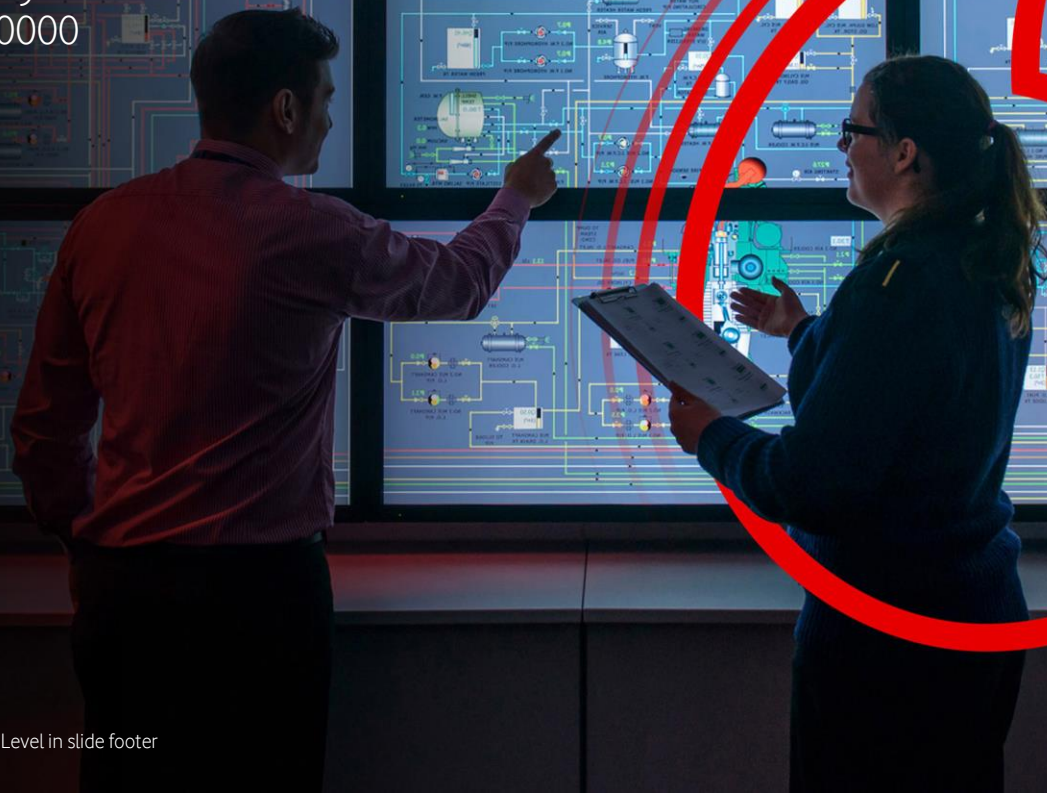
Market trends

1

Trends in technology

Growth in data, new ways of working and trust in the internet have encouraged organisations to adopt the cloud for flexible, reliable and cost effective connectivity

Explosion in data

Traffic volumes continue to spiral (40% YoY) *(BMM & Gartner)*

Increase in cloud adoption

Large enterprises aspire to have roughly 60% of their environment in the cloud by 2025 *(McKinsey)*

Investing in the internet

Internet + SD-WAN is good enough 90% of the time *(BMM & Gartner)*

Rise in remote working

48% of people will work remotely (permanently / some days) post pandemic *(BMM & Gartner)*
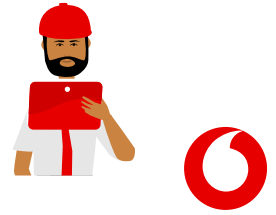
Shrinking network budgets

Network modernisation

Increase in regulations

Fears of network outage

Increasing their reliance on the network

A faster, more agile network

- On-demand
- Fast provisioning
- Automation & orchestration

Organisations can scale and adapt to change

High bandwidth and network capacity

- Direct internet
- Cloud access
- Lower cost connectivity

Increase efficiencies by connecting everywhere

Secure critical comms

- Application visibility & control
- Secure global access from anywhere

Improving accessibility and protection of data

Innovation at speed

- Choice of vendors
- Open standards
- 3rd party integration

Quickly take advantage of new opportunities

Secure by Design

- End-to-end embedded security
- Threat detection and protection

Reduce risk and protect reputation

Vodafone credentials

2

Vodafone named as a Leader in the 2023 Gartner® Magic Quadrant™ for Network Services, Global – for the 5th time!

- Our customers know they can rely on our global network services especially when their business calls for always-on connectivity. With our world-wide coverage we deliver their critical information where it needs to be all the time, every time, anywhere and everywhere.

- We think we have a particular advantage among network services providers because our infrastructure takes in private networks, internet users and mobile endpoints.

- Read what Gartner have to say here

Gartner® Magic Quadrant™ for Network Services, Global, Danellie Young, Bjarne Munch, Karen Brown, Lisa Pierce, Katja Ruud, Gaspar Valdivia, 22nd February, 2023

Gartner, Gartner Peer Insights 'Voice of the Customer': Network Services, Global, By Peer Contributors, July 2022
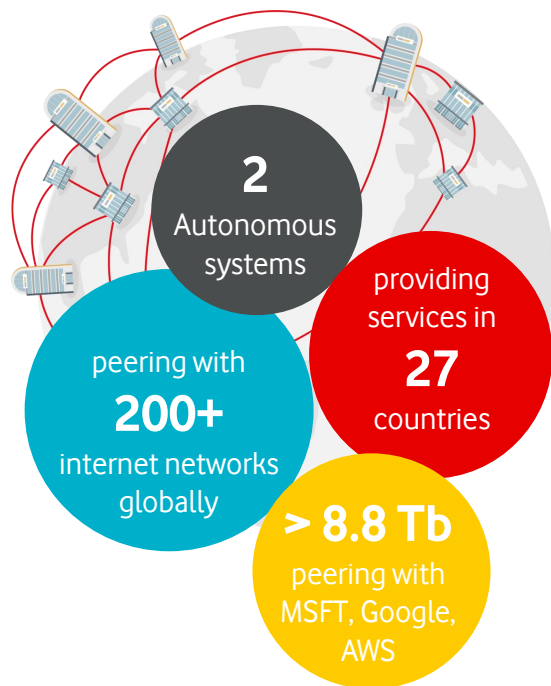
Gartner is a registered trademark and service mark of Gartner, Inc. and/or its affiliates in the U.S. and internationally, Magic Quadrant and Peer Insights are registered trademarks of Gartner, Inc. and/or its affiliates and are used herein with permission. All rights reserved.

