thinkbroadband®

The State of Broadband

A Comprehensive Overview

July 2024

Published 12/08/2024

Special Feature

The Alternative Networks Building Broadband Britain

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Want the latest stats?
A lot of our statistics are live on:
https://labs.thinkbroadband.com/local

Browse our broadband map:
https://maps.thinkbroadband.com

The State of Broadband

Welcome to the fourth edition of our State of Broadband Report where we provide unique insight and latest statistics on broadband rollout across the UK.
We expect to publish the next update in January 2025.

In this edition, we'll cover the usual State of the Nations updates looking at Gigabit and Full Fibre coverage, progress towards government targets, average pricing of consumer broadband packages and more.

We're also going to look at the 'alternative networks' or 'alt-nets', the companies building Broadband Britain alongside Openreach and Nexfibre (associated with Virgin Media O2).

Key Stats – Full Fibre (**FTTP**) is now available to almost **7 in 10 households** (up from 6 in 10 six months ago) across the UK with **Openreach** leading the way at 46% (up from 39%) and **Gigabit** being available to **83.9% of households**, up from 79.9%. Altnets are available to almost 4 in 10 premises (35.9%).

We saw an announcement of a **merger between YouFibre and Brsk** jumping the combined alt-net to just after Nexfibre and above Community Fibre on our tracker.

Unless otherwise stated, the data is based on our database as of 27 July 2024.

Please visit https://labs.thinkbroadband.com/local for the most up-to-date data for your area.

thinkbroadband.com

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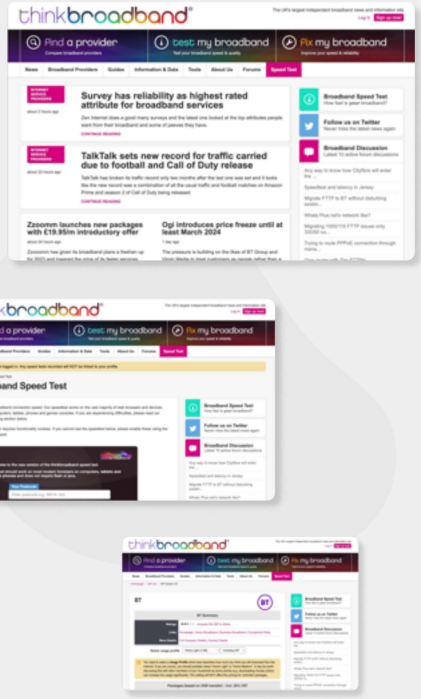
About thinkbroadband

thinkbroadband is the UK's leading source of broadband news and analysis and home to the UK's largest community of users looking to get the most out of their home broadband. Run by a small team passionate about all things connectivity, we are independent of broadband providers and offer listings to any provider who meets our listing criteria, not based on whether they pay a commission.

Over the past two decades, we have created a wide range of free tools to help consumers understand how to make the most out of their broadband connection including speed tests, broadband maps, local broadband statistics, and our one-second resolution broadband quality monitor.



We have also developed a range of industry-specific solutions, such as our broadband availability API. This tool is designed to assist websites requiring information on broadband service availability in a particular area, enabling them to power their own services and deliver their users with accurate comparison listings.

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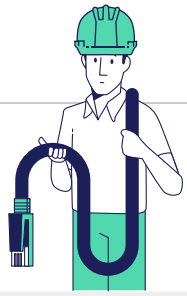

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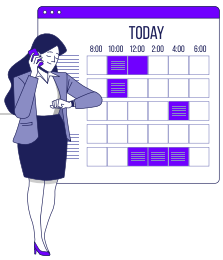

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Contact Details

State of the Nations

Current UK FTTP ("full fibre") Coverage

68.8% vs 60.7% Jan 2024

(not including DOCSIS 3.1 cable)

FTTP 85% prediction

Sep 2025 No change

FTTP 95% prediction

May 2026 No change

Current UK Gigabit Coverage

83.9% (includes DOCSIS 3.1 cable) vs 79.9% Jan 2024

Gigabit 85% prediction

Sep 2024 Improvement - 1 month

Data: July 2024; includes households and business premises

Authority Name	Superfast (30 Mbps+)	Full Fibre (FTTP)	Gigabit (FTTP or DOCSIS 3.1)	85% Gigabit Prediction	85% FTTP Prediction	95% FTTP Prediction	Alt-net FTTP*
England	98.3%	68.6%	84.7%	Aug 2024	Aug 2025	Apr 2026	37.8% +6%
Wales	97.1%	68.4%	74.4%	Jun 2025	Aug 2025	Mar 2026	14.5% +3.8%
Scotland	96.5%	62.2%	78.1%	May 2025	Mar 2026	Dec 2026	30.1% +4.8%
Northern Ireland	98.3%	95.4%	95.9%	**Achieved**	**Achieved**	**Achieved**	34.9% +5.5%

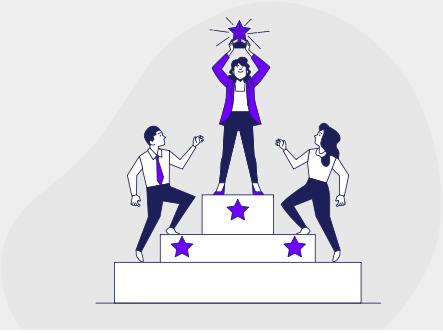
* For this purpose alt-nets EXCLUDE Openreach as well as KCom (Hull) and Virgin Media RFOG and Nexfibre. Increase compared to Jan 2024.

Source: labs.thinkbroadband.com

English Region Breakdown

Authority Name	Superfast (30 Mbps+)	Full Fibre (FTTP)	Gigabit (FTTP or DOCSIS 3.1)	85% Gigabit Prediction	85% FTTP Prediction	95% FTTP Prediction
Yorkshire and The Humber	98.3%	80.4%	88.4%	**Achieved**	Oct 2024	May 2025
North West	98.6%	74.3%	87.1%	**Achieved**	Feb 2025	Aug 2025
East Midlands	98.2%	69.5%	84.1%	Sep 2024	May 2025	Dec 2025
London	98.6%	69.0%	90.8%	**Achieved**	May 2026	Jul 2027
West Midlands	98.6%	66.5%	87.9%	**Achieved**	Aug 2025	Apr 2026
East of	98.4%	64.4%	80.3%	Mar 2025	Dec 2025	Aug 2026
South East	98.2%	64.3%	81.9%	Jan 2025	Feb 2026	Nov 2026
South West	97.1%	64.1%	75.7%	Oct 2025	Apr 2026	Jan 2027
North East	98.2%	62.9%	84.8%	Aug 2024	Sep 2025	Mar 2026

Winners & Losers



Top 20 best and 10 worst local authorities for FTTP coverage. We also include a date for 85% and 100% FTTP prediction. Note that this is strictly 'full fibre' and areas with low fibre (which is future proof) may still receive Virgin Media 1Gbps services over DOCSIS 3.1.

