Virgin Media BUSINESS

Scaling a network?

Get all the support you need. Straight from the source.

Backhaul services

Dedicated to your growth
— PROUD TO BE YOUR PARTNER —

Your network.
On a whole new level.

If your business depends on transferring huge amounts of critical data, you'll need a fixed fibre network you can depend on. One with a high capacity network that links to most businesses in the UK. Low latency so that you can build up market-leading services. And a range of options for how you route and protect the service as you grow.

But you'll probably need a whole lot more too.

Like what?

Like a single connectivity provider that can cover all your needs – from unmanaged Dark Fibre to managed Optical and Ethernet services. Or a partner that enables you to finance your connectivity requirements in a way that suits you. Or a team that gets what you're trying to do, is proven to be able to manage complex rollouts on time and wants to work alongside you to achieve your goals.

If this is true for you, then we'd love to talk to you about how our **backhaul services** can help you use your network to take your business to the next level.
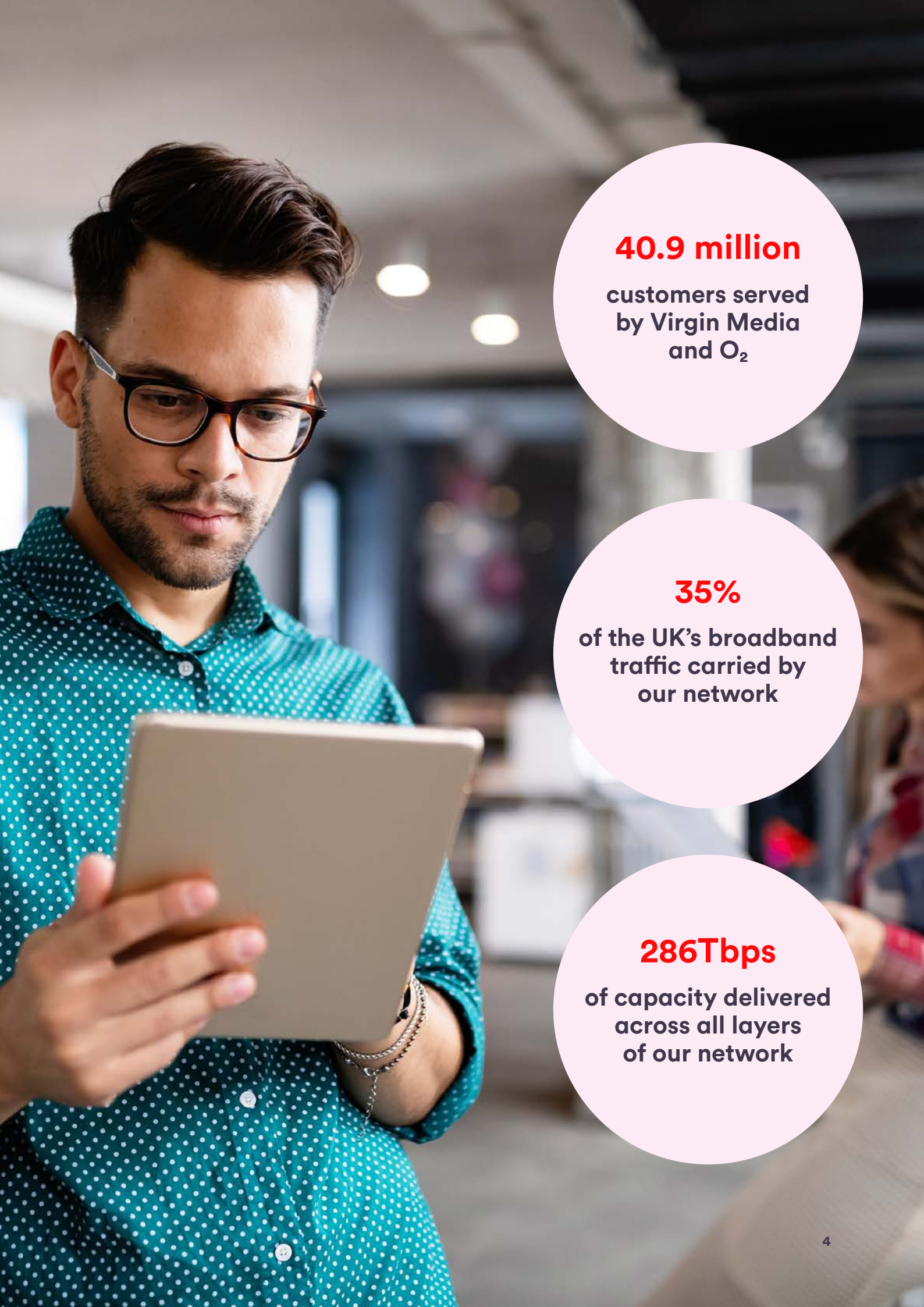
Who are they for?

