

How Virgin Media Business Wholesale is expanding the network

Contents





Chapter 1: Our network

Our fibre-optic network has always been our crown jewel and now that we've joined forces with O2 we have the capacity to do even more amazing things for our partners. Here's what our network looks like today. And just imagine where it could take us tomorrow.





47 million UK connections across broadband, mobile, TV and home phone



Our fixed network passes

15.5 million homes
and businesses



We have re-surfaced **3,300,000 square metres** of footpaths and roads



We own in excess of 190,000 km of fibre network



35% of the UK's broadband traffic is carried by the Virgin network



40.9 million

Customers are served across Virgin Media and O2 (combined)



260 London Underground stations are equipped with our Wi-Fi – connecting nearly 5m daily passenger journeys



286 Tbps of capacity are delivered across all layers of the network



Connecting the nation

We take pride in satisfying the UK's hunger for faster, reliable connectivity – and as of 2021 the majority of all UK Businesses can access our network.

Unlike many other ISPs I have worked with, Virgin remains engaged with their customers and makes themselves available to assist with any request or situation.

CGI IT UK Ltd

Extending our reach

We provide 84% of our Ethernet services entirely on our own network.

And our network reach covers:

- 38.000 Telco street cabinets
- 170+ data centres
- 336 Virgin exclusive PoPs
- Up to 70km from your location to your nearest PoP

But we're not done yet. With businesses looking to reap the benefits of Covid-era digital change, and data volumes showing no signs of slowing, our goal is to become the UK's best-in-class supplier of network connectivity. We want to create better connections for our customers and help to supercharge the UK.

So what's next?



Chapter 2:

Building business with better connections

Triumph follows adversity – or so the saying goes. For UK businesses, it seems to hold true, with Covid-driven digital change now supporting new innovations and opportunities.

There's now a £232bn opportunity up for grabs according to the Centre for Economics and Business Research (Cebr), who estimate that Covid-driven digital change will boost the UK economy by 6.9% in the next 20 years.

Flexible working technology, digital service delivery and larger, richer data sets are all prime areas for investment to deliver maximum impact. And now that digital transformation and new technologies are on the agenda for many organisations, building strong connections is more crucial than ever before.

What does Virgin Media Business Wholesale bring to the table?

In a nutshell, we work with partners and network operators to create connections that really matter. Through our infrastructure we build bridges between organisations to drive economic growth and bring emerging technologies to our everyday lives.

Who are our partners?

- Network aggregators combine our services with similar offerings from other providers.
- Resellers and partners bundle our services to offer complete customer connectivity.
- Mobile operators hop onto our network to build and roll out new services like 5G.
- Systems integrators merge our products to create complete solutions.

Not to mention, broadcasters, colocation, data centres, and content and media companies. It's one big diverse family.



Chapter 3:

Our journey to becoming a network of all networks

From a Spark all the way through to Lightning, we're making changes across our network to put our customers - and their customers - at the heart of everything we do.

As the UK's #1 best-in-class supplier of network connectivity we'll be able to achieve:

- faster delivery times for critical services for customers and partners
- faster upgrades to continue to meet your customer demands
- all at lower costs.

It's an audacious goal. But we're innovating, streamlining and investing to make it happen.

Here's how.





Chapter 3.1:

Connecting millions more homes

Since 2015, Virgin Media has connected 2.5 million additional homes to its network through Project Lightning.

- 80,000 premises were added in Q2 2021, during the Covid lockdown
- 15.5 million premises in total are now connected
- The average speed across our UK broadband base has increased again to 186Mbps (up from 174Mbps in Q4 2020)
- Data consumption has increased 40% YoY
- There's been a 163% YoY increase in graduate, intern and apprenticeship roles to support the network expansion.

Better together: Virgin Media Business and O2

Now, we're investing in the UK's internet infrastructure to expand our footprint, bringing us closer to end customers, wherever they are. Partnering with O2 (Telefonica) will light the fuse on a major £10bn project to extend "full fibre" FTTP and 5G mobile services, delivering ultrafast speeds to more residents and small businesses across the UK.

It's our biggest investment in over a decade. What will it mean for business?

Virgin Media O2 will be the largest gigabit speed provider in the UK

We'll will have completely upgraded our HFX network with FTTP by the end of 2028





Chapter 3.2:

Project Spark: transforming our 10Gbps portfolio

As part of our quest to find out what our customers - and their customers - need from our network transformation, we spoke to many of you to find out how the pandemic had affected your businesses. Our findings were illuminating.

- 67% of end customers felt their current infrastructure has hindered their ability to respond to Covid-19
- 98% of IT managers surveyed said that current networks are limiting their organisation's capacity to harness emerging technologies
- Almost 1 in 7 end customers believe network infrastructures are preventing them from harnessing the power of emerging technologies
- 51% of senior IT managers said that increased network speed was their top infrastructure need

We listened. And we're evolving our high-bandwidth national ethernet and high capacity services to meet those needs.



