



## News

February 2018

### Welcome!

In our first newsletter of 2018 we're focusing on Ultrafast broadband, along with some stories about more communities who are enjoying – or looking forward to having – superfast broadband through their Community Fibre Partnerships. And our CEO, Clive Selley, talks about 'fibre first' – a new programme that will accelerate our FTTP build programme by 50% to reach three million homes and businesses by the end of 2020.

Ultrafast will create huge wealth for the UK, and many opportunities for careers that previously weren't possible. We're delighted to support the Government's new Gigabit Voucher Scheme that will provide

vouchers worth up to £3,000 to support getting new gigabit capable connections for businesses. The scheme is currently being trialed in a handful of areas and looks set to broaden to more cities soon.



Matt Lloyd,  
Head of  
Community Fibre  
Partnerships,  
Openreach

## Businesses with ultrafast broadband wouldn't be without it



A faster internet connection means firms can do more and sell more. They can serve their customers better and attract new ones more easily.

The core benefit of implementing speeds of over 100Mbps at a small or medium sized business is the vastly faster connectivity speed and increased bandwidth capability the technology provides. Here are some of the benefits firms enjoy with ultrafast:

- **Fast data transfer:** With a gigabit, you can transfer data over the internet faster than you can write data to a thumb drive. Plus you can download data as fast as many computers can save the data to a hard drive.

- **Increased productivity and competitiveness:** Employees won't be twiddling their thumbs, waiting on unresponsive applications to launch and for files to load, saving businesses time and money.
- **Access and increased functionality to the Cloud:** You can fully utilise Cloud computing technology with no limits on the ability to access data, plus with an ultrafast connection you can upload more, faster.
- **Flexibility and cost savings:** Employees can enjoy increased flexible working and also reduce business travel and commuting. Staff can enjoy improved access to online training and video conferencing too.

# Clive Selley, CEO Openreach, talks about the ‘fibre first programme’



**Today the UK is a world leader in digital infrastructure and services of all kinds. We have the largest digital economy in the G20. We’re the biggest internet shoppers on the planet, leaders in programming and innovation, a hotspot for financial technology and a magnet for start-ups.**

But we are also in the grips of a technological revolution. The internet is now something that touches virtually every aspect of our lives and its empowering influence is growing and evolving at an electrifying pace and shows no signs of slowing. The statistics speak for themselves. Just three years ago, Britons used less than half the data they do now on their home broadband. Average speeds were a third of what they are now. I’ve talked to many people in my visits across the UK for whom the internet is now an essential part of daily life – from the kids doing their homework, to filing your tax return or running a kitchen table business.

In order to stay afloat on this digital tidal wave, we need to invest in the next generation of faster broadband technology – Fibre to the Premises (FTTP).

We’ve already made a start – with half a million premises in Britain with access to FTTP – a majority in rural areas. But we want to go further.

February sees the launch of our ‘fibre first programme’ – which fires the starting pistol on a potentially huge upgrade of critical UK infrastructure.

Fibre first is more than just a programme. It’s about how Openreach thinks, and is approaching the challenge of building a large-scale FTTP network for the UK. That means wherever we can in the future, we will build ‘fibre first’ – including in rural areas.

As a first step, we’re accelerating our FTTP build programme by 50% to reach three million homes and businesses by the end of 2020. We’re keen to get going and building work will start in a few months in an initial eight cities – Birmingham, Bristol, Cardiff, Edinburgh, Leeds, Liverpool, London, and Manchester.

Reaching three million premises by 2020 sets Openreach on the right trajectory to achieve its ambition of building a ten million FTTP footprint by the mid-2020s and, if the conditions are right, to go significantly beyond,

bringing the benefits of FTTP to the majority of homes and businesses across the UK.

FTTP is fast – currently up to 1Gbps – enough to stream 200 HD movies simultaneously – but has the potential to go even faster. Last summer Openreach launched the world’s first ever live demonstration of a 100Gbps or ‘hyperfast’ broadband service. So we know it can provide a future-proofed digital platform that can boost productivity for decades to come.