Altnets. Data Centre Operators. Hyperscalers. Cloud service providers. Resellers. Mobile Network Operators (MNOs). System integrators. Broadcasters. They all choose to work with us to deliver their connectivity services. We work with most UK operators too. So you'll have almost certainly relied on our backhaul services in your personal or professional life without even noticing.

Why us?

Whether you're building out your own network or creating high bandwidth solutions for your customers, with Virgin Media Business Wholesale you get all the support you need – straight from the source. This is because we have the second largest fibre network in the UK and because we make it easy to work together too.

What makes us different is that we can give you the network access you really need right across the country. On commercial terms that suit your business model. All supported by expert design, engineering and project management teams at your disposal whenever you need them.

40.9 million

customers served
by Virgin Media
and O$_2$

35%

of the UK's broadband
traffic carried by
our network

286Tbps

of capacity delivered
across all layers
of our network

Let's do things differently

No two network requirements are ever the same.

You might be an Altnet looking to aggregate an FTTP network. A hyperscaler looking to host information closer to the edge. Or a reseller looking to offer connectivity as a key service for customers.

Whatever your business, your connectivity provider should be flexible enough to accommodate your specific need. Whether that's network typology, low latency, diverse routing or lowest overall costs.

At Virgin Media Business Wholesale, we're one of only two providers that can offer direct access to backhaul services across the UK. But instead of treating partners as just another transaction, we genuinely care about your objectives.

It's this willingness to proactively work with you that sets us apart.

We're a customer-first organisation that brings a range of connectivity services together in one place with a clear mission: to upgrade the UK. We take pride in satisfying the country's hunger for faster, more reliable connectivity – bringing together next-generation gigabit broadband and 5G services while expanding our network reach across the country.

This includes delivering gigabit broadband speeds across our entire network and upgrading our fixed network to full fibre to the premises (FTTP) by 2028.

Just as importantly, we're committed to personal, transparent relationships and finding financial arrangements that work for everyone.

So you get the connectivity, commercial terms, and collaborative provider your business deserves as you scale.

£10 billion
investment in our
national network

What these differences mean for you

Fibre connectivity covering the UK

- Through our multi-million-pound investment in core network capabilities, we can provide you with both **national availability** as well as **local density**

- With Project Spark, we're evolving our portfolio to offer you not only an expanding national footprint but also **revised pricing, more scalability and greater resilience**

- Our broad set of fibre connectivity options is **designed to address specific use cases**, with a range of options that give you much greater flexibility

Flexible commercial terms

- We always look to find **commercial terms that work for your business** to give you the connectivity you need – even if that puts us in uncharted territory

- Whether your priority is **Capex, Opex, cashflow or something else**, we can provide the financial arrangements to match your business preferences

- Our full-service delivery support also provides the **expertise and guidance** to help you deliver your strategic business goals

Focus on strong relationships

- Throughout onboarding, build and engagement, we constantly speak to, listen, and learn from our partners and **act on feedback** to design or redesign our services

- Our consultative pre-sales teams **explore route options** using our automated Smart Planning Tool and design intelligent solutions to connect your customers and enable you to scale faster

- Our **specialist engineers already in place** across the UK will support you with works and quickly fix any connection issues

It's not about us

Connectivity is only ever part of the story.

Your business goals should be the most important consideration when designing your service.

That's why we take the time to understand precisely what you need.

Perhaps you need dedicated wavelengths to remove any risk of data loss during high traffic periods. Or you need to move huge amounts of critical data between your own sites to conduct specific analytics tasks. Maybe you need low latency connectivity closer to the edge and closer to your end users. Or you want to improve reliability and ensure maximum availability by sending data via different routes in case of interruption.

You could simply be creating a core network on which to scale up your own connectivity services.

Whatever your requirements, we've got you covered through backhaul services that can meet local or national, standard or bespoke, point-to-point or point-to-multipoint requirements.

