

New Build Development Guidance

Demand for gigabit-capable full fibre broadband is growing fast with households and businesses, as connectivity is now an essential part of everyday life, it is expected by all consumers. The UK Government have set the target of achieving 85% gigabit coverage by 2025.

Having the fastest broadband means households no longer have to battle over bandwidth, people enjoy the freedom to live and work more flexibly, businesses increase their productivity, and vital public services thrive.

Having the fastest connections also means the UK is fit-for-the-future, with broadband infrastructure designed to deliver for people's needs for decades to come.

From 26th December 2022 the Building Regulations 2010 will be amended to compel gigabit ready infrastructure in residential developments. This is an outcome following the 'Future Telecoms Infrastructure Review 2018' and 'New Build Developments: Consultation on delivering gigabit-capable connections.

The changes are summarised below:

Gigabit-ready physical infrastructure necessary for gigabit-capable connections (consisting of physical infrastructure including ducts, chambers and termination points) up to a network distribution point, or as close as is reasonably practicable where the developer does not have the right to access land up to the distribution point

Subject to a £2,000 cost cap per dwelling (includes VAT), a gigabit-capable connection (which may include equipment such as an optical fibre cable or other technological means of facilitating such a connection). Where a developer is unable to secure a gigabit-capable connection within the cost cap, developers must install the next fastest technology connection available, provided this can be done without that connection also exceeding the cost cap.

An approved document 'connectivity plan' will be available for developers to submit as evidence they have complied with the building regulations 2010.

Superfast South Yorkshire will continue to work with the South Yorkshire Local Authorities development management departments to support the transition to ensure there are no gaps in the delivery of gigabit capable connectivity.

With any new development the earlier a developer engages with network operators, the more cost effective the solution and deployment will be. Information on the options available from network operators can be found below.

What is gigabit-capable full fibre?

Full-fibre networks use fibre optic cables to connect the exchange directly to each premise. Full-fibre connections are capable of delivering speeds greater than 1 gigabit per second (Gbps; 1 Gbps is equal to 1000 Mbps). Full-fibre networks are more reliable than copper-based networks and cheaper to maintain and operate. Full-fibre networks are also important for supporting high capacity mobile broadband networks, particularly future 5G networks. Full-fibre networks, also referred to as fibre-to-the-premises (FTTP) or fibre-to-the-home (FTTH), consist of fibre optic cables running from the local exchange directly to each premises. Fibre optic cables transmit data using light and can carry more data with faster speeds and significantly less signal loss with distance compared to copper cables. Gigabit-capable connections can also be delivered via technologies such as cable (DOCSIS 3.1) and fixed wireless access.

Developers will be asked to consider installing gigabit-capable full fibre infrastructure from multiple network operators in order to provide choice and competition to consumers. Occupiers should be able to access broadband ideally from a choice of at least two network operators upon occupation of the premises. Developers should also consider their ability to upgrade the infrastructure in the future in order to minimise disruption to occupiers/users.

Residential Developments

Residents in new developments expect to be able to take full advantage of everything the internet has to offer including connecting to the cloud, streaming in HD or ultra-HD, video calls, low-latency online gaming, online shopping and connecting with people on social media. The provision of gigabit-capable full fibre broadband will make the properties more attractive to buyers and will meet the resident's broadband expectations.

Commercial Developments

Having the right level of connectivity is crucial for commercial developments to ensure businesses have the complete infrastructure available from the first day. This will also help developers sell and fill the site.

Network operators are equally interested in working to provide connectivity at commercial sites, but critically need to be made aware of developments at the earliest possible opportunity to enable the best solution.

Retiring the copper network:

Openreach will be retiring the old analogue phone network at the end of 2025. By then everyone in the UK will need to have moved to a Digital Phone Line. For further information visit: <https://www.openreach.com/fibre-broadband/retiring-the-copper-network>

<https://www.ispreview.co.uk/index.php/2021/04/openreach-campaign-to-raise-awareness-of-analogue-uk-phone-retirement.html>

Gigabit-capable full fibre Network Operators:

CityFibre

CityFibre only invests in full fibre networks, which means fibre at every point in the network, including the final leg from the street cabinet. With no reliance on copper infrastructure, our connections are the best way to ensure your buyers receive gigabit-speed, consistent and reliable internet connectivity. Provide a future-proof network capable of 10Gbit/s and beyond. Sites of 10+ plots – free issue of ducts, chambers & lids and ancillary items to site and payment of approved works to developer. Dedicated locally based City Planner for rapid and consistent turnaround of site design. CityFibre are interested in smaller plots of <10 and will provide further support and information on a site by site basis.