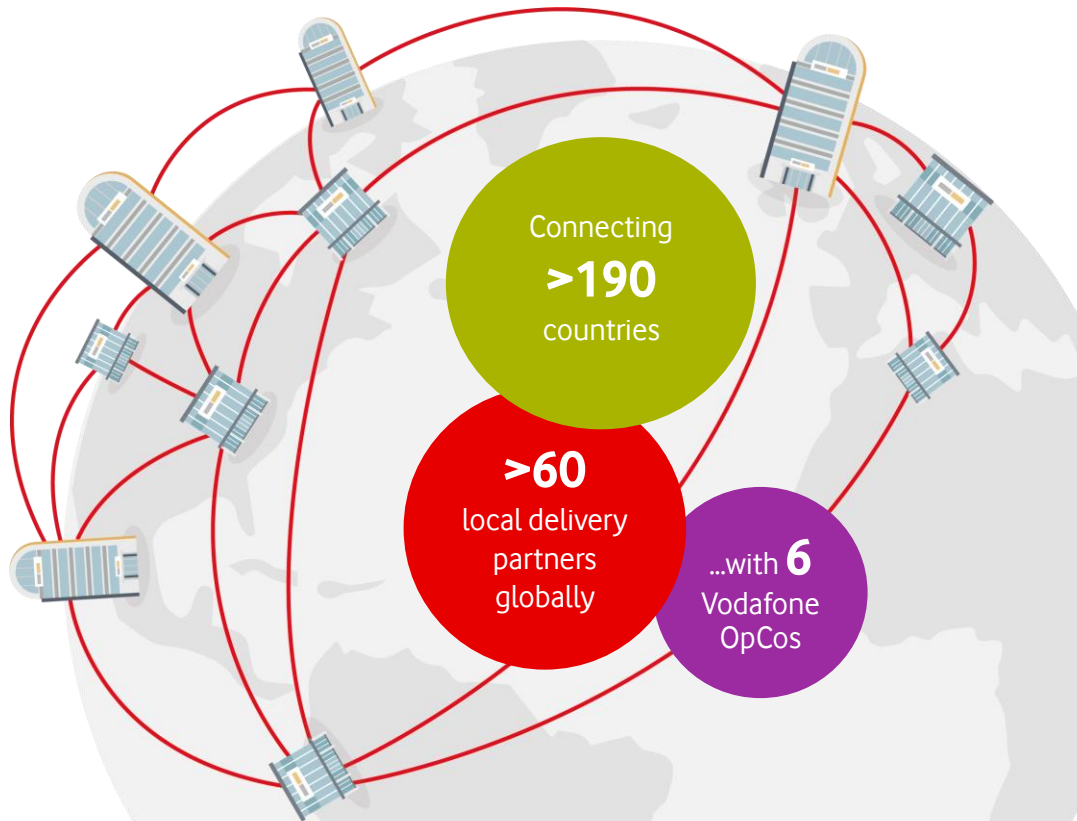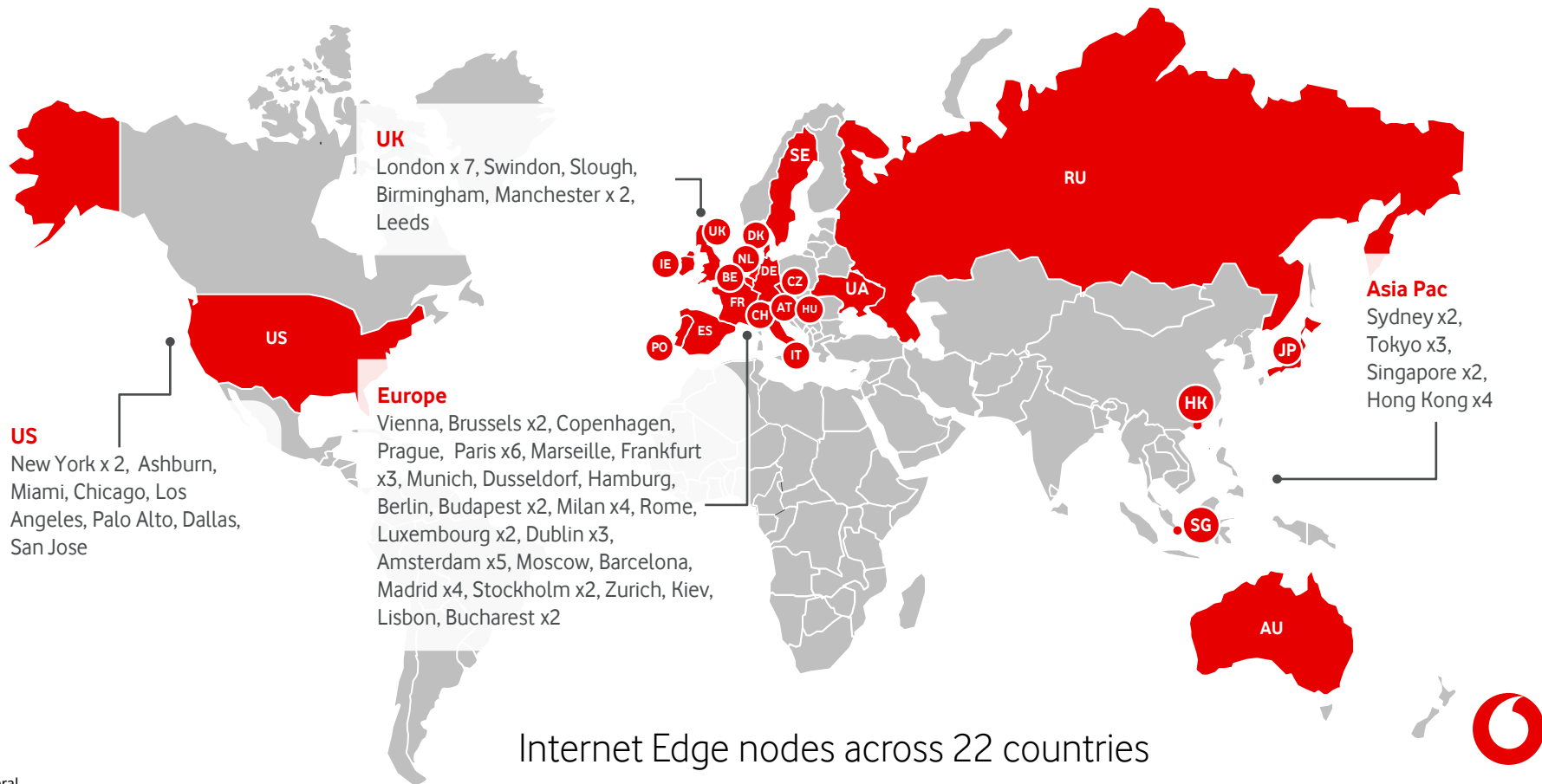Figure 1: Magic Quadrant for Network Services, Global