So with our **Dark Fibre, High Capacity Services** or **Ethernet**, you can quickly establish the connectivity that makes sense for your business case.

How we can help you

Altnet?
As you expand your network and roll out fibre to the premises (FTTP), our backhaul services will help you quickly reach new areas – without delays or the costs of building your own core network

Data centre operator?
Whether you need huge bandwidth and redundancy or simply want to offer your customers a choice of providers, we have the high capacity, low latency, and lightning-fast connectivity you need

Hyperscaler or cloud platform?
If you have an ongoing need to push services closer to end users then you'll need access to the kind of high-speed, unencumbered, intelligent, and low-cost connectivity we offer across the UK
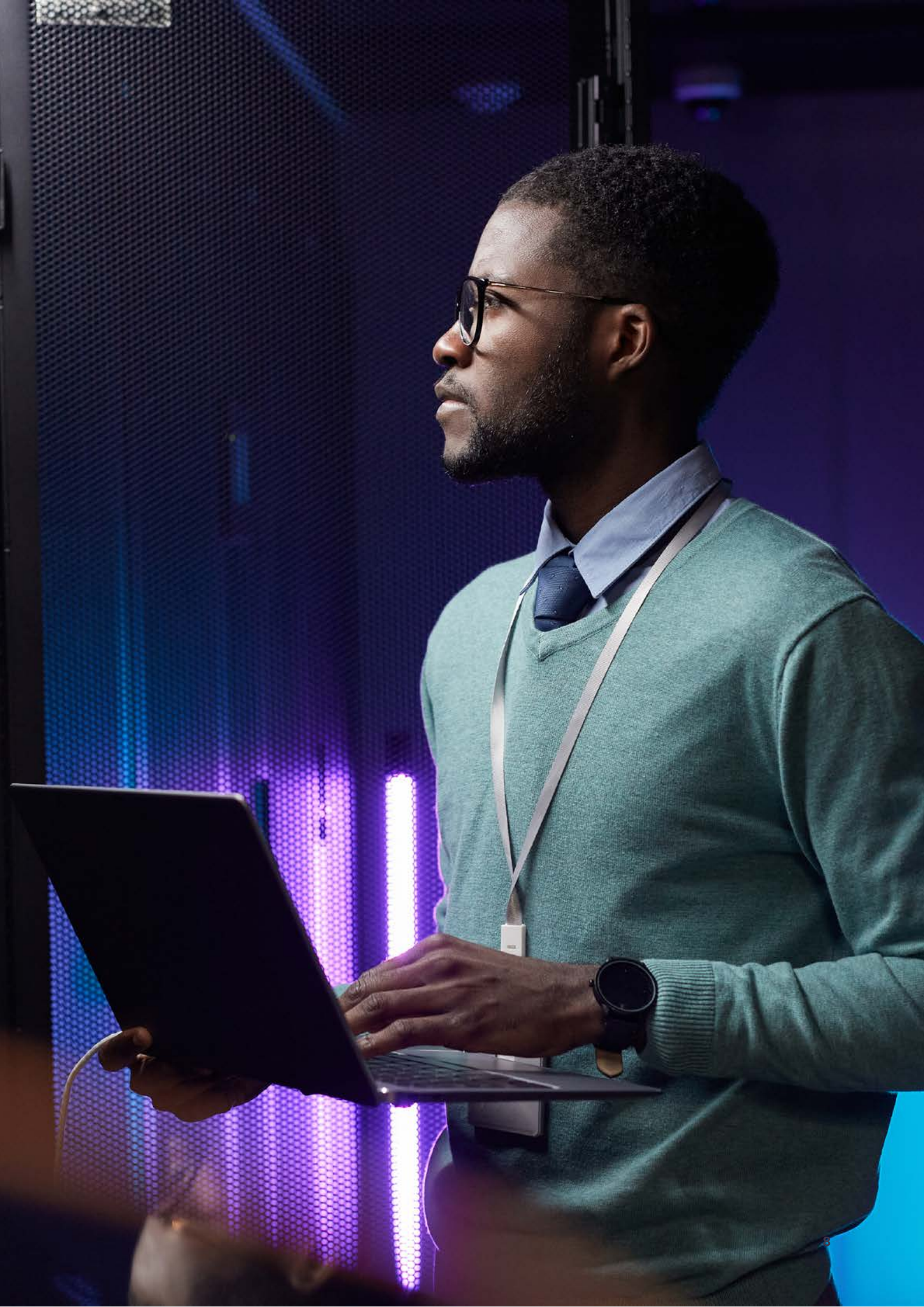
MNO?
While you're building and rolling out new services like 5G, you can hop onto our core network to maintain connectivity via local access fibre, regional aggregation and national backhaul services