Top 20 Authorities by Full Fibre Rollout

Authority	Full Fibre %	95% FTTP Prediction
City of Kingston upon Hull	99.8%	Achieved
Mourne and Down	96.8%	Achieved
Ards and North Down	96.6%	Achieved
Coventry District	96.3%	Achieved
Belfast	96.2%	Achieved
Lisburn and Castlereagh	96.2%	Achieved
Mid and East Antrim	95.6%	Achieved
Milton Keynes	95.6%	Achieved
Antrim and Newtownabbey	95.5%	Achieved
Armagh, Banbridge and Craigavon	95.2%	Achieved
Derry and Strabane	94.9%	Aug 2024
Mid Ulster	94.7%	Aug 2024
Southend-on-Sea	93.9%	Sep 2024
Hyndburn District	93.8%	Dec 2024
West Northamptonshire	93.3%	Oct 2024
Causeway Coast and Glens	93.3%	Jul 2025
Wirral District	93.0%	Oct 2024
Worthing District	92.3%	Mar 2025
Fermanagh and Omagh	91.8%	Mar 2025
Bury District	91.8%	Oct 2024

Note: Where we cannot predict, no date is shown. Dates in far future are not necessarily likely as intervention may apply changing the likely dates. This information relates to 'full fibre' and does NOT include DOCSIS 3.1 cable services which can deliver 1Gbps broadband. **The prediction of future dates is based exclusively on the performance in the past 9 months; future performance is not necessarily based on past performance.**

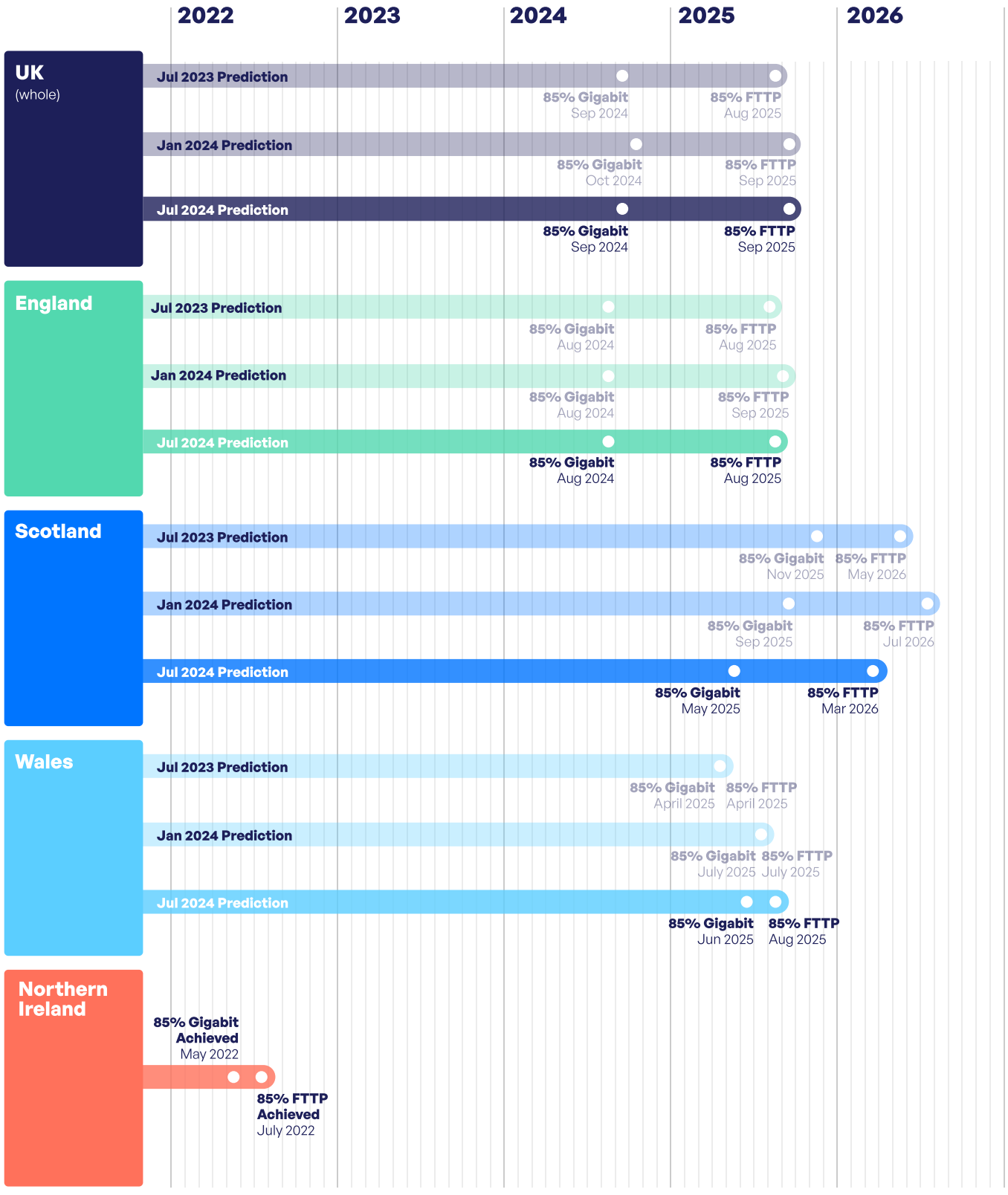
Bottom 10 Authorities by Full Fibre Rollout

Authority	Full Fibre %
Warwick District	27.2%
Perth and Kinross	21.6%
Telford and Wrekin	21.3%
Argyll and Bute	17.6%
West Dunbartonshire	15.3%
Harlow District	13.7%
Orkney Islands	13.5%
Shetland Islands	9.5%
Isles of Scilly	9.5%
Na h-Eileanan an Iar	6.5%

We cannot predict a date for these local authorities due to a lack of clear data on progress. We would note however that Isles of Scilly has increased from 2.6% to 9.5% in six months, Orkney from 8% to 13.5% and Perth and Kinross from 16% to 21.6%, so there is progress.

UK Nations – Progress Towards Government Targets

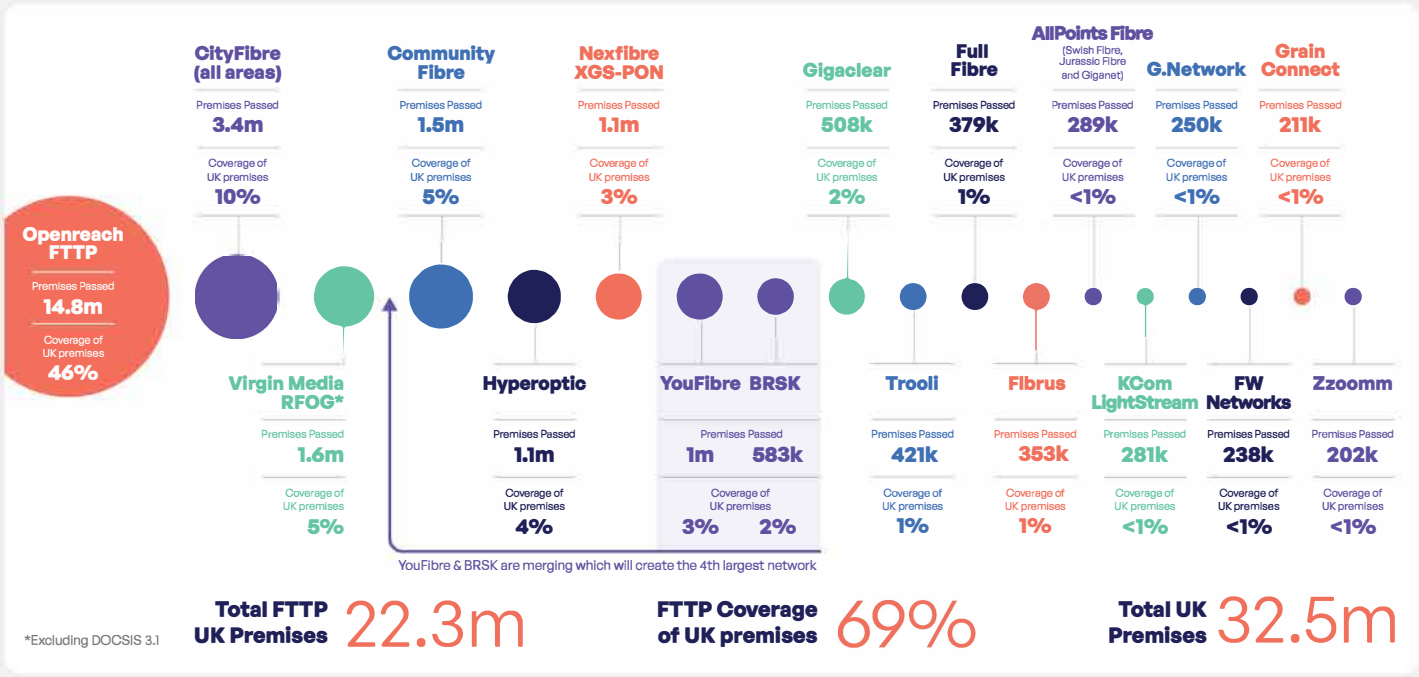
Progress towards 85% Gigabit and 85% FTTP targets



Source: labs.thinkbroadband.com; theoretical prediction is based on performance in the past 9 months.