Source: Gartner (February 2023)

Our Global Capabilities

On-Net DIA & IP Transit

2 Autonomous systems

providing services in **27** countries

peering with **200+** internet networks globally

> 8.8 Tb peering with MSFT, Google, AWS

Global Internet – Partner Broadband & DIA

Connecting **>190** countries

>60 local delivery partners globally

...with **6** Vodafone OpCos

Our Global Reach

UK
London x 7, Swindon, Slough, Birmingham, Manchester x 2, Leeds

US
New York x 2, Ashburn, Miami, Chicago, Los Angeles, Palo Alto, Dallas, San Jose

Europe
Vienna, Brussels x2, Copenhagen, Prague, Paris x6, Marseille, Frankfurt x3, Munich, Dusseldorf, Hamburg, Berlin, Budapest x2, Milan x4, Rome, Luxembourg x2, Dublin x3, Amsterdam x5, Moscow, Barcelona, Madrid x4, Stockholm x2, Zurich, Kiev, Lisbon, Bucharest x2

Asia Pac
Sydney x2, Tokyo x3, Singapore x2, Hong Kong x4

Internet Edge nodes across 22 countries

Our Internet Services

3

Dedicated Internet Access

Vodafone Business Global Internet

IP Transit

Vodafone Enterprise Broadband

Our Internet Portfolio

Resilient uninterrupted connectivity that keeps your data safe

Reach

Underpinned by our wholly owned global IP backbone we connect you directly with cloud providers. Our portfolio through our longstanding partnerships reaches >190 countries.

Agility

Choice of connection and speeds that can accommodate peaks in demand in line with your business .

Flexible Commercials

Various service options to meet your budget requirements all supported by a single point of contact for service.

We'll help whether you're hosting a website, making huge file transfers or running real-time applications.

Powered by our reliable internet portfolio and underpinned by our world leading network you have unlimited access even at busy times.

How the network helps to achieve business goals

Maximised efficiencies

Reduced costs

Reduced complexity

Single point
of contact

More secure, reliable
connections

Connected directly to
cloud resources
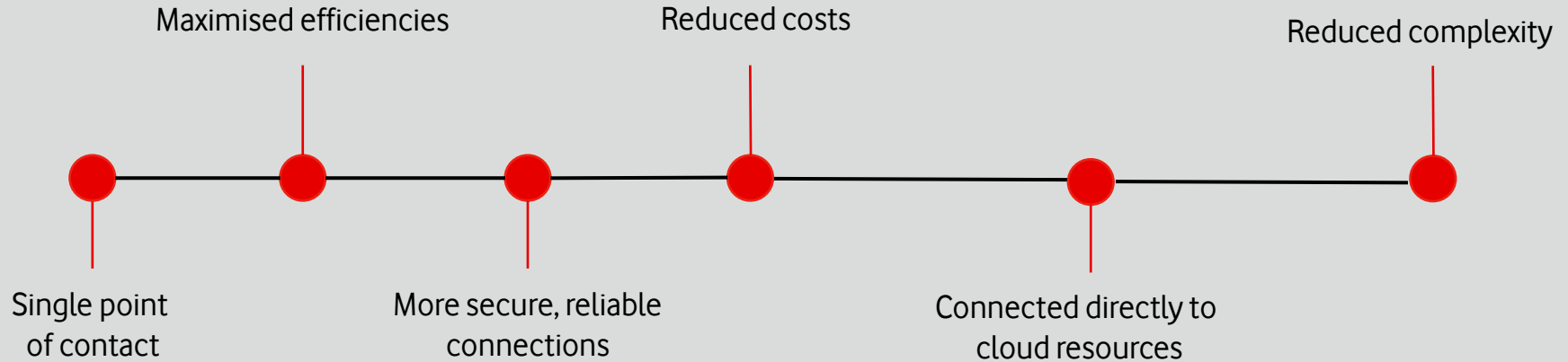
As an underlay to SD-WAN, Vodafone Business Global Internet delivers speed with a
network that won't hold you back

Vodafone Dedicated Internet Access (DIA)

Uncontended, unlimited internet access via our hyper-connected, wholly-owned, global IP backbone

- Connect your sites and your teams through a **secure**, **high-performance** private internet connection
- Symmetrical upload and download speeds from **2 Mbps to 10 Gbps**
- Can be a standalone product or an underlay for **SD-WAN**

Benefits | **Optional extras**

- Fast, reliable internet access
- Excellent service experience
- Overall best value
- Performance reporting

- Premium cloud access
- Global reach
- Burstable bandwidth
- Resilience

- Managed Firewall
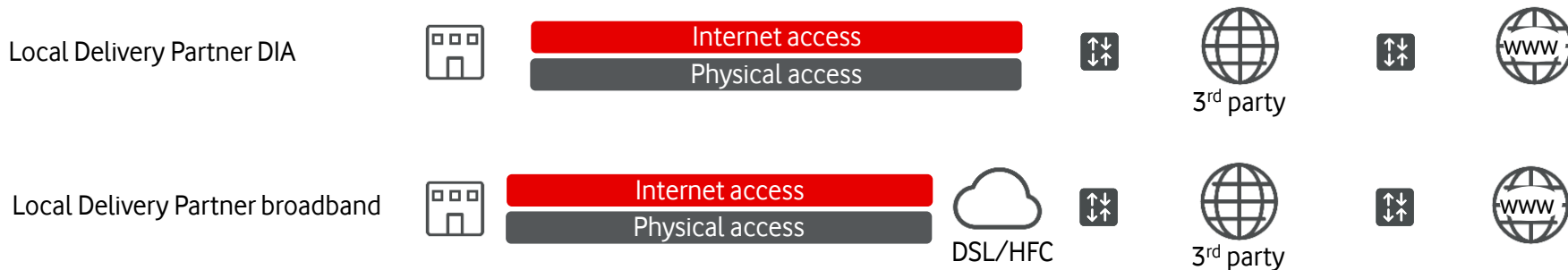- Email and internet proxy filtering

We've improved the design of our core and our interface with Microsoft, so our service now offers even better resilience, high bandwidth connectivity and consistently high performance.