Three million by 2020 might not seem a lot – but connecting every individual property to a full fibre connection is a massive task and takes significant time, engineering and manpower. The job of “fibering” the UK will take decades.

I’m under no illusions about the challenges that lie ahead – it is a massive technical, financial and logistical exercise, but we have the people, the scale, the desire and the expertise to do it.

I believe Openreach can be at the heart of this digital revolution and has a critical role to play in ensuring the UK has a FTTP network, fit for the future. The prize for our wholesale customers, their customers and the UK as a whole is huge.

# Aberdeenshire community crowdfunds to get Ultrafast

People living in a new housing development in Monymusk, Aberdeenshire will have among the fastest broadband speeds in Scotland after agreeing a Community Fibre Partnership with Openreach.

All 44 households on the Clyans Wood development missed out when fibre broadband at speeds of up to 80Mbps reached the village – because the upgrade was planned before their homes were built.

But now they'll leap ahead with a bespoke Fibre to the premise (FTTP) network which is capable of providing ultrafast speeds of up to 1Gbps (gigabits per second) – around 24 times the UK average speed and enough to stream 200 HD Netflix movies simultaneously.

The cost will be covered by investment from Openreach and the residents themselves, who set up a crowdfunding scheme to raise their share of the funding.

Clyans Wood resident Roger Esson launched the appeal on the



crowdfunding service [Spacehive](#). Within two months, the community raised the £8,700 needed to co-fund the project.

Roger, who has recently taken on a senior management role with The Oil & Gas Technology Centre (OGTC) in Aberdeen, said: "In a 21st century connected home where you're running TV and music over the internet, working from home and trying to upload to cloud-based services, you need fast, reliable connectivity."

"The houses over the road had speeds that were 10 times faster, but we were not in any upgrade plans because our postcode didn't exist when they were drawn up. It was very frustrating and seemed beyond our control."

"I investigated as many options as I could and a Community Fibre Partnership with Openreach seemed like the best way forward. There was enough local interest to convince me we could make it happen, and I started the crowdfunding appeal, with neighbours and social media helping to spread the word. People understood that the technology we'd get as part of the upgrade would add value to local properties and future-proof our community for years to come – and it will now happen way before we would have received any other upgrade."

Roger also secured support from the site's developers, Kirkwood Homes, and factors, The Property Management Company, which both contributed to the fund.

## How to get £3000 per premise, for Ultrafast broadband

The Government's Department for Digital, Culture, Media and Sport (DCMS) has launched a new Gigabit Voucher Scheme whereby SMEs\* in some areas can claim up to £3,000 each to get a full fibre ultrafast connection. You can even pool these vouchers for a Fibre to the Premises (FTTP) solution delivered to multiple SMEs, for example, business parks.

The scheme is currently running in four areas:

1. Aberdeen and Aberdeenshire
2. Bristol, with Bath and North East Somerset\*\*
3. Coventry and Warwickshire
4. West Yorkshire Combined Authority (Bradford, Calderdale, Kirklees, Leeds, Wakefield and York)

The vouchers can be put towards a full fibre (FTTP) Community Fibre Partnership solution with Openreach meaning firms will be able to order the

highest speed connections from the broadest range of suppliers. Information on how to apply for ultrafast vouchers is via [this link](#). So if you represent an SME, or if you're a home owner with an SME in your community, then you could be eligible.

### Firms are getting grants

Four businesses in Stareton, Warwickshire, are to benefit from the scheme. They have been awarded grants totaling £12,000 which has virtually covered the cost of bringing ultrafast to their community through having a partnership with us.

Local business owner, Dr Malcolm Strens, said "The community chose Openreach for our main provision because their network is 'open', giving us a choice of fibre broadband providers."

"This time next year we should have some of the fastest internet speeds in

 Department for Digital, Culture, Media & Sport

## GIGABIT BROADBAND VOUCHER SCHEME

the country, after being stuck in the 'slow lane' with speeds below 2Mbps, making life very difficult for both businesses and residents.