Largest Full-Fibre Networks

The UK has many alternative network operators (altnets), and competitors to the incumbent networks (Openreach and KCom in Hull). In spite being smaller in size, these altnets play a vital role where incumbent FTTP services are not available, providing an alternative commercial proposition, which can often be superior to the consumer. Despite being less known, these smaller networks are an essential part of the UK's broadband infrastructure and provide a critical lifeline for local communities desperate for fast broadband.



Source: labs.thinkbroadband.com. Note: This refers to 'full fibre' (FTTP) networks and not gigabit-capable networks. As such the current Virgin Media DOCSIS 3.1 footprint (capable of delivering gigabit broadband) is not included. We expect Virgin Media will upgrade its network to RFOG (Radio Frequency over Glass) so this will increase Virgin's FTTP share in due course. **Data is based on our database which tracks 'available to order and deliver within a standard order timeframe'** (usually a couple of weeks). If a site requires additional wayleaves, this would not be considered live. Our criteria for inclusion is strict and therefore may not match information claimed by operators in press releases or financial results, however the methodology we use is consistent.

Relative Market Share of the Big Retail Providers

	BT Group: BT/EE/PlusNet	Virgin Media O2	Sky	TalkTalk	Vodafone	Alt Nets
2022 Q4	10.7 million	5.7 million	5.6 million	3.5 million	1.2 million	1.8 million
2023 Q4	10.5 million	5.7 million	5.7 million	3.1 million	1.3 million	1.9 million
2024 Q1	10.4 million	5.7 million	5.8 million	3.4 million	1.4 million	2 million
Market Share	36%	20%	20%	12%	5%	7%

Total Estimated Retail Subscribers 2024 Q1 28.8m

Total Estimated Retail Subscribers 2023 Q3 28.3m

Total Estimated Retail Subscribers 2022 Q3 28.4m

Source: Point-Topic UK Plus Data Set. Note: These figures will include estimates as not all providers publish information in a consistent manner. Only 'consumer' fixed broadband (excluding fixed wireless access) services are included. We note that BT Business has a significant lead in the business segment. **The historical figures are re-stated due to adjustments** in data collection. TalkTalk share has changed due to migration of Shell Energy's customer base from the wholesale arm to retail segment, less losses estimated.

Average Prices of Consumer Fibre

We track average broadband prices by speed category for major providers to provide market guidance. There are always offers available as well as a wider selection of broadband providers, so these **prices are only guidelines and not intended to be used for selecting a provider**.

50-80 Mbps Downstream
(5-21 Mbps upstream)

~~£27-33~~
Before

Now
£27-30
per month

150 Mbps Downstream
(20-30 Mbps upstream)

~~£27-41~~
Before

Now
£26-30
per month

500 Mbps Downstream
(36-73 Mbps upstream)

~~£33-51~~
Before

Now
£33-40
per month

1 Gbps Downstream
(52-111 Mbps upstream)

~~£42-61~~
Before

Now
£41-43
per month

Most fibre-based services require an 12- to 24-month contract. Above prices are based on 18-24 month contracts.

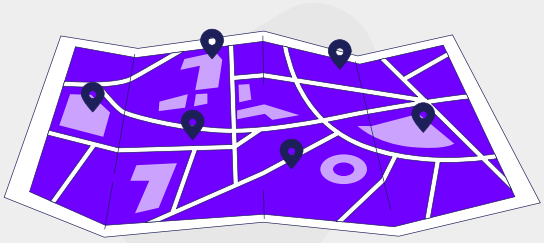
IMPORTANT NOTE: Please be aware that big providers often have offers on which can include cash-back and special promotions for a short period now included below.

Category	Package	Download Speed	Upload Speed	Contract	Cost/month
50-80 Mbps	**Sky Superfast 80**	61 Mbps	20 Mbps	24 months	**£27**
	TalkTalk Full Fibre 65	77 Mbps	20 Mbps	24 months	**£28**
	Virgin Media M50	54 Mbps	5 Mbps	18 months	**£48**
	Virgin Media M50	54 Mbps	5 Mbps	1 month	**£48** + £80 setup
	BT Fibre 1	50 Mbps	10 Mbps	12 month	**£40**
	BT Fibre 2	74 Mbps	20 Mbps	12 month	**£42**
	BT Full Fibre 1	50 Mbps	10 Mbps	24 month	**£30**
150 Mbps	**Virgin Media M125**	132 Mbps	20 Mbps	18 months	**£26**
	Sky Ultrafast	145 Mbps	30 Mbps	24 months	**£29**
	BT Full Fibre 100	150 Mbps	30 Mbps	24 months	**£30**
	TalkTalk Full Fibre 150	152 Mbps	30 Mbps	24 months	**£28**
	Virgin Media M125	132 Mbps	20 Mbps	1 month	**£54** + £80 setup
	BT Full Fibre 100	150 Mbps	30 Mbps	12 months	**£44** + £42 setup
500 Mbps	**Sky Ultrafast+**	500 Mbps	59 Mbps	24 months	**£33**
	TalkTalk Full Fibre 500	525 Mbps	72 Mbps	24 months	**£34**
	Virgin Media M500	516 Mbps	52 Mbps	18 months	**£34**
	BT Full Fibre 500	500 Mbps	73 Mbps	24 months	**£40**
	BT Full Fibre 500	500 Mbps	73 Mbps	12 months	**£55** + £42 setup
1 Gbps	**TalkTalk Full Fibre 900**	944 Mbps	110 Mbps	24 months	**£40**
	Sky Gigafast	900 Mbps	92 Mbps	24 months	**£43**
	BT Full Fibre 900	900 Mbps	110 Mbps	24 months	**£45**
	Virgin Media Gig1	1,130 Mbps	104 Mbps	24 months	**£41**
	BT Full Fibre 900	900 Mbps	110 Mbps	12 months	**£65** + £42 setup

Methodology: Comparisons on 26/07/2024 based on provider websites for comparable products, noting that variations apply. We have not included promotions which include an initial period at a lower price, unless this is substantially less over contract length as purpose of this report is to outline broad prices rather than recommend individual services. No bundling of other services (telephone, TV, mobile) is included. Pricing for services is likely to increase mid-contract in most cases annually, around April. Where speed ranges quoted, we will use the marketed average figure or a mid-point rounded figure, so caution advised on minor variations (e.g. 74 vs 78 Mbps) as these are likely to be on the same underlying technology. This simplification has been provided for ease of comparison. Pricing may vary by location however our lookup is based on the same address on what we believe indicates market for full fibre services. Pricing is rounded up to nearest pound where it is close.

Do not use this table to select a provider for your personal circumstances – This list is provided as a guide to understand market pricing only. Please visit thinkbroadband.com and compare deals specific to your location and requirements.

Altnet Prices



The UK has many 'altnets', or so called 'alternative network operators' which typically refers to challengers to the incumbent (BT Openreach and Virgin Media nationally). They often offer faster services at lower prices, so we have included a separate table of prices to track.