Vodafone Dedicated Internet Access (DIA)

Underpinned by our hyper-connected, wholly-owned, global IP backbone

20%

We carry over 20% of global internet traffic on our networks
That's over 12 Tbps of customer traffic, making us a Top 5 Global ISP

45

We have over 45 Tbps of Private Peering
Covering 200+ ISPs and cloud/content providers. Over 8 Tbps of this is with AWS, Google and Microsoft

30

We have over 100 Points of Presence across 30 countries
Giving us an extensive global footprint

Vodafone IP Transit

Uncontended, unlimited internet access via our hyper-connected, wholly-owned, global IP backbone

- Connect your sites and your teams through a **secure**, **high-performance** private internet connection
- Uses point to point Optical access for very low delay and bandwidths up to 10 or 100 Gbps
- Greater separation between DIA and IP-VPN/Switched Ethernet
- Can be a standalone product or an underlay for **SD-WAN**

CE | Internet access | Physical access | IER | AS1273 | IER | WWW

Benefits		Optional extras
- Fast, reliable internet access	- Premium cloud access	- Managed Firewall
- Excellent service experience	- Global reach	- Email and internet proxy filtering
- Overall best value	- Burstable bandwidth	
- Performance reporting	- Resilience	

We've improved the design of our core and our interface with Microsoft, so our service now offers even better resilience, high bandwidth connectivity and consistently high performance.

Vodafone Business Global Internet

Cost-effective internet access globally from our local operating companies and partners

- A choice of broadband or dedicated Internet access options
- A single point of contact for quoting, ordering, billing and service management
- Consistent service levels, with a tiered global Service Level Agreement

Local Delivery Partner DIA

Internet access

Physical access

3rd party

WWW

Local Delivery Partner broadband

Internet access

Physical access

DSL/HFC

3rd party

WWW

Benefits | **Optional extras**

- Global reach
- Cost-effective broadband options
- Built to support SD-WAN
- Tiered global SLA

- Central service desk
- Single contract
- Central billing
- Fixed IP public IP addresses

- Managed Firewall
- Email and internet proxy filtering

Vodafone Business Global Internet Coverage

Delivering Global Internet in more than >190 countries
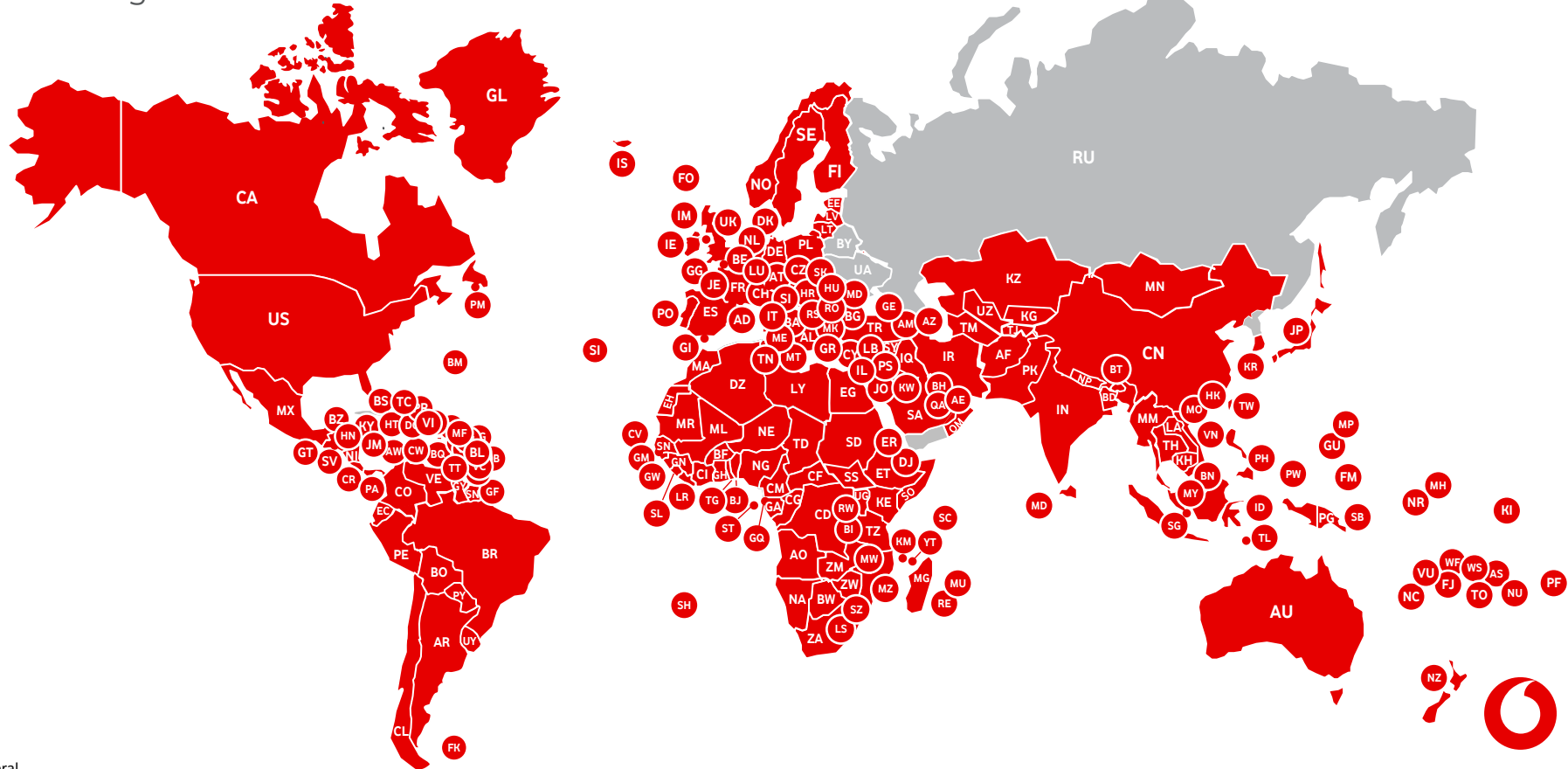
Fixed Wireless Access
Commonly known as FWA