Our improved 10Gbps portfolio now offers:

Revised pricing

With new and even better price points on granular bandwidths over 10Gbps NE access circuits. These new prices are locked into our internal pricing systems to deliver quotes faster. EAD-LA-regulated competitors can't beat our on-net cost base - Data-centre cabling now included in the price.

• National Footprint

We can deliver high bandwidth NE across all our PoPs, that's all of our network covered

Scalability

Our services now scale from 1Gbps to full 10Gbps bandwidth, so you can futureproof solutions with your end customers

Resilience

The unique resilience offered by Virgin's national network now extends to full 10Gbps National Ethernet



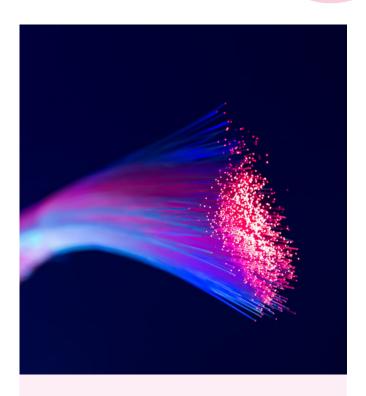
Chapter 3.3:

Meeting demand with Dark Fibre

As digital investment from Covid-driven change increases, infrastructure will be pushed into the Cloud. Data is being transported in new ways, increasing the demand for new fibre routes to support physical and virtual infrastructure. More subsea and terrestrial cables and more effective networking is required to handle growing data demands.

Our partners face unique challenges:

- A need for total network resilience we offer multiple routes for total redundancy and network resilience
- An increasingly complex landscape With more data centres being built out, and dedicated data centre environments emerging, choice and options are widening. There is now potential for much greater autonomy and control of the complete infrastructure.
- A demand for multiple, smaller 'Edge' data centres - driven by Multi-Access Network Computing which needs an extended network.
- The need for a supplier that can meet demands we offer commercial agility. First time, every time, and to scale.



Providing solutions with the largest Dark Fibre network

The unlit, unmanaged optical fibre paths of Dark Fibre allow our partners to deploy their own electronics and control their network from end to end. They benefit from greater security, and an almost unlimited capacity for expansion and scalability.

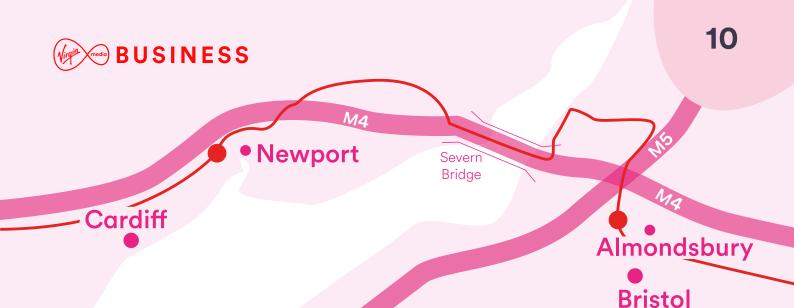




Virgin Media Business Wholesale's **Dark Fibre network offers:**

- The UK's widest reach
- Security beyond question
 Faster service delivery
- Choice and flexibility
- A quality network
- Network resilience

Our specialist expertise in unmanaged connectivity helps our partners maintain maximum control.



Chapter 4: Bridging the gap: upgrading our Severn Bridge network

When it comes to supporting our customers, we don't just stop at Dark Fibre. We're the only operator offering coverage across the Severn Bridge, providing vital connections between England and South Wales for our partners.

Capacity bottlenecks have impacted business for a number of years, and it's clear there is insufficient capacity to support our customers' needs for future projects.

So we're taking action.

We're upgrading our cable on the Severn Bridge to new specification fibre with a high fibre count, creating diversity and resilient route options that add vital capacity to support our partners on either side of the estuary. We'll connect subsea landing stations to the M4 corridor and central data centres. And we're proactively pre-building the route to support an increase in demand and ensure shorter delivery times for our customers' projects.

The new route will be ready to create new connections by January 2022.

Why not get in touch today, just email: expansionenquiries@virginmedia.co.uk



Chapter 5:

A connected future, thanks to an expanded network

From multi-million-pound investments to groundbreaking partnerships, and innovative pricing to improved cross-border capacity, we are rethinking our network to better serve our customers.

Our network expansion plans will build bigger, better connections for our partners and customers. So they can make connections that matter with their customers in turn. Stay tuned to see what the UK's network of all networks can deliver in 2021 and beyond.

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