Category	Package	Download Speed	Upload Speed	Contract	Cost/month
100 - 150 Mbps	G.Network Superfast	150 Mbps	50 Mbps	24 months	£17
	G.Network Superfast	150 Mbps	50 Mbps	12 months	£23
	G.Network Superfast	150 Mbps	50 Mbps	1 month	£29
	Community Fibre 150	150 Mbps	150 Mbps	24 months	£21
	Community Fibre 150	150 Mbps	150 Mbps	12 months	£27
	Hyperoptic Superfast	150 Mbps	150 Mbps	24 months	£29
	Hyperoptic Superfast	150 Mbps	150 Mbps	12 months	£32
	Hyperoptic Superfast	150 Mbps	150 Mbps	1 month	£40
	YouFibre 150	150 Mbps	150 Mbps	18 months	£23
	YouFibre 150	150 Mbps	150 Mbps	1 month	£30
	Vodafone Full Fibre 150 (CityFibre)	150 Mbps	150 Mbps	24 months	£25
300 - 500 Mbps	Community Fibre 500	500 Mbps	500 Mbps	24 months	£20
	Hyperoptic Ultrafast	500 Mbps	500 Mbps	24 months	£35
	Hyperoptic Ultrafast	500 Mbps	500 Mbps	12 months	£36
	Hyperoptic Ultrafast	500 Mbps	500 Mbps	1 month	£53
	YouFibre 500	500 Mbps	500 Mbps	18 months	£28
	YouFibre 500	500 Mbps	500 Mbps	1 month	£35
	Gigaclear Ultrafast 400	400 Mbps	400 Mbps	18 months	£20
	G.Network Ultrafast	300 Mbps	100 Mbps	24 months	£27
	G.Network Ultrafast	300 Mbps	100 Mbps	12 months	£33
	G.Network Ultrafast	300 Mbps	100 Mbps	1 month	£39
	Vodafone Full Fibre 500 (CityFibre)	500 Mbps	500 Mbps	24 months	£31
	Community Fibre 1Gbps	1 Gbps	1 Gbps	24 months	£26
1 Gbps	Community Fibre 1Gbps	1 Gbps	1 Gbps	12 months	£32
	Hyperoptic Hyperfast	1 Gbps	1 Gbps	24 months	£39
	Hyperoptic Hyperfast	1 Gbps	1 Gbps	12 months	£40
	Hyperoptic Hyperfast	1 Gbps	1 Gbps	1 month	£63
	YouFibre 1000	1 Gbps	1 Gbps	18 months	£30
	YouFibre 1000	1 Gbps	1 Gbps	1 month	£40
	Gigaclear Hyperfast 900	830 Mbps	830 Mbps	18 months	£49 (£29 special offer until 31/7)
	B4RN Residential	1 Gbps	1 Gbps	12 months	£33
	G.Network Ultrafast	1 Gbps	300 Mbps	24 months	£30
	G.Network Ultrafast	1 Gbps	300 Mbps	12 months	£36
	G.Network Ultrafast	1 Gbps	300 Mbps	1 month	£42
	Vodafone Full Fibre 900 (CityFibre)	910 Mbps	910 Mbps	24 months	£31
3 Gbps+	Community Fibre 3Gbps	3 Gbps	3 Gbps	24 months	£56
	YouFibre 8000	7 Gbps	7 Gbps	18 months	£100
	YouFibre 8000	7 Gbps	7 Gbps	1 month	£130
	B4RN 10Gbps	10 Gbps	10 Gbps	12 months	£150 + £360 setup

Date Collected: 29/07/2024. Methodology – see previous section. **Do not use this table to select a provider for your personal circumstances** – This list is provided as a guide to understand market pricing only. Please visit thinkbroadband.com and compare deals specific to your location and requirements.

Social Tariffs

Social Tariffs are dedicated plans for those on very low incomes in receipt of certain state benefits. These help to subsidise your broadband service cost.

To qualify you need to be receiving one of the following five benefits: -

- Universal Credit
- Pension Credit
- Income Support
- Income-based Jobseeker's Allowance
- Income-based Employment Support Allowance

Note: Recipients of Personal Independence Payment or Attendance Allowance may also qualify in some cases however this may vary by provide. The contract needs to be in the name of the qualifying person.

National Networks

Package	Download Speed	Monthly Cost
BT – Home Essentials - No Income (Zero Income only)	36 Mbps	**£15.00**
BT – Home Essentials - Unlimited 36 Mbps	36 Mbps	**£20.00**
BT – Home Essentials - Unlimited 67 Mbps	67 Mbps	**£23.00**
NOW Broadband – Basics	36 Mbps	**£20.00**
Sky Broadband – Basics (existing customers only)	36 Mbps	**£20.00**
Virgin Media – Essential Broadband	15 Mbps	**£12.50**
Virgin Media – Essential Broadband Plus	54 Mbps	**£20.00**
Vodafone – Fibre 2 Essentials	73 Mbps	**£20.00**

Other Providers (including alt-nets)

Package	Download Speed	Monthly Cost
4th Utility – Social Tariff	30 Mbps	**£13.99**
B4RN – Social Tariff	1 Gbps	**£15.00**
Community Fibre – Essential	35 Mbps	**£12.50**
Connect Fibre – Basic Essentials	50 Mbps	**£20.00**
Connect Fibre – Essentials	150 Mbps	**£25.00**
Country Connect – Social Tariff	25 Mbps	**£15.00**
County Broadband – Essential Broadband Tariff	15 Mbps	**£17.50**
Fibrus – Full Fibre Essential	50 Mbps	**£14.99**
G.Network – Essential Fibre Broadband	50 Mbps	**£15.00**
Grayshott Gigabit – Connect	100 Mbps	**£22.00**
Hey! Broadband – Everyday Fibre	100 Mbps	**£16.00**
Hyperoptic – Fair Fibre 50	50 Mbps	**£15.00**
Hyperoptic – Fair Fibre 150	150 Mbps	**£20.00**
KCOM – Full Fibre Flex	30 Mbps	**£14.99**
Lightning Fibre – Social Tariff	50 Mbps	**£15.00**
Lothian Broadband – Social Tariff	100 Mbps	**£19.99**
Quickline – Social Tariff	100 Mbps	**£16.50**
RunFibre – Social Tariff	100 Mbps	**£20.00**
Truespeed – Basic	30 Mbps	**£20.00**
Wildanet – Helping Hand Social Tariff	30 Mbps	**£20.00**
WightFibre – Essential Broadband	100 Mbps	**£19.95**
YouFibre – Social Tariff	50 Mbps	**£15.00**

Source: Information collected by thinkbroadband.com on 08 July 2024. https://www.thinkbroadband.com/news/10138-social-tariffs-july-2024

Feature

Altnets – Building Broadband Britain

Alternative networks, or commonly referred to as **alt-nets, are independent internet service providers (ISPs) that offer broadband services**, often focusing on **underserved areas**, both in rural, suburban and urban settings. They provide a range of wholesale and/or retail services which vary by network operator.

These alt-nets have emerged as a competitive force against traditional ISPs, providing high-speed fibre-optic internet connections and helping bridge the digital divide in the UK. They have gained significant attention and investment due to the increasing demand for faster and more reliable internet services, particularly in regions neglected by larger providers. Alt-nets typically build their own infrastructure, leveraging modern technology to deliver superior speeds and services compared to the ageing networks of established ISPs.

These companies range from those with **private equity backing** to **community projects** like Broadband for Rural North (B4RN), a community-led initiative that brought fibre optic services to areas where no commercial services were expected for some time. Many are receiving state subsidies including the Project Gigabit contracts covered in this report.