- **A perfect back-up for your Internet**
  When resiliency is essential for your mission critical information

- **The ideal diversity solution**
  When you need to guarantee connectivity

- **A primary circuit**
  If there's no other fixed circuit available

- **A temporary flexible solution**
  Whilst you await the fixed line implementation

- **Fast and unintrusive installation**
  Helps to overcome the cost, obstacles and lead-times of laying physical cables

You can even use FWA ahead of your fixed circuit delivery and then use it as your back up

Hardware
- 2 x SIMs
- 1 x cradlepoint* router

Set up
- Site visit
- Router installation router
- SIMs activation
- Coverage check

Much more than a SIM

Fix faults
- Hardware swap out

In life
- Router and SIMs monitoring
- Troubleshooting
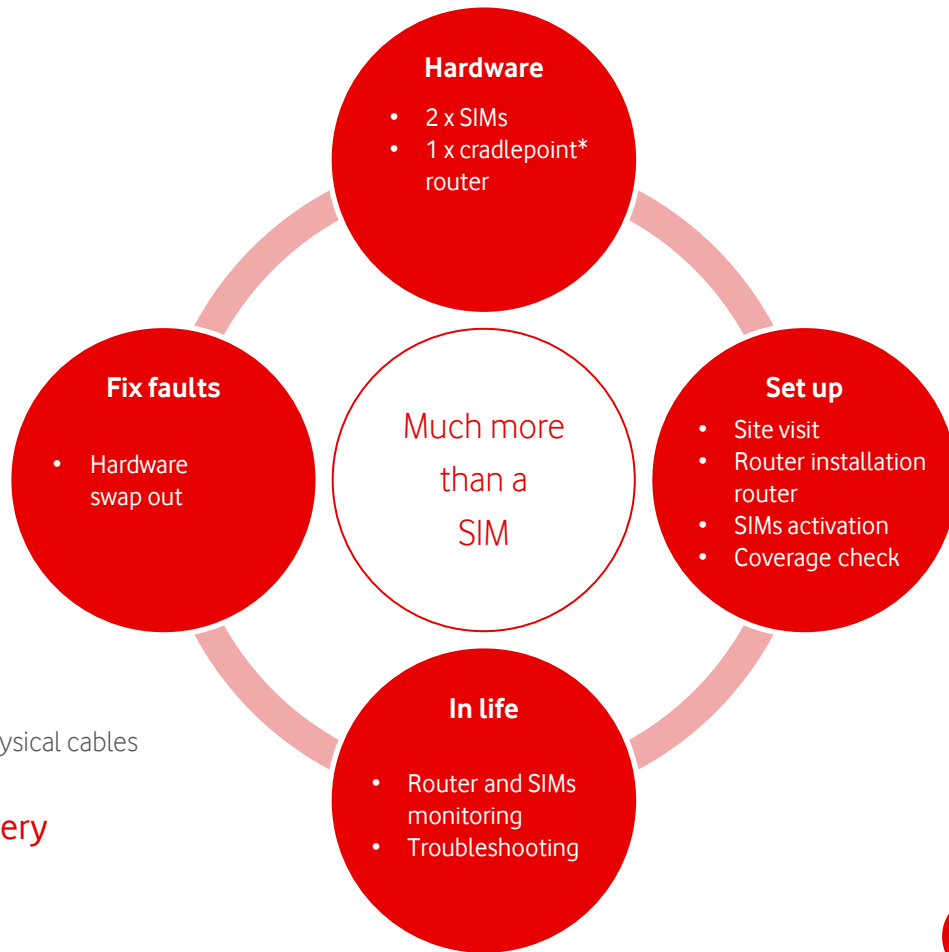
Examples of Fixed Wireless Access delivering value for business

RETAIL

Food & beverage

Operations in over 70 countries, fast-changing retail environment with new store openings, in-store requirements and several pop-up locations. Needed flexible on-demand, non-intrusive connectivity for agility and customer experience

Results: Using 4G access means no wiring issues has eradicated all delays and downtime

OIL & GAS

Energy

MANUFACTURING

FMCG

Examples of Fixed Wireless Access delivering value for business

RETAIL
Food & beverage

OIL & GAS

Energy

With operations in remote offices and vessels, high-speed connectivity for staff was challenging and satellite was often too slow and expensive.

Results: The managed service including equipment data and professional installation including long-range antennas enabled reliable connectivity up to 40km on sea and land. IT budget reduced significantly by replacing satellite links.

MANUFACTURING
FMCG

Examples of Fixed Wireless Access delivering value for business

RETAIL
Food & beverage

OIL & GAS
Energy
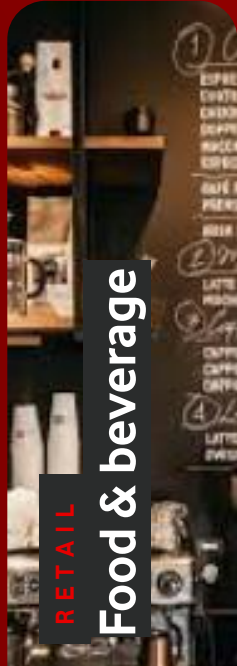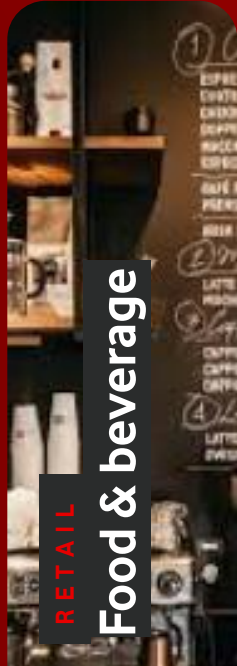
MANUFACTURING

Multinational Food Manufacturer

Operating in 189 countries, with over 447 factories and 1000's of warehouses many in developing countries. 100% uptime was essential for plant and warehouse operations. 2nd wired connections for back-up was expensive and not truly resilient.