"For local high-tech businesses like deeplearn.com, which builds artificial intelligence on 'big data', the ultrafast connections offered by FTTP technology will be invaluable."

\* Small and medium enterprises with up to 249 employees (in total in the organisation) and a turnover no greater than €50m per annum, and/or a balance sheet of no more than €43m.

\*\*Vouchers up to the value of £500 per home for eligible residents in Bristol, Bath and North East Somerset toward a full fibre connection are also available.

# Successful businesses don't think big, they think broad

**Business is all about connection. But the digital revolution has completely tipped the balance. We're in the age of the consumer. Smartphones, superfast broadband and wi-fi have transformed the way we live, work and play. And businesses that want to survive and thrive in this brave new world can't afford to get left behind.**



**Matt Lloyd,**  
Head of  
Community Fibre  
Partnerships, talks  
about ultrafast  
for business

But achieving all this takes much more than simply having an internet connection. Competing now isn't just about doing the same things faster. It's about whole new ways of working that ultrafast broadband enables.

With an ultrafast connection of a gigabit, you'll be able to transfer data over the internet faster than you can write data to a thumb drive. Suddenly, you open up the benefits of cloud services – where applications and data are hosted and accessed from anywhere.

On the end of an ultrafast connection that means you and your colleagues won't have to sit waiting for unresponsive applications to launch and for files to load. Instead you'll have instant, secure access to the tools you need to get the job done, saving money and boosting productivity.

From there, it's just a short step to more advanced applications such as IP telephony, web conferencing, and streaming video. All of these solutions run over the network and require more bandwidth to run effectively. But the extra bandwidth ultrafast provides can handle all of this simultaneously.

So instead of wasting time travelling up and down the country (or round the world) for meetings, you can meet with customers and colleagues in HD quality sound and vision. Similarly, the potential to connect quickly and easily with remote talent also allows businesses to save on office space and provide more work-from-home or remote opportunities to employees.

## Businesses that have made the leap couldn't go back

For example, a renovated Swansea venue, The Hyst, has tapped into the media revolution to stream TV quality images from live performances to social media channels like YouTube and Facebook.

"It is no exaggeration to say that we couldn't physically do any of this without having the ultrafast broadband to power it all," says co-owner Dan Evans. "Digitally broadcasting TV quality live or recorded content uses up a lot of bandwidth and without the ultrafast speeds it just wouldn't work. It has helped what was a small independent business move onto the next level."

Superfast broadband is absolutely key in underpinning the economy now and well into the future. Where once home computers and mobile phones were seen as a fad, it's almost impossible to imagine life without them now. Gigabit broadband will be the same – with forward thinking business who get in early pushing ahead of the rest.

## FTTC and FTTP: What they are

**There are two methods of delivering broadband to a property: fibre to the cabinet (FTTC) and fibre to the premises (FTTP).**

**FTTC** is a connection that uses fibre optic cables from the telephone exchange to a cabinet on the street. A new piece of equipment is installed near the existing cabinet that creates a superfast broadband connection using 'Very high speed digital subscriber line' (VDSL) technology over the remaining copper cable between the cabinet and the home. To deploy a fibre cabinet Openreach first has to decide on an optimum location, then planning permission has to be applied for from the local council. Once that's granted, Openreach puts in a concrete plinth, and liaises with the power company to make sure it can get power to the electronics. After that it deploys the cabinet and electronics and routes a fibre to it.

Once the checks have been done to make sure it's working correctly, Openreach confirms that the cabinet is available for service so internet service providers can offer the end customer a fast fibre broadband package.

**FTTP** is a pure fibre connection – all the way from the exchange into your home or business. It offers speeds of up to 1Gbps. It's sometimes referred to as 'Full Fibre' because the fibre runs from the telephone exchange all the way to the interior of the property. As with FTTC, Openreach informs service providers when new infrastructure has been deployed and is ready to take orders.