Overbuild

Premises with 1 FTTP network – 69%

Premises with 2 FTTP networks – 22%

Premises with 3 FTTP networks – 2.8%

Premises with 4 FTTP networks – 0.2%

Premises with 5 FTTP networks – 0% (around 4,000 premises)

When a network operator **builds in an area already covered by another network**, this is known as **'overbuild'**. An operator may choose to do this if they want to compete. However, when investing in infrastructure, being the sole fibre operator has major advantages, mainly in terms of avoiding splitting up take-up across multiple physical operators.

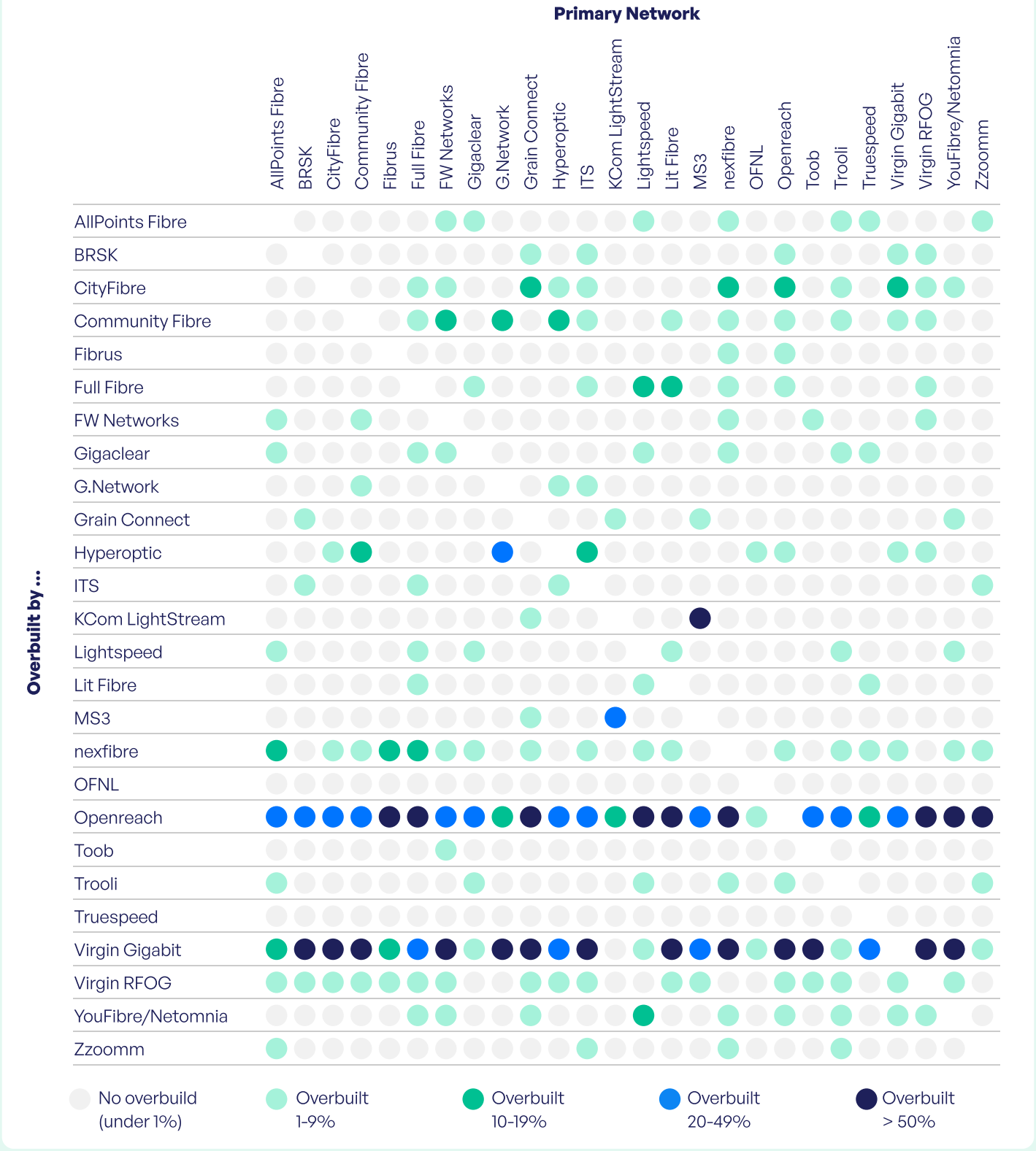
Overbuild is inefficient where a competitive wholesale market exists, but means multiple providers running their own fibre network through an area.

The following table provides an indication of the overbuild for the larger alt-nets. The coloured cells represent the **percentage of premises** for the provider in the top column, which is overbuilt by the provider in each row. We also include incumbent networks (Openreach, Virgin Media, KCom) along with Nexfibre, a project closely linked to Virgin Media O2 via shared ownership.

For example, this shows that Fibrus (an alt-net dominant in Northern Ireland) has Openreach in over 50% of its postcodes. However, as Openreach is a network covering all the nations of the UK, only 2% of its network is overbuilt by Fibrus.

Feature

Altnets – Building Broadband Britain



Feature

Altnets – Building Broadband Britain

The Financial Backers

Major investors in UK broadband alt-nets include private equity firms, infrastructure funds, and strategic investors recognising the growth potential in the sector. Investment into networks is often debt funding, which means an increase in interest rates has increased the debt repayments, limiting funding available to network operators. This means, it is quite likely that acquisition/mergers will be a significant tool for growth for network operators rather than cash purchases or greenfield build projects, at least in some cases.

The backers below may reflect equity investors, debt financing and other management.