Results: 4G connections were installed quickly and at low monthly cost to provide a remotely monitored back-up solution even in remote locations.

Vodafone Enterprise Broadband

A range of residential or commercial broadband packages for large enterprises

- Suitable as a standalone solution for Internet Access (eg. replacing DSL)
- For Vodafone Global customers with UK sites that may include residential and small office sites
- Can provide primary or secondary access to the application layer
- A standalone product or an underlay for **SD-WAN**

Internet access
Physical access

DSL/HFC

AS1273

WWW

Benefits	Optional extras
- Static IP address - Support service - Single account for multiple sites/connections - VCoP Compliance	- Ultra smart router

Feature availability matrix

	DIA	IP Transit	VB Global Internet	VEB
Global network scale	●	●	●	UK only
Single point of ordering	●	●	●	UK sites only
Single contract	●	●	●	UK sites only
Tiered SLA	●	●	●	Standard SLAs
One service wrap covers multiple products	●	●	●	●
Central service desk	●	●	●	●
Usage based billing		●		
Enhanced reporting	●	●		
Managed services	Optional	Optional		

Why Vodafone?

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Making our secure & connected solutions work together

Mobility
- Device Lifecycle Management
- Vodafone Telephony Reporting
- Vodafone Red & Enterprise Bundles
- Enterprise Managed Mobility
- Managed Messaging
- Bring Your Own X

Connectivity
- Mobile private networks
- IP-VPN & Cloud Connect
- Dedicated Ethernet
- Software Defined Networking
- Dedicated Internet Access
- Vodafone Enterprise Broadband
- Network Security & Mobile Data Backup
- Global LAN & Wireless
- SD-WAN

Cloud & Security
- Secure & Connected Cloud Solutions
- Multicloud Platform
- Public & Private Cloud
- Managed Security
- Edge Computing
- Data Analytics & Location Insights
- Mobile Application Development
- Co-Location
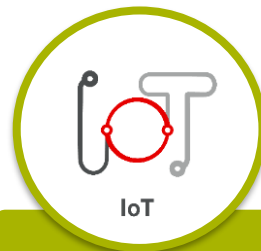
IoT
- IoT Solutions & Devices
- Automotive
- Mobile Asset Tracking
- Building Security
- Management Portal
- Dedicated Global SIMs & Network
- Managed IoT Connectivity
- Application development

Unified Comms
- Vodafone One Net Enterprise - Microsoft
- Vodafone One Net Enterprise – Cisco
- Vodafone Meet Anywhere
- Vodafone Contact Centre
- Global SIP
- Network Mobile Recording

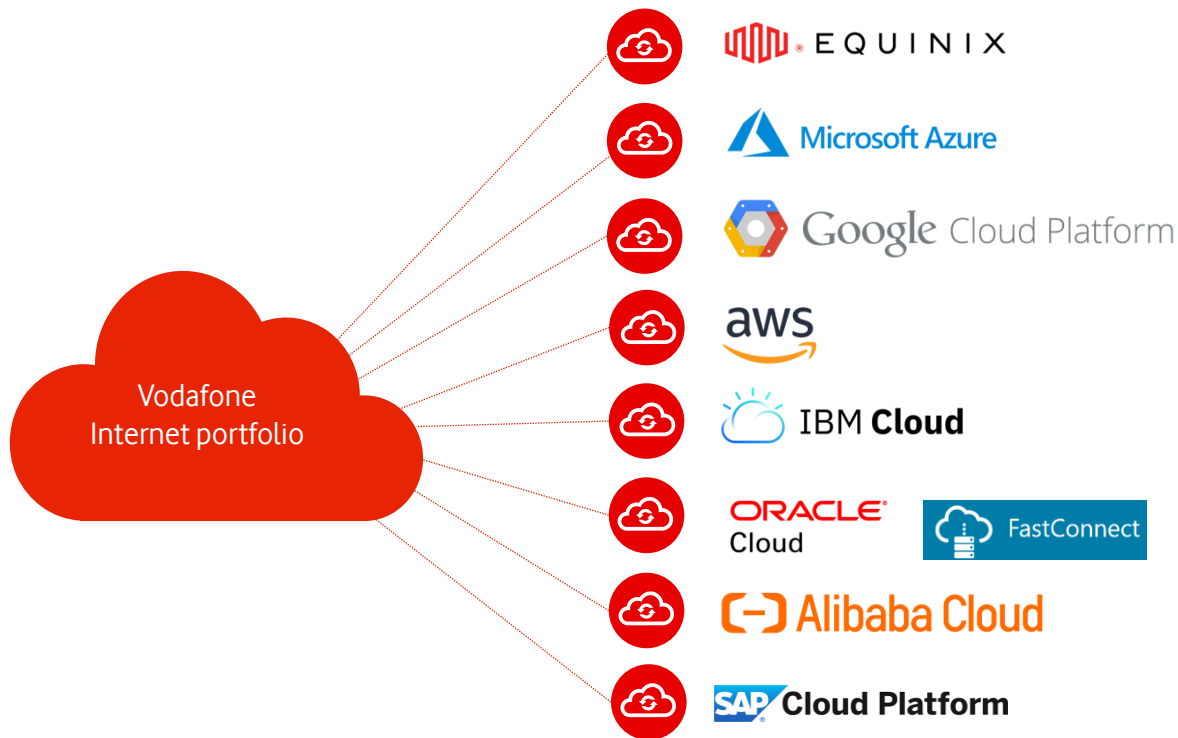## Professional & Managed Services
- Innovation Workshops
- Consulting Services
- Business Impact Assessment
- Network Discovery & SDN Readiness
- Workplace Assessment
- Benefits Realisation Assessment

