

## Platform for progress:

shaping the future of the UK's digital infrastructure



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## Foreword

With over a full year of operation now, in addition to celebrating our significant achievements as a team, we are also taking a critical look at what is needed to unlock the potential of full fibre which can transform the UK's economy and society.

In today's world, full-fibre broadband isn't a luxury, it's a fundamental necessity for a thriving digital economy. Yet the UK, despite its rapidly expanding digital ambitions, still lags behind Europe in fibre coverage.

This is why nexfibre's mission is so important. We are building the fibre access platform the UK needs and deserves. We are not just providing high-quality fibre access to millions of households, but also shaping the market itself by fostering greater sustainable competition and innovation.

We are uniquely positioned to create this competitive network platform for the industry. As a wholesale-only connectivity provider, we focus solely on building and maintaining a national-scale fibre platform for all. With our focused strategy and £4.5 billion in funding from leading investors, including InfraVia Capital Partners, Liberty Global, and Telefónica, we are ambitiously aiming to reach 5 million premises by 2026, allowing us to make a big impact at pace.

Furthermore, our partnership with Virgin Media O2, one of the UK's largest networks and retail providers, offers significant scale and expertise in network build. Leveraging their established presence also offers us a substantial foundation to onboard additional Internet Service Providers (ISPs) and extend our network to more consumers. Offering our combined fibre footprints on a wholesale basis which will amount to over 21 million homes, will drive our ambition to become a true national-scale competitor to Openreach.

From these strong foundations, we have made impressive progress, having already passed **one million premises in April 2024.** 

Looking ahead, the second half of 2024 will see even greater growth and progress. We will ramp up our rollout across the UK and solidify our market presence. We will also work with policymakers and regulators to create the best environment for the UK's digital infrastructure economy, as part of the Telecoms Access Review 2026-2031 (TAR).

We are advocating for the following to safeguard the UK's digital future.

- First, we need a stable regulatory environment which continues to attract the much-needed investment in our digital infrastructure.
- · Second, we require a regulatory framework which ensures a consistent and equitable regulatory playing field for all.
- Third, we need a market characterised by **sustainable competition** rather than fragmented sub-scale operators.

With the right focus on these crucial areas, I believe we can empower more people and businesses to participate in the digital revolution and contribute to a more prosperous and connected country.

The market is changing rapidly, and we've learned valuable lessons through its evolution. That's why, in 2024, alongside our near-term goals around building our network and connecting premises, we are also actively looking to shape the future of the UK's digital infrastructure.

We invite you to join us in transforming the future of connectivity for the UK in 2024 and beyond by participating in this critical conversation.



Rajiv Datta,
Chief Executive Officer,
nexfibre

## The state of the market



## Outdated infrastructure is holding back the UK

The UK's broadband landscape is changing rapidly and today, access to connectivity is a basic essential in modern day life. However, a booming digital economy requires more than the basics; it requires access to higher speeds, greater resilience and better quality. Despite this, critical investment into the UK's digital infrastructure has historically been neglected. This has translated into slow internet, limited digital capabilities, and ultimately, it has hindered the UK's economy, fairness in society, and global standing.

A landmark report by McKinsey¹ found that while declining productivity has impacted many advanced economies since the mid-2000s, the UK stood out as one of the worst performers among its peers. Moreover, in the aftermath of the financial crisis, the United Kingdom recorded one of the lowest productivity-growth rates and the steepest declines in productivity growth, falling by 90%.

<sup>1.</sup> Solving the UK Productivity Puzzle in the Digital Age (McKinsey, 2018)

Since these warnings, UK productivity has stalled. In Q4 2023, it was estimated to be 0.3% lower compared with a year previously<sup>2</sup>. McKinsey's report identified uneven digitisation as a critical factor holding the UK back. This is echoed by the UK Government, which has noted that the UK's economic future, jobs, cost of living, productivity and ability to compete globally are all reliant on the successful adoption of digital technologies<sup>3</sup>. Another study has estimated that doubling broadband speed will contribute to 0.3% GDP growth, largely from productivity gains<sup>4</sup>.

## Playing catch-up

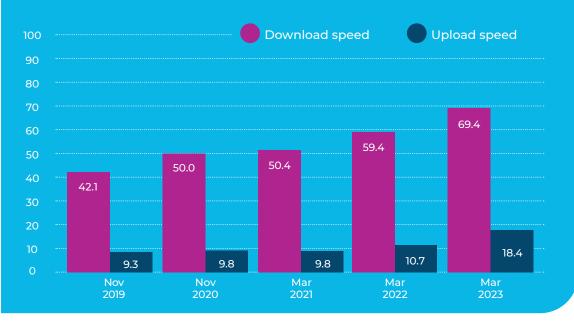
To help tackle the UK's productivity crisis, boost the economy and ensure we can take advantage of technologies of the future, both the pace of full fibre roll-out, and the quality and speed of the broadband available thereafter, need to be addressed.