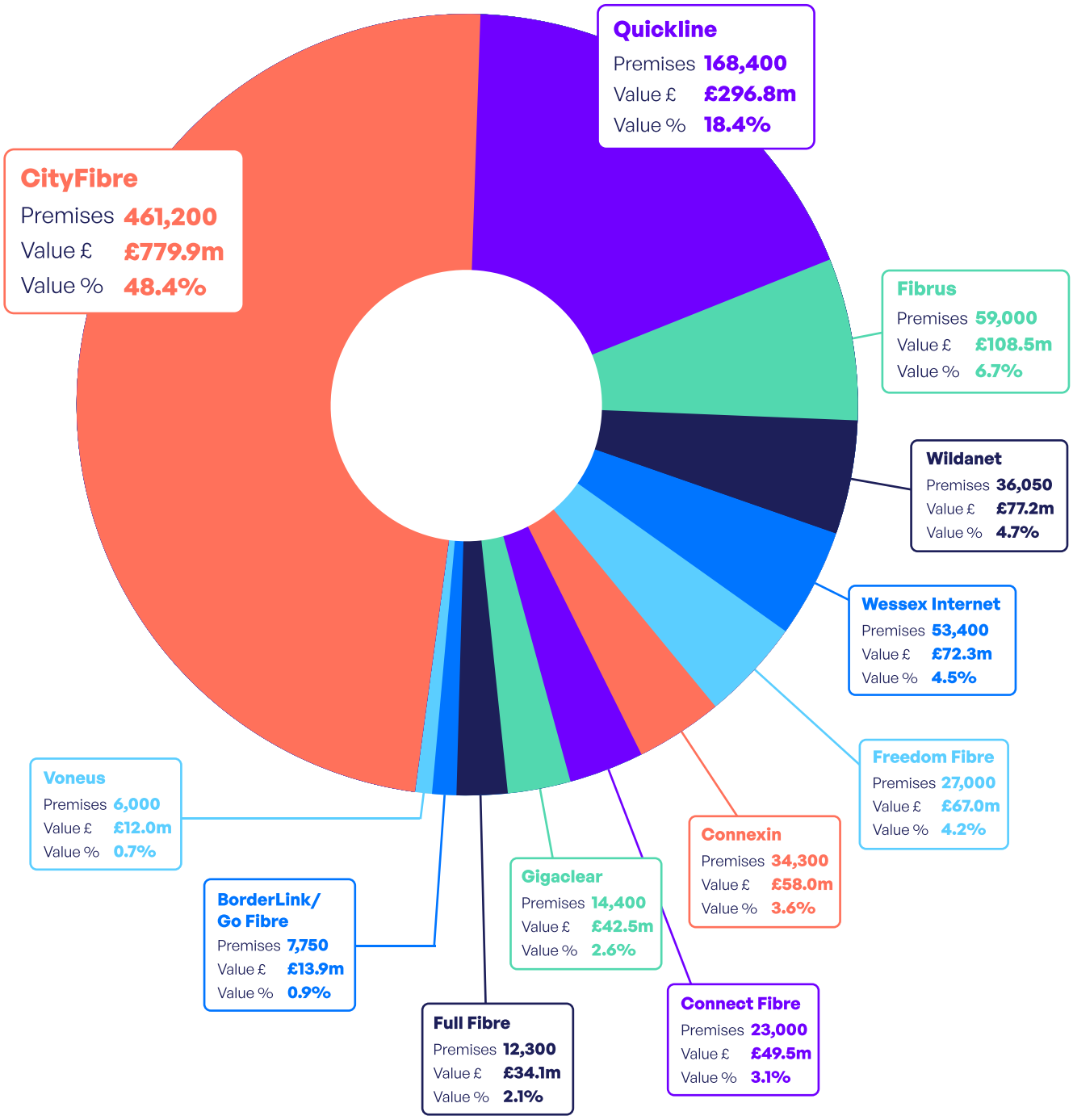
Company	Footprint	Backers
CityFibre	**3.8m**	Antin Infrastructure Partners and West Street Infrastructure Partners, a fund managed by Goldman Sachs. Mubadala Investment Company and Interogo Holding
Community Fibre	**1.5m**	Warburg Pincus, DTCP (Deutsche Telekom Capital Partners), Amber Infrastructure and RPMI Railpen, Macquarie Asset Management
Hyperoptic	**1.1m**	KKR, UKIB
Nexfibre	**1.1m**	Liberty Global, Telefónica, InfraVia Capital Partners (same companies as those behind Virgin Media O2 also an anchor customer), UKIB
YouFibre / Netomnia	**1m**	Advencap, Digital Bridge, Soho Square Capital, UKIB, Equitix
Brsk	**583k**	Advencap, Ares Management Corporation (in process of merging with Netomnia/ YouFibre)
Gigaclear	**508k**	Infracapital, UKIB, Equitix
Trooli	**421k**	Agnar UK infrastructure (Vauban / Natixis)
Full Fibre	**379k**	Basalt Infrastructure Partners
Fibrus	**353k**	Infracapital, UKIB
KCom	**281k**	Macquarie Group
G.Network	**250k**	Cube Infrastructure Managers, USS
F&W Networks	**238k**	Foresight Group, Santander
Grain Connect	**211k**	Equitix, Albion Capital, Pinnacle Group, Norddeutsche Landesbank
Zzoomm	**202k**	Oaktree Capital Management, (ING Bank, with Hamburg Commercial Bank and Kommunalkredit Austria)
ITS	**191k**	Aviva Investors, Avenue Capital Group
MS3	**184k**	Asterion Industrial Partners
Lit Fibre	**157k**	(now part of CityFibre; originally Newlight Partners)

UKIB = UK Infrastructure Bank, a company wholly owned by HM Treasury

Source: Data collected from various public sources including press releases, news reports and records by thinkbroadband.com.
Some information may be out-of-date. You should not rely on this information for any investment decisions.

Project Gigabit

Project Gigabit is a UK government initiative aimed at delivering gigabit-capable broadband to underserved areas across the country. Launched in 2021 by the previous government, the project is part of a broader effort to ensure that at least 85% of UK homes and businesses have access to gigabit-speed internet by 2025, with an ambition to achieve nationwide coverage soon after. With a budget of £5 billion (most of which remains unallocated), Project Gigabit focuses on reaching rural and remote areas that have historically lacked high-speed connectivity. The initiative involves collaborations with private sector providers and local authorities, leveraging public investment to stimulate private investment in broadband infrastructure. This project is seen as critical to boosting economic growth, improving digital inclusion, and ensuring that all parts of the UK can participate fully in the digital economy.



Grand Total: **902,800** Premises **£1.6b** Value

Project Gigabit – full list of contracts

Area	Provider	Premises	Value	Date
Lincolnshire and East Riding of Yorkshire	Quickline	72,000	£118.9m	Jul 2024
North Yorkshire	Quickline	36,300	£73.5m	Jun 2024
Cheshire	Freedom Fibre	15,000	£43.0m	May 2024
Derbyshire Peak District	Full Fibre	4,400	£10.7m	Apr 2024
Cornwall and the Isles of Scilly	Wildanet	16,800	£41.2m	Apr 2024
South Yorkshire	Quickline	32,100	£44.4m	Apr 2024
Mid West Shropshire	Voneus	6,000	£12.0m	Mar 2024
Dorset and South Somerset	Wessex Internet	21,400	£33.5m	Mar 2024
West Herefordshire and Forest of Dean	Full Fibre	7,900	£23.4m	Apr 2024
South Wiltshire	Wessex Internet	14,500	£18.8m	Mar 2024
East Gloucestershire	Gigaclear	4,400	£16.0m	Feb 2024
West Yorkshire and parts of North Yorkshire	Quickline	28,000	£60.0m	Feb 2024
Leicestershire and Warwickshire	Cityfibre	38,000	£71.0m	Jan 2024
Bedfordshire, Northamptonshire and Milton Keynes	Cityfibre	25,000	£51.0m	Feb 2024
Kent	CityFibre	50,000	£112.0m	Jan 2024
Nottinghamshire and West Lincolnshire	Connexin	34,300	£58.0m	Jan 2024
East and West Sussex	Cityfibre	52,000	£100.0m	Jan 2024
Buckinghamshire, Hertfordshire and East Berkshire	CityFibre	34,000	£58.0m	Jan 2024
Derbyshire	Connect Fibre	17,000	£33.0m	Nov 2023
North East Staffordshire	Connect Fibre	6,000	£16.5m	Nov 2023
Oxfordshire	Gigaclear	10,000	£26.5m	Nov 2023
Hampshire	Cityfibre	75,500	£104.2m	Jun 2023
Suffolk	Cityfibre	79,500	£100.5m	Jun 2023
Norfolk	CityFibre	62,200	£114.2m	Jun 2023
North Shropshire	Freedom Fibre	12,000	£24.0m	Apr 2023
New Forest	Wessex Internet	10,500	£14.0m	Mar 2023
Cambridgeshire	CityFibre	45,000	£69.0m	Feb 2023
Cornwall	Wildanet	19,250	£36.0m	Jan 2023
Cumbria	Fibrus	59,000	£108.5m	Dec 2022
North Northumberland	BorderLink/Go Fibre	3,750	£7.3m	Oct 2022
Teesdale	BorderLink/Go Fibre	4,000	£6.6m	Sep 2022
North Dorset	Wessex Internet	7,000	£6.0m	Aug 2022