Carrier Services: Connectivity, Voice & Messaging

...so you can progress and thrive

Our partners

Vodafone Internet portfolio

EQUINIX

Microsoft Azure

Google Cloud Platform

aws
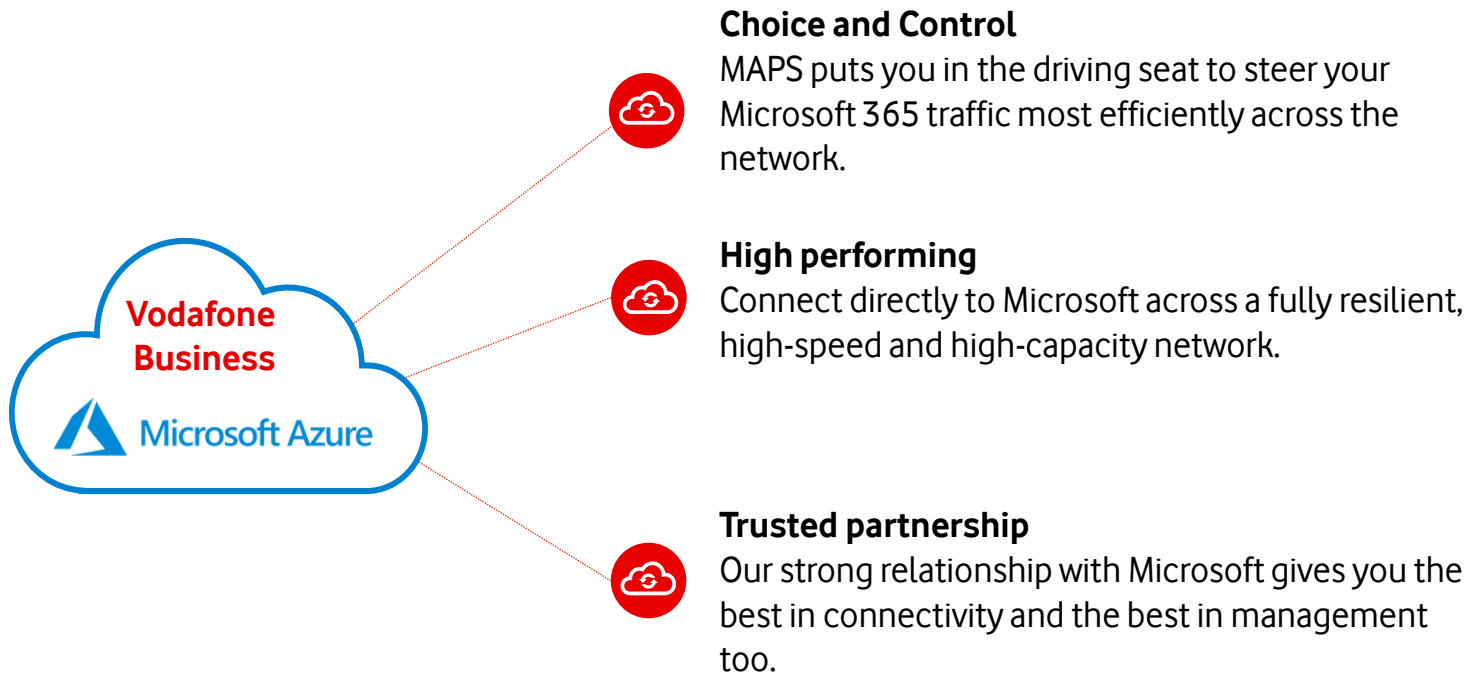
IBM Cloud

ORACLE Cloud

FastConnect

Alibaba Cloud

SAP Cloud Platform

Leveraging our partner relationships we are constantly enhancing our services.
Keep an eye out for innovation announcements coming soon

Vodafone is now Microsoft Azure Peering Services (MAPS) accredited

Vodafone Business

Microsoft Azure

Choice and Control
MAPS puts you in the driving seat to steer your Microsoft 365 traffic most efficiently across the network.

High performing
Connect directly to Microsoft across a fully resilient, high-speed and high-capacity network.

Trusted partnership
Our strong relationship with Microsoft gives you the best in connectivity and the best in management too.

Even more reason to choose Vodafone Business DIA and IP Transit
Existing customers can opt-in now

The Power of our Partnership

30+ Vodafone/Microsoft peering points across Europe and Asia Pac help to improve your Microsoft experience

With our MAPS enabled internet product, all it takes is **1 single hop** for traffic to reach Microsoft.

Just a few of the **1000s** of ISPs in the world have this accreditation

Microsoft Azure

Unrivalled fixed and mobile scale for network services

1m+ Kilometres fibre assets	**74** Country IP-MPLS network	**No.1** International voice carrier	**22k+** WAN customers
26 Country DWDM network	**26** Country PAN Africa network	**TOP 5** Global ISP	**16k+** On-net buildings
80 Cable systems	**1897** Ethernet POPs	**18.5m** Broadband / NGA subs	**>500k** Managed routers
738 Domestic DWDM POPs	**17** Domestic MPLS networks	**13** Countries with 4G WAN access	**524m** Mobile customers

Why Vodafone Business Internet portfolio?

We believe that the network is the backbone to your ambition

Effortless journey to the cloud

Innovate at speed with a network that won't hold you back and lay the foundations for cloud-based applications – including digital productivity solutions such as O365, CRMs such as Salesforce, and Unified Comms platforms

A future proof network

Vodafone constantly develop and build a future-proof, agile network. This requires a rethink of the network foundations combining the public internet and private networks for maximum scalability, security and cost effectiveness

One stop shop

If you want a single circuit or you want your entire global internet connectivity, Vodafone have you covered. In addition to our superior internet coverage, we have an extensive global connectivity portfolio that can be purchased from Vodafone.

Use Cases

5

Use Cases

As trust in the internet grows organisations migrate from traditional IP-VPN to Vodafone SD-WAN over global internet. Those with their own SD-WAN can use Vodafone Global Internet services as the underlay.

When adopting cloud-led technologies, organisations look for solutions with direct internet connectivity for maximum application performance, low latency and high resilience. Vodafone Global Internet services can achieve this.

Managing multiple contracts with different service providers is time consuming. Vodafone can help by bringing them all together under one roof.