Connectivity reseller?
By bundling connectivity with other services, you can use our fibre network to guarantee resilience, redundancy and scalability from 1Gbps to 10Gbps to 100Gbps while supporting future client use cases

Systems integrator?
When you're integrating connectivity with other tech to create a complete client solution, you can rely on us for core network access and the unmanaged services that will improve your margins

Dark Fibre

Take full control of your network from end to end with our unmanaged service.

What is it?

Dark Fibre is an optical fibre path between two sites that is unlit and unmanaged. You choose which electronics you want to use to light up the fibre and keep full control of the network end-to-end – from service protocols to bandwidth.

All of which means you benefit from greater security and an almost unlimited capacity for expansion and scalability.

Why us?

Our Dark Fibre network offers:

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

With our specialist expertise in unmanaged connectivity, we can help you maintain **maximum control of your network**.

We use existing fibre within our 190,000+ km network to plan and deliver network routes across the UK. Each fibre is **100% dedicated to your use**, which means it's completely secure.

It's also a great way to control your costs (particularly when scaling a network over time) because you own the end-to-end management and maintenance of the product.

Plus we've got **multiple commercial options** available – from the more traditional annual rental charges (operating lease) to sales-type leases with payments made earlier in the lifespan of the agreement.

The technical bit

Product	Dark Fibre
Configuration	Dedicated fibre; point-to-point
Coverage	National availability, on-net only; long spans of fibre can be very expensive
Max Bandwidth	Virtually limitless, determined by the equipment
Scalability	Characteristics all depend upon the equipment and configuration used by the customer to terminate the fibre
Service types	
Performance	
Security	Dedicated fibre, physical separation from other networks

High Capacity Services (HCS)

Choose between our lightning-fast, low latency services to match your data demands.

What is it?

High Capacity Services (HCS) offer you fully managed, optical connectivity via circuits that follow a fixed path between two locations. This helps ensure you get the lowest latency connections while maintaining the same level of performance.

Even better, you can choose which HCS works best for your business case.

Dedicated HCS

Dedicated HCS is a Layer 1 service that uses Wavelength Division Multiplexing (WDM) technology to connect sites within 100km of each other via dedicated fibre.

Flexi Filter is a further option that gives you a single managed wavelength service over the first port as well as the option to attach optical equipment directly to spare filter ports.

National HCS

National HCS uses our UK network to provide connectivity with no distance limitations. All options are delivered over optical platforms, so bandwidth is guaranteed, and links follow a fixed path to ensure ultra-low latency.

Typically, National HCS is delivered using switched Ethernet technology. But if you need greater transparency, our Layer 1 **National Wavelength Service** is also an option.

Why us?

We have an extensive national network and access to many of the UK's leading data centres and cloud hosting facilities. So, we're ready to connect your business whenever you are.

Our National HCS enable you to **transfer huge volumes of data securely** and at lightning-fast speeds, with extensive fibre-optic bandwidths in multiples of 100Gbps already covering most of the UK.

If you need near **instantaneous data transfers** to support remote working, cloud applications or 5G, IoT and AI then our range of High Capacity Services will give you the connectivity you need.

With Flexi Filter for Dedicated HCS, you can tap into spare filters, light up additional services yourself and scale your network when your business needs to at **no extra cost**.

The technical bit

Product	Dedicated HCS	National HCS
Configuration	Dedicated fibre based; non-switched point-to-point service	Optical network based; Deterministic; non-switched point-to-point service
Coverage	National availability, local access <100km, on-net only	National availability, national reach, on and off-net
Max Bandwidth	100Gbps	100Gbps
Scalability	Multiple system sizes, add new services quickly and cheaply MTU 10,248	Multiple system sizes supporting multiple bandwidths MTU 10,248
Service types	Multiple	Multiple
Performance	Sub-3ms one way latency SLA Deterministic	Sub 5ms one way latency SLA Deterministic
Security	ISO27001, Dedicated Fibre	ISO27001

Ethernet

Create the point-to-point network you require – whatever, wherever and however you want to connect.