Openreach's monopolistic position in the wholesale infrastructure market resulted in historically low investment and lagging progress<sup>6</sup>. This delay left the UK playing catch-up with its European counterparts.

## The UK's broadband speeds are growing, but need to keep up with exploding demand.

The median average download speed of UK home broadband connections was 69.4 Mbit/s in March 2023, a 17% increase year-on-year<sup>5</sup>. As future technologies from Al to immersive and cloud gaming become the norm, the UK's demand for data will also ramp-up.

### Median average download and upload speeds (Mbit/s)



<sup>2.</sup> Productivity: Key Economic Indicators (House of Commons Library, 2024)

<sup>3.</sup> UK Digital Strategy (Department for Culture, Media and Sport, 2022)

<sup>4.</sup> Does broadband speed really matter for driving economic growth? Investigating OECD countries (IK Rohman, 2012)

<sup>5.</sup> UK home broadband performance 2023 (Ofcom, 2023)

<sup>6.</sup> Future Telecoms Infrastructure Review (Department for Culture, Media and Sport, 2018)

Czech Republic

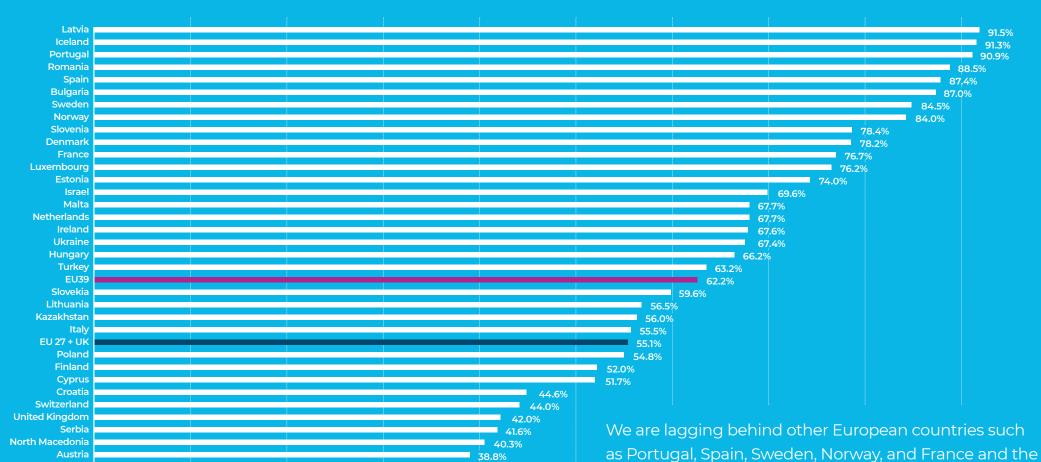
Greece

Germany

Belgium

## European leaderboards<sup>7</sup>

Nearly 3 out of 4 countries now have more than 50% of total homes with fibre. FTTH/B coverage\* as of September 2022 (\*Homes passed/Households)



29.7%

20.7%

improvement in speed of roll-out in the UK needs to be

maintained long-term to change this position8.

## The digital divide

It's clear that the failure to invest in the UK's digital infrastructure has disproportionately impacted underserved communities (e.g. there is a difference of almost 40% in average speeds between rural and urban communities<sup>9</sup>). The government has recognised that digitally connecting our cities, towns and communities is essential for them to thrive<sup>10</sup>, but without equalising connectivity, inequality across the country will still be exacerbated.

The economic opportunity, as both Ofcom and independent studies indicate, is substantial <sup>11</sup>. Faster, more reliable internet speeds enable businesses to adopt new technologies, automate tasks, and collaborate more effectively, ultimately leading to greater efficiency and output.

The need to transition away from legacy infrastructure is recognised by the government, which has outlined ambitious targets and invested in efforts to achieve nationwide coverage of gigabit-capable broadband by 2030. This acknowledges the vital role full fibre plays in not only boosting the economy but also bridging the digital divide and ensuring a level playing field for all.



<sup>9.</sup> Broadband Statistical Digest for Rural England (DEFRA, 2021) 10. Government launches new £5bn 'Project Gigabit' (DCMS, 2021)

<sup>11.</sup> The Economic Impact of Full Fibre Infrastructure in 100 UK Towns and Cities (Regeneris Consulting, 2018)

## The size of the prize to the UK economy of closing these gaps is clear:

£1 = £9.50

Every £1 invested in full fibre could return £9.50 to the UK economy by 2025<sup>12</sup>.