Cost efficiency for organisations who expect large fluctuations in bandwidth demand over relatively short periods of time such as during events, conferences, or when using subscription-based services (e.g. live streaming events)

Perfect for organisations who occasionally need more bandwidth than usual but don't want to pay for the top end speed.

MPLS to Internet

Move to Cloud

Multiple contracts

Usage based billing

Burstable bandwidth
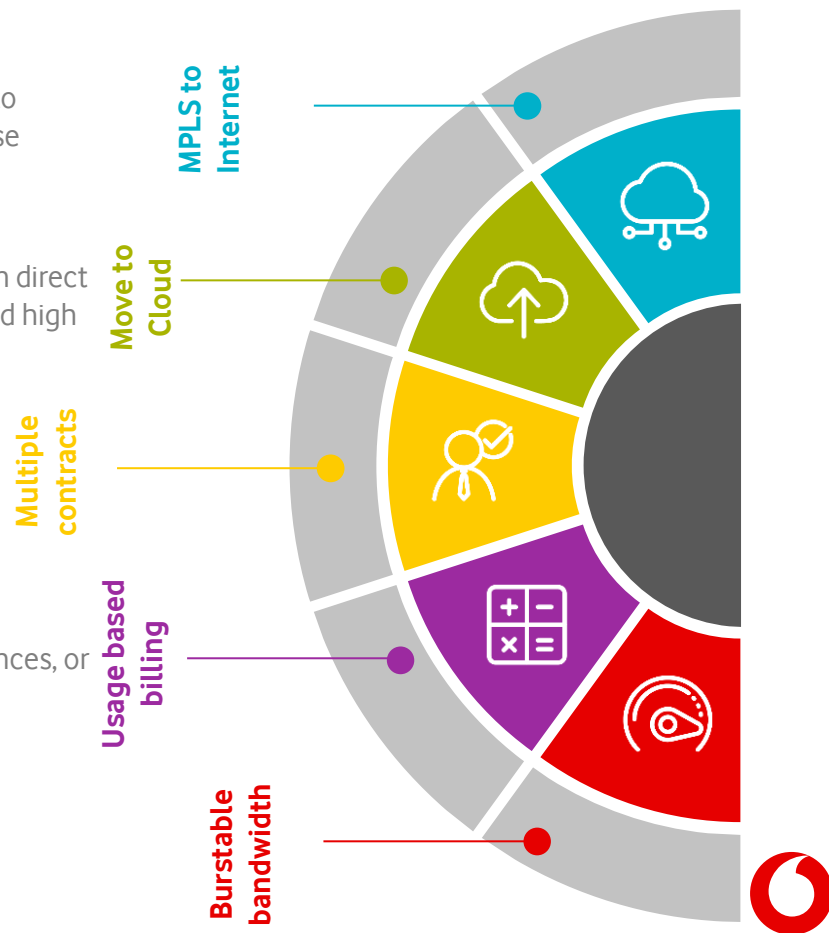
Success Stories

6

Vodafone Business Global Internet | Manufacturing

Our global customer needed global internet access for their Viptela SDWAN rollout across Europe, APAC, MEA and Africa.

Why they chose Vodafone:

- Long-standing relationship
- Low price
- 1 year contract

8 countries   **33+** sites

Impact = Reduced costs

Vodafone Business Global Internet | HR Services company

Our global customer needed consumer grade internet for multi-country sites across Europe.
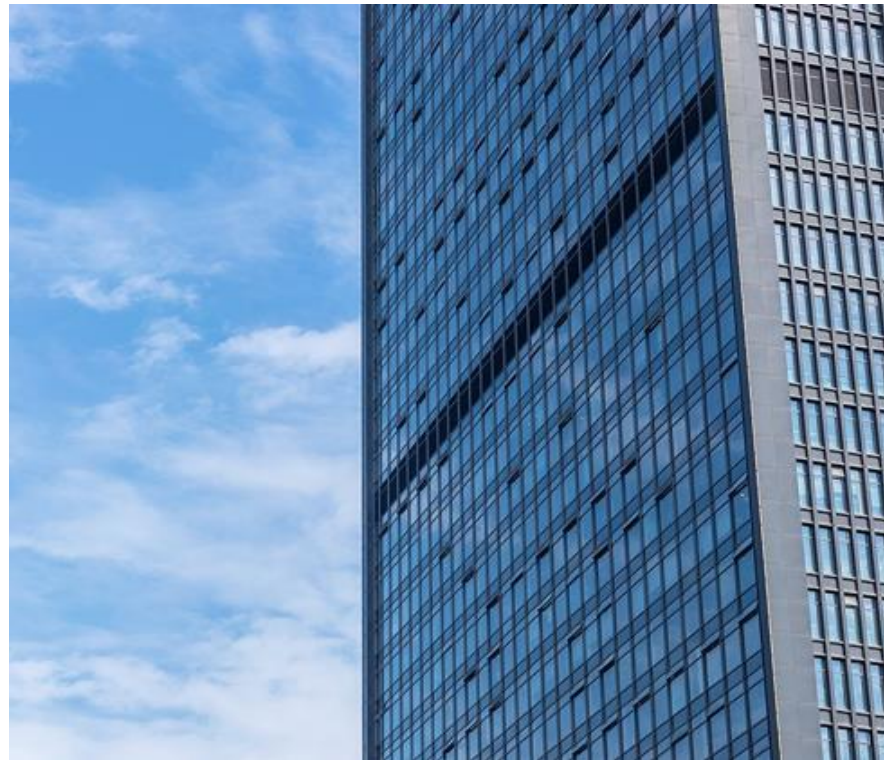
Why they chose Vodafone:

- Already a fixed and mobile customer
- Long-standing relationship
- Low internet resell prices
- Ability to a managing the total fixed estate in the future
- 3 year contract

4 countries　　　　**100+** sites

Impact = Improving efficiencies through consolidation

Vodafone Internet | Online Game Provider

The customer needed reliable connectivity for instant data uploads and online broadcasts.

- Vodafone's internet solution has provided a fast and reliable internet connection that scales when more bandwidth is required
- "We are especially grateful for the rapid installation of the new service as we are producing shows everyday, the transition had to be really quick."

1 country   **1** site

Impact = Improved scalability

vodafone
business

Together we can