What is it?
Our Ethernet services offer your business access to a series of Layer 2 point-to-point connections. These can be provided over short-distance, dedicated fibre links (Ethernet Extensions). Or by tunnelling your data across the Virgin Media O₂ network to connect sites nationally (National Ethernet).

Ethernet Extensions
Ethernet Extensions are point-to-point, fibre-based Ethernet transport that can connect your sites up to 35km apart.

Transmission between the sites is undertaken optically over a pair of fibres connected directly between the Network Terminating Units so no intermediate devices or sites are involved. This provides the best possible performance for delay (latency), delay variation (jitter) and frame loss.

National Ethernet
National Ethernet provides point-to-point and point-to-multipoint Ethernet connections with no distance restrictions. Our National Ethernet circuits will aggregate connectivity between end user sites and your own network hubs using interconnects.

As a fibre-based Layer 2 Ethernet service, it offers you a quality, dependable and low-cost option for overlaying IP-based services such as internet, VPN, cloud connectivity or unified comms.

Why us?

Whatever, wherever and however you want to connect, our Ethernet respects your choice of routers, protocols, locations, bandwidth, and distance.

Handling **multi-site connectivity is simple**. You can create rings, a mesh or hub-and-spoke designs using National Ethernet. Then enjoy **flexible bandwidth in any corner of the UK** with access to our own fibre network or through a choice of partners.

Need resilience? We offer many options including geographically diverse access tails either directly or by combining our services with other carriers. We can also offer shadow VLANs to an **alternative interconnect of your choice** on our National Ethernet services.

While we're on-site installing your National Ethernet solution, we can also install a second piece of equipment such as a router. If you chose a **managed router install**, we can supply and/or install the router for your backup circuit at the same time. And these options are available at both ends of the National Ethernet circuit.

For **high performance metro connectivity at the right price**, you can depend on **Ethernet Extensions**. With 100Mb, 1Gb and 10Gb options, this dedicated Virgin Media fibre link supports jumbo frames with less than 2ms latency. So, your data transactions and transfers become **faster and more reliable without breaking the bank**.

The technical bit

Product	Ethernet Extension	National Ethernet
Configuration	Dedicated fibre; point-to-point (or multiples thereof): hub and spoke	Ethernet over MPLS- point-to-point (or multiples thereof): hub and spoke
Coverage	National availability, local access <35km, on-net only	National availability, national reach, on and off-net
Max Bandwidth	10Gbps	100Gbps
Scalability	Bandwidth same as bearer size MTU 9212	Fractional bandwidth increments up to bearer size MTU 2036
Service types	Ethernet only	Multiple
Performance	Sub 1ms one way latency SLA Deterministic	15ms one way latency SLA
Security	ISO27001, Dedicated Fibre	ISO27001

Partner with the pioneers of UK-wide fibre connectivity

The jewel in our crown has always been our national fibre-optic network. And we continue investing to make it faster, ultra-reliable and more accessible than ever.

In total, we now have more than 15.5 million UK premises connected and we're not slowing down any time soon. Through Project Spark, the Virgin Media Wholesale 10Gbps portfolio will be transformed thanks to a multi-million-pound investment in our core network capabilities and digital services.

At the heart of everything we're doing is improving architecture across our national network. Our 10Gbps portfolio will be available in even more locations and will enable automation and operational improvements. A new, lower-cost base offering more commercial flexibility will be a feature of the 10Gbps portfolio going forward.

Now that we've joined forces with O₂, we have the capacity to do even more amazing things for our partners. We're investing to connect more of the UK's digital infrastructure – from cabinets to data centres – bringing us closer to your end customers.

Partnering with O₂ also lit the fuse on a five-year, £10 billion investment to extend 'full fibre' FTTP and 5G mobile services – delivering ultrafast speeds to more premises across the UK.

These are generational investments in our network which will benefit all of our customers and partners for many years to come.

Meanwhile, our joint venture with InfraVia will provide additional connectivity to up to seven million more homes and extend our fibre network for backhaul and other business services.

38,000
telco street cabinets

1,370+
BT Exchanges

190,000+ km
of fibre across the UK

336
Virgin Media
O_2 PoPs
covering most
UK businesses

160+
connected
data centres

3.3 million m²
of footpaths and roads
resurfaced by our teams

Let's talk

Before we can build the right network service for you, we need to know a little bit more about your business needs.

To find out more about our different backhaul services, get in touch with your account manager or visit our website. And if you're already interested in becoming a partner, you can register quickly here.

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BUSINESS

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