#### This includes the value of:



#### **DIRECT BENEFITS:**

**J**ob creation in construction, engineering, and technology sectors.



#### **PRODUCTIVITY BOOST:**

Businesses adopting faster internet see increased efficiency, innovation, and competitiveness.



#### **FLEXIBLE WORKFORCE:**

Remote work becomes more viable, expanding talent pools and boosting local economies.

Once full-fibre connectivity is ubiquitous, the benefits of its capabilities will go beyond the economy, since it is essential to modern life:



#### FRICTIONLESS DIGITAL EXPERIENCES:

Customers demand more from their digital services and are frustrated by buffering.
Full fibre delivers seamless online services.



#### **BRIDGING THE DIGITAL DIVIDE:**

Everyone deserves equal access to the digital world. Full fibre deployment provides the opportunity for everyone to participate and thrive.



#### **FUTURE-PROOFING THE NATION:**

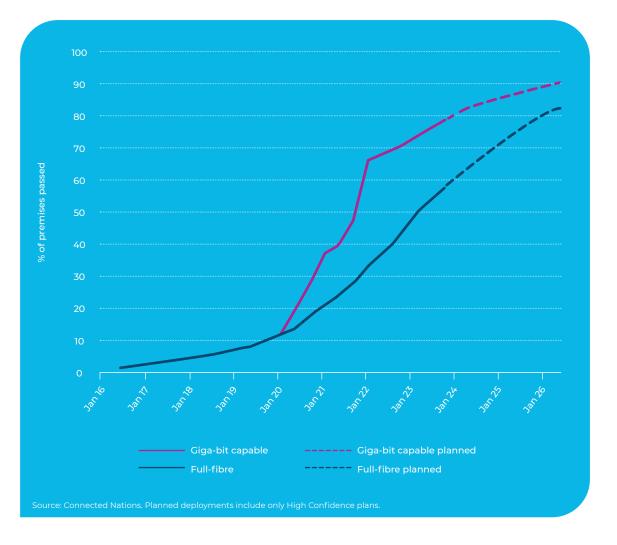
We must equip ourselves with the infrastructure to compete in a globally connected world.

## The number of operators is unsustainable

Starting from a low base, the UK has in recent years made significant strides in expanding full fibre broadband coverage<sup>13</sup>.

The emergence of new alternative networks (altnets) to Openreach contributed to this progress, and it was facilitated by a pro-competition regulatory framework, with access to shared physical infrastructure (PIA). These networks - and the use of cutting-edge technologies such as XGS-PON, capable of symmetrical speeds of up to 10 Gbps - have injected muchneeded competition into the market and boosted overall rollout and investment into the UK's digital infrastructure.

This has been particularly vibrant since the government committed to specific targets, and opened up competition for the rollout of a fibre network across Britain to connect hard-to-reach homes and businesses to ultrafast broadband through Project Gigabit. The government's mission has been supported by billions of private investment and lending which has led to the entry of over 100 UK altnets in the market<sup>14</sup>.



<sup>13.</sup> Telecoms Access Review 2026 (Ofcom, 2024)

<sup>14.</sup> UK altnets face tough year in crowded broadband market (Grant Thornton, 2023)

However, this number of subscale operators is unsustainable over the long-term and multiple investment cycles. The economics of fixed infrastructure mean there can be only a small number of viable network operators.

Financial pressure on altnets are increasing due to low customer uptake rates<sup>15</sup> and the economic environment.

Many have already begun to reduce, or in some cases cease build altogether.

As such, all of this progress is fragile. The only way the UK can drive momentum behind the roll-out of full-fibre at pace, and ensure the cycle of investment continues longer term, is to ensure we have a sustainable competitive dynamic in the market. To achieve this, the UK needs a national-scale, high-quality competing provider to challenge the incumbent, with significant financial backing who can continue to drive forward competition, investment and innovation.



# nexfibre: a platform for progress



## Providing sustainable, national-scale competition

nexfibre is uniquely positioned to transform the full-fibre broadband access market by creating sustainable competition and becoming a national scale challenger to Openreach.