Use our [fibre checker](#) to see if you're in an FTTP area. If you are, you'll need to contact a communications provider – some of whom are now offering Ultrafast broadband – to upgrade as it won't happen automatically.

If you're not in a rollout area for FTTC or FTTP, we can help with a Community Fibre Partnership.

# People power to bring superfast fibre broadband to Putney

John Kingdon,  
Local resident and  
broadband campaigner



There are some things you have to accept when you live in London. Rush hour pandemonium, coffee shop confusion and eye-watering prices for a start. But it's balanced by bucket loads of culture on the doorstep, global cuisine on every street and fantastic broadband coverage. So when residents on one Putney road discovered they'd been left behind in the superfast roll-out they couldn't understand why – and decided to take action.

Local resident and broadband campaigner John Kingdon explains: "It was so frustrating. Nearby streets could get superfast fibre broadband. But not us. Apparently it wasn't commercially viable to upgrade our cabinet so we weren't part of the roll-out plans."

## Dealing with dial-up speeds

With a personal and professional interest in technology, John wasn't prepared to accept that and began to look into different ways of bringing better broadband to the street.

"I work from home and it was so slow. I'd be monitoring my speed and experience drop-outs on the order of 10 to 15 times a day. But the straw that broke the camel's back was when I decided to back up our family photos on the cloud.

"We have a lot of photos, but when it was still uploading three and a half weeks after I started, I thought 'that's it, I'm writing a letter!'"

The difficulty was knowing who to contact.

"There were some private companies who could have set up a dedicated

network connection, but that was an expensive and restrictive route. It would have tied us into one supplier forever. It became pretty clear that if you want to talk about communications infrastructure, you talk to Openreach."

## Seeking professional help

With most of the information on extending fibre focused on rural communities in far-flung corners of the country, it seemed for a long time that this little pocket of Putney would fall between the cracks.

"I consider myself techy but how to get help is not well publicised or easy to understand. I filled in forms online but the stock responses didn't really answer my specific questions or deal with our situation. The key was getting through to speak to someone directly. Then things became clear and really began to move."

With an Openreach Community Fibre Partnership advisor on board, John was able to get the answers he needed. And then the hard work started. John had to find out who was affected, and how much it might cost to get fibre in. Initial estimates suggested a figure of about £30,000 as the average needed to get a fibre infrastructure installed. With just 44 homes in the street, that meant quite a big investment for each household – and no guarantee that everyone would be on board.

"The first thing I did was to knock on doors. After 20 years on the street, I was getting to know some of the neighbours for the first time! The response was

positive – younger households in particular were very keen – but everyone had lots of questions."

With support galvanised Openreach arranged for an engineer to survey the current set up and provide more details on a proposed solution. This was when things really started to look up.

"The engineers were able to devise a solution to get fibre to the street for just £7,300," explains John, "so now it was all system go."

## Getting everyone on board

The biggest challenge has been organising the residents and getting a commitment. But a series of letters, meetings and online surveys confirmed that the vast majority – 39 out of 44 – were willing to contribute to get fibre in place.

Now, with the contract signed and planning in progress, John and his fellow residents are itching to get the work done. It takes a minimum of nine months from contract to connection but John is sure it'll be worth the wait.

"It will be absolutely and completely life-changing to people on the street to have a direct fibre broadband connection. We're going to see a massive increase in upload and download speeds. People will be able to shop around for the best deals from a whole host of suppliers – so we'll be getting a vastly improved, more reliable service for the same price we pay now for a patchy slow connection.

"We'll be able to balance work and play, not fight each other for time online and going forward there's a whole new world of opportunities; more remote working, more flexible working, new ways to stream media content and mirror all the network storage in the house.

"More and more will be cloud-based in the future and soon we'll be able to tap into things that are just not possible now. I may even get those family photos backed up at long last."

# 200th community broadband scheme goes live



Last autumn, a small rural community near Harrogate became the 200th in the UK to be upgraded to superfast, fibre broadband as a result of a Community Fibre Partnership with Openreach. Since the upgrade, people living in the 11 households, near the village of Follifoot, are now getting broadband speeds up to 75 times faster than their previous 1Mbps.