Find more information and register your site at: <https://www.cityfibre.com/property/>

Gigaclear

<https://www.gigaclear.com/>

Hyperoptic

<https://hyperoptic.com/property/>

Openreach

Information applies to new residential and commercial developments:

Developer information: <https://www.openreach.com/building-developers-and-projects/fibre-for-developers/registering-your-site>

Rate card for 1-19 plots: <https://www.openreach.com/content/dam/openreach/openreach-dam-files/images/fibre-broadband/fibre-for-developers/registering-your-site/Rate%20card%20website.pdf>

The benefits of installing full fibre network:

https://www.openreach.com/content/dam/openreach/openreach-dam-files/images/fibre-broadband/fibre-for-developers/registering-your-site/OR_10965_Small%20build%20A5%20tri-fold%20leaflet_04%20WEB.pdf

Pine Media

Pine Media is a Sheffield-based internet service provider with its own full-fibre network. It provides broadband connections of up to 900Mbps to residential, business and public-sector customers across Sheffield and the wider South Yorkshire area. Pine Media has a particular focus on connecting hard-to-reach rural communities and city-centre multi-dwelling units.

For more information about Pine Media and its offering, please visit <https://pinemedia.net/>

Virgin Media

Developer information: <https://www.virginmedia.com/broadband/network-expansion>

We're also rolling out our next-generation gigabit-capable broadband which will be available to our entire network by the end of 2021. Our Gig1 broadband is incredibly fast, offering average download speeds of 1,140Mbps, providing a hyperfast service to support even the busiest of connected households.

<https://www.virginmedia.com/corporate/about-us/gigabit-broadband>

[https://www.virginmedia.com/broadband/gigabit?buspart=uk_ps_acq_cable_GOOGLE_Generic_Gigacity_\(London\)_Exact_Generic_Gigacity_Broadband_Exact_1gb%20broadband&CMP=DFA&medium=PPC&gclid=EAlaIqobChMI68znjl-r7glV8IFQBh3YJgvpEAAAYAiAAEgIkqvD_BwE&gclsrc=aw.ds](https://www.virginmedia.com/broadband/gigabit?buspart=uk_ps_acq_cable_GOOGLE_Generic_Gigacity_(London)_Exact_Generic_Gigacity_Broadband_Exact_1gb%20broadband&CMP=DFA&medium=PPC&gclid=EAlaIqobChMI68znjl-r7glV8IFQBh3YJgvpEAAAYAiAAEgIkqvD_BwE&gclsrc=aw.ds)

This list is not exhaustive.

For further information on other technologies available:

<http://www.superfastsouthyorkshire.co.uk/technologies>

Full fibre-build across the United Kingdom:

There are many companies building new networks and many operators focus on a particular geographical area. Telecoms industry news website ISPReview collates industry announcements on full-fibre plans and current coverage. In April 2022 they shared the top 30 full fibre network operators by share of UK new build developments.: <https://www.ispreview.co.uk/index.php/2022/04/top-30-full-fibre-operators-by-share-of-uk-new-build-homes.html>

Gigabit-broadband in the UK: Government targets and policy: House of Commons Library – Briefing Paper CBP 8392: <https://researchbriefings.files.parliament.uk/documents/CBP-8392/CBP-8392.pdf>

Evidence: Installation of gigabit-capable full fibre broadband in new developments:

The types of evidence that can be submitted include:

- A contract or invoice for the installation of the physical infrastructure and the connection to gigabit-capable full fibre broadband (must match the stipulation in the original requirement by the Local Authority)
- Confirmation of the speed that will be achieved by the gigabit-capable full fibre broadband infrastructure, from the network operator