We are different from other network providers in three main ways:

- Firstly, we have solid financial backing. Our world-class investors InfraVia Capital Partners, Liberty Global, and Telefónica not only provide significant funding (£4.5 billion) but also bring extensive experience in the telecoms industry and the UK market.
- Secondly, we operate as a wholesale-only network provider. We focus solely on building and maintaining our full-fibre infrastructure platform for all ISPs and businesses. By investing in XGS-PON and having the ability to continuously upgrade our network, we are ensuring that our network is able to power the technology of the future.
- Thirdly, we have national scale. We have a strong partnership with Virgin Media O2, one of the UK's largest ISPs, and we intend to offer our footprints for wholesale access on a combined basis of over 21M premises. This creates a true national scale alternative, which the market has lacked thus far making us a natural home for growth-minded ISPs who prioritise quality, stability, and a great customer experience.

### A platform for progress

We are proud of what we have achieved since starting our rollout in December 2022. We have delivered key milestones in record time, and are ramping-up our rollout in 2024<sup>16</sup>.

**Delivering our network at pace:** In April 2024 we reached one million premises passed and ready for service. We achieved this milestone in just 14 months, which is faster than any other full fibre operator in the UK.

**National-scale coverage:** Our network footprint has broad coverage across the UK. In 2024 we are set to roll out our network to more premises than any other fibre provider, except for Openreach, which will make us the UK's second largest alternative network provider in only our second year of operations.

**Underpinned by best-in-class technology:** We have built our network exclusively using XGS-PON technology, capable of symmetrical speeds of up to 10 Gbps. This ensures it is fit for the future and our rigorous testing and auditing processes make sure that as we scale at pace, the quality of our deployment and service is not compromised.



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Playing an active role in consolidation: As a well-financed, national scale operator we intend to play an active role in market consolidation, providing a natural home for quality networks which extend our footprint. We demonstrated this last year with the acquisition of Upp in partnership with Virgin Media O2, adding up to 175K premises to our network.

16. Network rollout update (nexfibre, 2024)

# An opportunity for policymakers



## The task at hand: protecting progress and building for the future

While the UK has made significant strides in expanding full fibre broadband coverage over the past five years – albeit from a low base, this progress is fragile, and the UK's digital landscape is at a pivotal moment.

Ofcom's upcoming Telecoms Access Review (TAR) will assess the market, the challenges it faces and set-out regulatory frameworks for 2026-31, and has the potential to set the trajectory beyond that. The decisions made will have far-reaching consequences for the future of the UK's digital infrastructure, economy and society.

We believe that by prioritising competition, investment and innovation, policymakers can foster the development of a dynamic, consumer-centric telecoms market that will power the UK's digital future. That's why we are advocating for three crucial areas of focus:

- First, we need a stable regulatory environment which **continues to attract much-needed investment** in our digital infrastructure.
- Second, we require a regulatory framework which ensures a **consistent and equitable playing field** for all.
- Third, we need a market characterised by **sustainable competition** rather than fragmented sub-scale operators.

# 1. An environment that attracts investment

Despite having seen an influx in recent years, the UK fibre market still requires billions of pounds more in annual investment to complete the rollout of full fibre and meet the Government's connectivity targets<sup>17</sup> and more again to deliver a sustainably competitive market for the long-term.



## Competing on a global scale

The need for telecoms infrastructure investment isn't confined to the UK. A recent report suggests €180 billion is needed across the EU, Switzerland and UK alone to bridge the coverage gap¹8. This means we're competing globally for investment, and as such changes to the market are key to ensure the UK is attractive to long-term investors.

### A more attractive market

With altnets struggling to drive penetration to the levels needed for a stable return on capital, investors are becoming increasingly wary of increasing their investments into the UK market. James Barfod who is Head of Telecoms at Enders Analysis, a research firm, recently said that "investors [now] demand better performance on existing footprints", rather than providing capital to expand their rollouts further. In the same article, Inka Klinger, head of project finance at

Hamburg Commercial Bank said that it is "quite challenging" for investors to get a return on investment in the current environment<sup>19</sup>.

Alongside fair returns, regulatory stability is key to incentivise investment. Stable, consistent regulation over a long period of time maintains the environment needed to support long term investment horizons.

## Innovation requires investment

The UK needs innovation in the market to facilitate highquality national scale networks that are at the forefront of technological developments. We need a market that not only incentivises network providers to adopt the latest technologies today, but also to continue to invest and innovate to upgrade their networks to withstand future data needs.

# 2. A consistent and fair playing field

The development of the wholesale fibre market is at a critical juncture. A stable, fair and effective regulatory framework is vital for the future development of a competitive and innovative market. Regulators and policymakers must restrain anti-competitive behaviour from the incumbent and put in place a regulatory framework which addresses exclusion of competitors.



### Maintain regulation on the incumbent

Until sustainable and proven scale competition to the incumbent is in place, it is not appropriate to reduce or remove regulation of the incumbent. Maintaining investment incentives requires stable and consistent regulation over a sustained period of time so as to maintain the environment needed to support long term investment horizons.