One Touch Switching

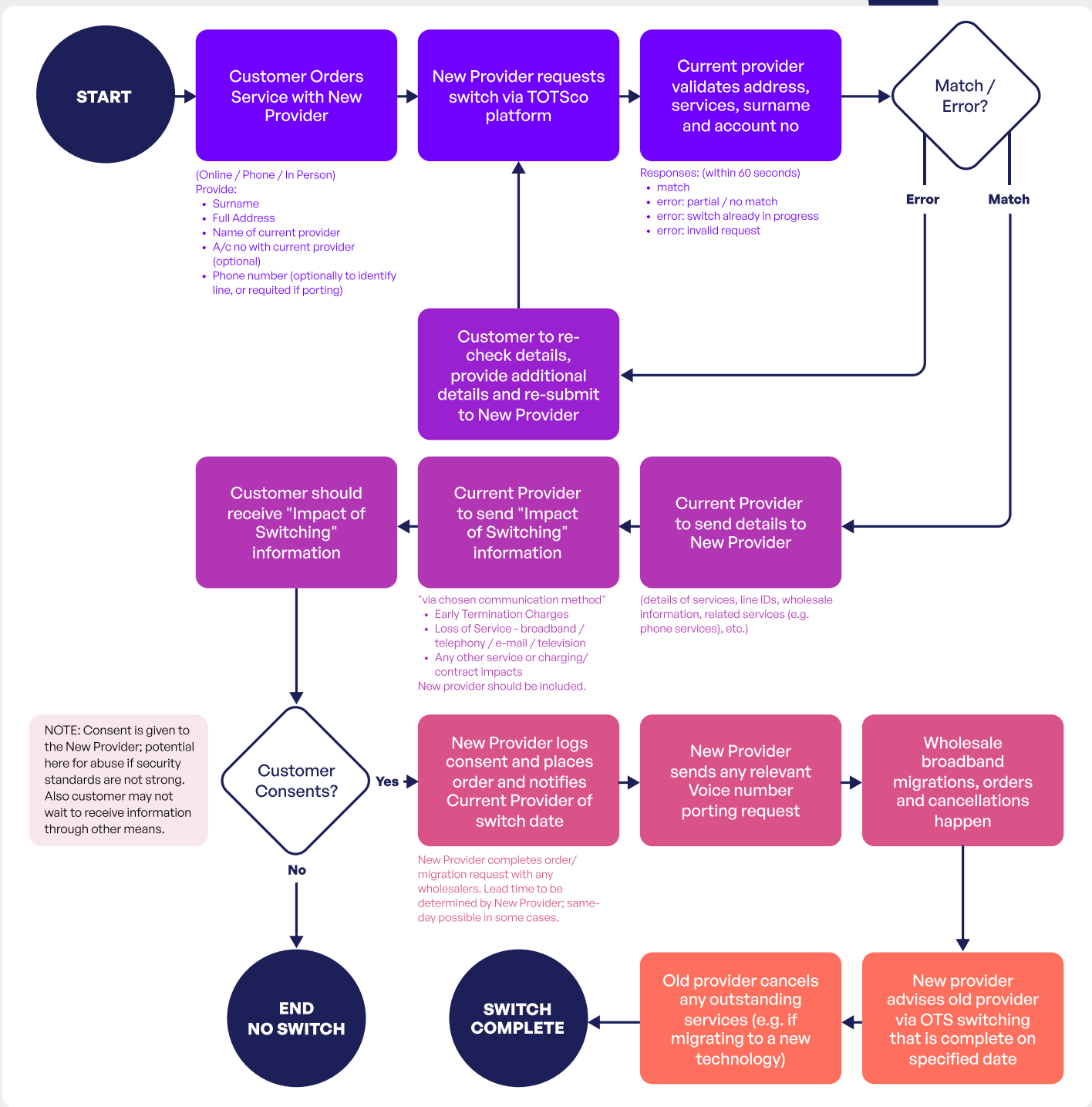
Going live 12 September 2024

The One Touch Switch (OTS) system is a new process in the UK designed to simplify and speed up the switching of broadband providers for consumers. The system is run by The One Touch Switching Company (TOTSCo), which facilitates communication between consumer broadband operators. The new system ensures consumers don't need to understand the complexity of the underlying systems, although there has been criticism among the industry about the lack of security processes and other cases which may present challenges.

Under the OTS process, the new broadband provider manages the entire switching process on behalf of the consumer. This means that when a customer decides to switch, they only need to contact the new provider, who will handle the coordination with the existing provider to ensure a smooth transition.

The goal of the system is to ease migrations, and Ofcom hopes this will foster a more competitive market. The system is scheduled to **go live on 12 September 2024**.

The following chart shows a simple version of the process from a consumer's perspective:



Broadband Speed Requirements

What speed broadband connection do you really need for most applications?

Application		Recommended Bandwidth	
		Up	Down
Video Streaming (Netflix / YouTube)	Standard Definition / SD	-	1-2 Mbps
	High Definition / HD	-	3-5 Mbps
	UHD / 4K	-	15-20 Mbps
Zoom Calls	1080p Full HD[1]	4 Mbps	3 Mbps
	720p	1.2 Mbps	1.2 Mbps
	Standard Video	0.6 Mbps	0.6 Mbps
VoIP Calls / Digital Voice		0.5 Mbps	0.5 Mbps
		Actual usage may be less but more likely to be affected by other usage during call	
Online Gaming (real-time multiplayer) Varies by game. This will vary a lot and it's less about the raw speed for the game but about avoiding latency/jitter associated with saturating the line if you're doing more than one thing or your household has multiple users.	Fortnite	3 Mbps	5 Mbps[2]
		"Gigabit fibre with [..] symmetrical upload and download speeds absolutely smashes those requirements out of the arena"	
	Roblox	4-8 Mbps	4-8 Mbps[3]
	Call of Duty MW2	4-8 Mbps	4-8 Mbps
Twitch Streaming / Broadcasting		3-10 Mbps	20 Mbps
		Some recommendations increase upload speed to 25Mbps	
Web Browsing, E-mail & Social Media		1 Mbps	5 Mbps
		Once connection is above 40Mbps, unlikely to see much improvement as DNS lookups likely to be more of a factor than raw speed	
Downloading Games and Large Content		-	100 Mbps
		100 Mbps or faster is ideal but balance cost vs patience	
Larger Households		For real-time simultaneous use, you need to multiply the above. E.g. two people watching Netflix at 4K might need up to 40Mbps; a third is probably not going to be watching at the same time.	

1 https://support.zoom.us/hc/en-us/articles/201362023-Zoom-system-requirements-Windows-macOS-Linux
2 https://blog.frontier.com/2022/08/4-ways-fiber-helps-you-win-in-fortnite/
3 https://en.help.roblox.com/hc/en-us/articles/203312800-Computer-Hardware-Operating-System-Requirements

Types of Broadband

ADSL (or variations thereof, e.g. ADSL2+)
Asymmetric Digital Subscriber Lines which means broadband through your phone line. The speed is determined by the distance between your property and the telephone exchange (usually up to a few kilometres) and the quality of your line. Asymmetric means the download speed is usually much faster than the upload speed, common in all consumer broadband. There are variants such as 'Annex M' which allow you to sacrifice some download speed for faster uploads. These were typically 'up to 8 meg' or 'up to 24 meg' type services depending on generation but speeds vary wildly based on the quality and length of the line.

"FTTC" or "VDSL2" or commonly called "fibre broadband"
Broadband where the fibre optic cable ends at the street cabinet, which is likely to be some distance from your house.
A phone line is then used for the final link to your house, similar to ADSL. VDSL is the underlying technology, "Very High Speed Digital Subscriber Line" which allows faster speeds than ADSL, but it is more limited by distance – a few hundred metres rather than kilometres.

"FTTP", "FTTH", "FTTB" or "full fibre"
Fibre to the premises/home/building. i.e. the entire circuit to the property is fibre. There may in some cases be copper wiring inside the building depending on the setup. The speed is usually not limited by the distance where you can get FTTP as this is delivered over a fibre optic wavelength.