The cost was covered by investment from Openreach, the residents themselves, who each contributed equally to the project, and the Government's [Better Broadband Subsidy Scheme](#), which supports households and businesses with

speeds of less than 2Mbps who are not covered by any current fibre broadband rollout plans.

Resident Martin Bentley, who led the campaign for the upgrade, said: "The upgrade to superfast broadband is making the world of difference to our everyday lives. Before, we struggled to carry out even basic online tasks, such as downloading an email attachment or watching a film. Often we would have to use 4G via our mobile phones, which was costly and used a lot of data. It was far from ideal.

"Now every member of the family can be online at the same time. The kids can watch Netflix while we're

online checking emails or doing the online shopping without so much as a noticeable drop in speed. Some of the people living here, including myself, can now work from home when we need to which is providing a much better work/life balance. Before, the speeds we were getting just weren't fast enough to get any work done."

The Openreach community fibre programme is bringing fibre broadband to some of the UK's most challenging areas with more than 30,000 UK households and businesses already able to benefit from faster speeds. The figure is expected to double to 60,000 within 12 months.

## Ultrafast broadband: what is it and why is it important?



**There are two major technologies for Ultrafast: Gfast and fibre to the premise (FTTP).**

Gfast lets us get amazingly high speeds from the same copper pipe that was originally used for voice calls. To put it in perspective, in terms of speed, voice uses about 64kbits, while Gfast offers 330Mbps. With those speeds you could have a 4K TV running in every room of your house simultaneously.

FTTP is an optical fibre almost as thin as a hair on your head that goes all the way to your home. In theory, that allows us to deliver unlimited speed to your premise.

### Why use two technologies?

Because they complement each other very well. There are some locations where FTTP is the obvious choice, like new-build houses, flats and rural locations, whereas Gfast lets you get a quick footprint of Ultrafast, as it lets us reuse the copper.

### What will people be able to do with Ultrafast broadband?

Everything we can dream of now and more besides. For example you could pick a film just before leaving the house, hit download, and it would be ready to watch on your phone or tablet almost immediately.

# Major engineering challenge brings superfast broadband to remote Exmoor village



Villagers in a remote Exmoor community are celebrating the arrival of superfast broadband after the completion of their Community Fibre Partnership. Nearly 100 households in the historic West Somerset village of Luxborough now can access high-speed fibre broadband services offering download speeds of up to 80Mbps.

The project included the installation of many kilometres of overhead and underground fibre optic cabling and two fibre broadband cabinets, the laying of 700 metres of new underground ducting, four road closures, extensive cutting back of trees and even the clearing of blockages in the underground network.

Luxborough resident Nigel Duke, who

organised the fund-raising in the village, said: “The arrival of superfast broadband will make a huge difference to our community. The service is outstandingly good and everybody in the village is thrilled. It is in a completely different league to what we had before.

“A good quality broadband service is essential for households today, particularly in the case of a remote community such as ours where a lot of people run some kind of business from home or need to work from home.

“Until now, the vast majority of the village had no broadband whatsoever apart from a satellite service. We lobbied hard for fibre broadband, but it became clear that, unless we took further action, the best we could hope for would

be a wireless service. We therefore settled on a partnership approach with Openreach.”

Ian Liddell-Grainger, MP for Bridgwater and West Somerset, said: “I am absolutely delighted that Luxborough has now been connected to superfast broadband as a result of a community fibre partnership. I have been in discussions with people in the village for some time about this matter and know how hard they have worked to bring about this connection and much needed improvement to their broadband service. Everyone in the village should be very proud of their efforts and it is a great example of what can be achieved when a local community pulls together.”

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[www.communityfibre.openreach.co.uk](http://www.communityfibre.openreach.co.uk)

Here at Openreach, we're committed to working with all communities to find a fibre solution, and our Community Fibre Partnership scheme is designed to do just this.