## Restrict anti-competitive behaviour

The incumbent continues to enjoy a position in the market which gives it the ability to distort competition. As the dominant wholesale access provider, its pricing affects every operator in the market. If it reduces pricing, to incentivise its customers to remain loyal and migrate to its new network, then the rest of the market needs to reduce pricing to remain competitive. If price reductions cannot be offset by cost reductions, the return on investment is decreased, reducing the incentive to invest in the long-term and reducing competition.

Current regulation on pricing has not been effective at addressing the incumbent's ability to exclude competitors and damage competition. The regulatory framework needs to ensure that pricing and pricing strategies by the incumbent do not disincentivise investment in the market or unfairly impede other operator's ability to compete. In addition, as the copper network is switched off, it's important that this is not used as an opportunity to entrench the position of the incumbent in the fibre market and the incumbent should not be permitted to incentivise migration from copper to its own fibre network at the expense of other operators.

## Review of pricing for access to passive infrastructure - ducts and poles

PIA (Physical Infrastructure Access) has facilitated investment by other fibre networks, underpinning roll out across the country. Effective regulation of PIA is critical in the long-term as it has become a vital input for fibre networks.

There are inconsistencies in the way PIA is priced that leads to altnets paying significantly more for ducts and poles than Openreach charges itself. The regulator needs to address these inconsistencies and consider changing the basis on which PIA is made available to ensure altnets and Openreach are paying a fair and equal price, and that the application of this pricing is consistent and predictable.

# 3. Creating sustainable competition

Despite the significant investment made in full fibre networks in recent years, the current number of subscale operators is unsustainable over the long-term – meaning consolidation is both inevitable and necessary.



The market still lacks national-scale wholesale competition to Openreach, which is the primary reason the UK still lags behind many of its international peers in FTTH rollout and is the single greatest threat to progress in the future.

We advocate for sustainable competition that benefits everyone, not just to complete the current full fibre rollout, but to support future investment which will be required for the UK to remain at the forefront of digital innovation.

## **Building scaled competition**

The recent influx of altnets has injected much-needed capital and energy into the market.

However, it has resulted in a highly fragmented structure, and with economic challenges leading to an increase in debt and growing losses, this puts continued investment at risk. Economic analysis<sup>20</sup> shows that to sustain the consistent investment we need, only a finite number of long-term viable operators can exist in the marketplace.



## Promoting sustainable national-scale competition to Openreach should be the key consideration for policymakers and the regulator.

Without the existence of these operators of scale who can withstand financial headwinds while developing their own network, we risk the entrenchment of the incumbent, the stifling of competition and the return of the complacent mind-set which resulted in the UK falling behind its digital infrastructure ambition.

## **Necessary consolidation**

With investment slowing due to current market complexity, consolidation in the pursuit of scale and more efficient operations is both inevitable and necessary to maintain rollout momentum.

## Conclusion

Quality connectivity isn't a luxury, it is a fundamental need that should be accessible to all. Our mission is to deliver the infrastructure of tomorrow, today, by building a nationwide network that combines utility with cutting-edge technology.

Beyond providing fast internet, nexfibre is committed to driving progress and innovation in the market through providing lasting, sustainable, national-scale competition. Our platform is designed to shape the future, ensuring the UK learns from past mistakes and can realise its potential through the digital revolution.

The reality is the market is at a crossroads. What comes next matters. Take the wrong turn and the UK could be stuck with a single dominant wholesale operator. Choose the right path - by prioritising competition, investment and innovation – and the stage is set for the development of a dynamic, consumer-centric telecoms market that will power the UK's digital future.

All of us with a stake in the market have a role to play, including in the upcoming Telecoms Access Review. We stand ready to work with policymakers and regulators to create the best environment for the UK's digital infrastructure economy, and look forward to engaging constructively over the coming months to help shape a bright future for our industry.

### Our proposed steps aim to:

- Empower people and businesses: By accelerating the full-fibre rollout, we create opportunities for everyone to participate in the digital revolution, driving economic growth and social progress.
- Attract investment: A thriving digital infrastructure attracts investment, generating a ripple effect that benefits not just nexfibre, but the entire UK economy.
- Foster innovation: We believe in going beyond XGS-PON, continuously exploring and investing in cutting-edge technologies that unlock incredible possibilities for the future.

This report is just the beginning of a conversation. We invite you to join us in shaping the future of connectivity for the UK. Together, we can build a more prosperous and connected nation, empowered by the digital infrastructure of tomorrow.



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