"FTTx"
Combination of the 'fibre to the...' services, i.e. fibre to the home and fibre to the cabinet.

Cable & DOCSIS 3.1
Cable broadband (typically meaning Virgin Media) is broadband delivered through the copper co-axial network (in most cases; RFOG- excepted) used to deliver cable TV services. This has traditionally been capable of delivering faster speeds than phone line based services. The latest generation, DOCSIS 3.1, can deliver gigabit broadband services.

Satellite
Satellite broadband uses geostationary satellites in space to deliver broadband to hard-to-reach areas. Aside from cost the main disadvantage is latency, which makes satellite broadband services slower to use for very 'interactive' applications, such as online gaming. Starlink claims to reduce this significantly. If you're in an area with limited options, this may be worth considering however.

3G / LTE / 4G / 5G (mobile broadband)
These are mobile technologies, evolutions beyond GPRS (2G) and EDGE (2.5G) which were the first types of data used by mobile phones and offered much slower speeds. The later generations like 5G can deliver very fast connections, although the performance varies significantly based on where you are. Using a fixed 4G/5G setup can take advantage of a fixed antenna which will perform better. The difficulty lies when in a congested city environment using a mobile phone, where it's quite possible for a 5G service to perform slower than a 4G one, so newer isn't always better (in the real world).

Wireless
Some broadband providers use wireless technologies such as directional Wi-Fi and microwave links to deliver broadband, often across wide open rural areas, where laying cables could be prohibitively expensive.

Glossary

"meg" or Mbps
The speed of broadband services is these days measured in Megabits per second (or Mbps). It is commonly referred to (albeit technically incorrectly) as "meg". 1 Mbps is broadly speaking 1,000Kbps, and 1Gbps (gigabit per second) is around 1,000 Mbps (technically it's a multiplier of 1024 from binary, rather than 1000). Note in particular that a Megabit (Mb) and Megabyte (MB) are very different, 1MB/s = 8Mbps as there are 8 bits in 1 byte. Sometimes you may see speeds when downloading expressed as MB/s, but broadband speeds are referred to in Mbps.

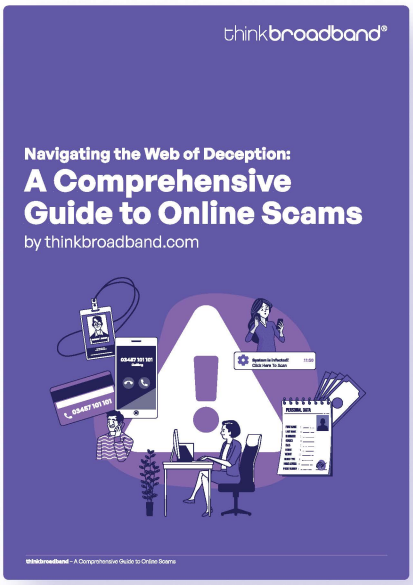
"Gig" or "Gigabit" broadband
Broadband that is capable of achieving speeds of 1Gbps (gigabits per second) or thereabouts. In practice this usually means FTTP or DOCSIS 3.1 cable services.

"Premises passed"
Term used to describe a premise which is able to order a broadband service with a given provider.

"Decent" broadband
This is a definition used by Ofcom of a broadband connection capable of delivering 10 Mbps downstream, and 1 Mbps upstream.

"Take-up"
The ratio between premises that order a service and the total 'premises passed' (where a service is available). It should be noted that even if full fibre is available, it doesn't mean all services are provided at 1 Gbps speeds.

Recent Developments



Navigating the Web of Deception: **A Comprehensive Guide to Online Scams & Traps**

Many of our readers are avid early adopters of tech who are confident about how technology works, spotting scams of all kinds very quickly, but we all have colleagues, neighbours, children and other loved ones who may not be as technically astute. These people may come to us to ask for advice on all things tech, but what if they don't know they should be seeking advice? This isn't directly about broadband, but it affects every Internet user around the world.

Online scams are a massive problem, far bigger than many imagine. In its online fraud report, Ofcom reported in March 2023 that almost half of all adult Internet users have been drawn into engaging in an online scam or fraud, and many of us know people who have become victims.

Please read and share our comprehensive guide to online scams and traps.

https://www.thinkbroadband.com/online-scams

29/01/2024 **CityFibre in search for five alt-net acquisitions**
https://www.thinkbroadband.com/news/9859-cityfibre-in-search-for-five-alt-net-acquisitions

07/02/2024 **Octopus Energy agrees to sell Shell broadband customers to TalkTalk**
https://www.thinkbroadband.com/news/9877-octopus-energy-agrees-to-sell-shell-broadband-customers-to-talktalk

16/02/2024 **Virgin Media O2 CEO says they've got a 4 million full-fibre footprint**
https://www.thinkbroadband.com/news/9893-virgin-media-o2-ceo-says-they-ve-got-a-4-million-full-fibre-footprint

16/02/2024 **Nexfibre announces £1bn investment in full fibre infrastructure in 2024**
https://www.thinkbroadband.com/news/9895-nexfibre-announces-1bn-investment-full-fibre

12/03/2024 **Ofcom enforcement update reveals One Touch Switching live date**
https://www.thinkbroadband.com/news/9940-ofcom-enforcement-update-reveals-one-touch-switching-live-date

22/03/2024 **CMA to launch phase 2 investigation in relation to Vodafone and Three merger**
https://www.thinkbroadband.com/news/9962-cma-to-launch-phase-2-investigation-in-relation-to-vodafone-and-three-merger

10/04/2024 **BT and EE change from CPI+ formula to simple amounts for price rises**
https://www.thinkbroadband.com/news/9984-bt-and-ee-change-from-cpi-to-simple-amounts-for-price-rises

24/04/2024 **Ofcom reports that 80% can get gigabit broadband**
https://www.thinkbroadband.com/news/9998-ofcom-reports-that-80-can-get-gigabit-broadband

08/05/2024 **CityFibre now with over 400,000 live customer connections**
https://www.thinkbroadband.com/news/10016-cityfibre-now-with-over-400-000-live-customer-connections

22/05/2024 **BT fined £2.8m by Ofcom for failing EE and Plusnet customers**
https://www.thinkbroadband.com/news/10042-bt-fined-2-8m-by-ofcom-for-failing-ee-and-plusnet-customers

20/05/2024 **BT updates its Digital Voice switchover and PSTN switch off programme**
https://www.thinkbroadband.com/news/10036-bt-updates-it-s-digital-voice-switchover-and-pstn-switch-off-programme

07/06/2024 **67% of UK properties now have a full-fibre broadband option available**
https://www.thinkbroadband.com/news/10074-67-of-uk-properties-now-have-a-full-fibre-broadband-option-available

26/07/2024 **nexfibre publishes ps as 1,277,800 XGS-PON footprint revealed**
https://www.thinkbroadband.com/news/10185-nexfibre-publishes-plans-as-1-277-800-xgs-pon-footprint-revealed

"When we began our journey to deliver broadband information twenty-three years ago, it was because we were eager to inform the public about the early stages of broadband developments. Since then, the Internet is no longer something we connect to once a day, but part of our everyday lives.

We have always strived to be different. We aren't another comparison site. Hey, we don't even consider ourselves a comparison site as most of the time, we aren't trying to persuade users to switch providers. A lot of the tools we have written are designed to help you troubleshoot your broadband connection. We even work with providers to troubleshoot issues at times.

In 2024 we enter our twenty-fifth year of running the site, with the same passion as when we started, and we look forward to further improving what we offer. We are the most up-to-date source of broadband availability and speed information in the UK, and we want to provide the best and most unique tools to help you understand the performance of your Internet connection.

I am proud that after all this time, the team that was there in the first year is still the team that runs the website today."

Sebastien Lahtinen Director

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