Delivering a Fibre First future



Annual Review 2017/18

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Want to know more about our business?



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We have 30,400 people, with over 2,300 trainee engineers joining this year. What does Openreach do?

We're the people behind Britain's digital revolution. We connect homes and businesses, large and small, to the wider world, working every day to achieve faster speeds, broader coverage and better service, for everyone in the UK.

"Our ambition is to deliver the best possible digital connectivity to everyone, everywhere, equally, across the entire country. And as the nation's largest network infrastructure builder, we believe we're the team that can get that job done."

Clive Selley Openreach CEO

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What does Openreach do? Continued

Our network is almost 165 million kilometres long, long enough to go around the world 4,125 times.

11bn invested into our network over the last 10 years

Openreach is an open wholesale network provider. We support more than 600 Communications Provider (CP) customers to connect their customers to their networks. That means we help retail businesses like Sky, TalkTalk, Vodafone and BT to provide their customers with landline, mobile, broadband, TV and data services throughout Britain. And because we're heavily regulated, our services are available to everybody and our products have the same prices, terms and conditions no matter who buys them.

Our network is the largest in the UK. Our superfast broadband network covers more than 27.5 million premises and our dedicated, point-to-point business lines (known as Ethernet) connect thousands of schools, hospitals, financial institutions, mobile masts and large businesses – even TV, CCTV networks and data centres. So it's no exaggeration to say that virtually every aspect of daily life touches our network in some way.

We're proud of what we do. We build, maintain, and manage more than 165 million kilometres of cable stretching from Scotland to Cornwall, Wales to East Anglia, and we carry out 9.5 million engineering jobs each year, dealing with 25,000 customers every day. Our superfast broadband network covers more than

exchange building

27.5m

Our 30,400 people work tirelessly, in all weathers, in every community. And they tackle complicated engineering problems – from coordinating works with councils, highways agencies, energy suppliers, and landowners, to installing and maintaining the complex kit that provides ultrafast broadband services.

Our customers rely on us. It's our network infrastructure that keeps their customers connected, so we work in partnership with them to keep expanding and updating that infrastructure. We're also working closely with other stakeholders – government, Ofcom, the wider industry and third party organisations – to make sure that Britain maintains its position as the leading digital economy in G20.

We're in the process of restructuring Openreach to focus on a fibre first ethos. We want to build more Fibre to the Premises (FTTP) technology because it's faster and more future-proof, but also crucially because it's more reliable.

We've already built our full fibre network to well over half a million properties, mainly in rural areas. But our target – announced in February – is to reach three million front doors by the end of 2020. And we don't want to stop at three million.

If we can get the right conditions to invest, we want to build a ten million footprint by the mid-2020s, and ultimately to reach the majority of Britain.

It's an unrivalled national ambition.

Introduction Mike McTighe Openreach Chairman



Another hugely eventful year at Openreach

It's been a busy twelve months. We've been simultaneously laying the foundations for Britain's ultrafast future; setting more ambitious targets for rolling out Fibre to the Premise; and investing in a better and broader network.

And we've made big strides towards becoming the distinct, legally separate company within BT Group that we committed to after Ofcom's Digital Communications Review (DCR) in 2017.

Decent broadband for everyone

This year we continued to grow our superfast broadband network.

Today it delivers speeds of at least 24 Mbps to more than 27.5 million premises. We were proud to do the heavy lifting on the Government's commitment to make superfast available to 95% of UK homes and businesses by the end of 2017.

This is no mean feat. Few countries around the world can point to such a widespread superfast footprint. But everyone in Britain should be able to get decent broadband speeds and we're still 5% short of good enough.

We won't stop until we close the gap. And we fully support the Government's objective to deliver a Universal Service Obligation.

Delivering an ultrafast future

Having achieved such widespread access to superfast broadband, it's right that we shift our focus to the next generation of ultrafast (100+ Mbps) infrastructure.

Let me be clear – we believe in a full fibre future. In fact I think a future-proofed digital network is essential to the UK's productivity and prosperity – it will serve Britain's people and businesses for decades to come. So we need to develop a viable business case which makes that possible.

This year we've made big progress – honing our skills, tools and techniques, taking our overall ultrafast footprint to more than 1.5 million homes and businesses using FTTP and Gfast technologies. Having consulted our Communications Providers customers during the summer, we now have an accelerated plan to make full fibre/FTTP connections available to 3 million homes and businesses by the end of 2020.

But we want to go a lot further – to 10 million premises and ultimately most of the UK if the business case is feasible. So we now have a Fibre First approach to every network expansion decision we make.

We've begun work in eight major cities and I firmly believe that with the right conditions we can reach 10 million premises by the mid-2020s and the majority of the UK thereafter.

We've also continued to develop technologies that will help us deliver ultrafast connectivity to people quickly and cost effectively.

Investing in our people

"Openreach is

a very different

time last year."

Openreach Chairman

Mike McTighe

business from this

Delivering great customer service will always be our top priority.

I'm encouraged by the persistent progress we've made this year in cutting the number of faults, keeping missed appointments to a minimum and fixing the faults we find much faster. But there's more to do.

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We've kept investing heavily in our people, training and systems, and we hired 2,392 extra engineers to maintain our network and connect our customers throughout Britain. We'll hire a further 3,000 this coming year in support of our Fibre First plans. And we've introduced a lot of new training and career opportunities to help us develop and keep hold of the very best engineering talent.

A bright, more independent future

Openreach is a very different business from this time last year. Following the commitments made under Ofcom's Digital Communications Review (DCR), we're now a separate company, Openreach Limited, wholly owned by BT, with our own board responsible for setting strategy and overseeing performance within a strategic and financial framework defined by BT.

We're tracking well against all of the commitments BT made as a result of the DCR and we're ahead on many, including our governance and rebrand.

I hope by now you'll have spotted one of our new vans, or our people sporting the new Openreach brand – because more are appearing every week. But the changes go far deeper than that.

We're developing stronger relationships with our customers through our consultations on major strategic investments, and we're forging closer ties with the industry, regulators and government for the good of the UK. We know there's a lot more to do and we're excited to be driving Britain's digital revolution.

"I'm encouraged by the progress we've made in cutting the number of faults and missed appointments, and fixing faults faster. But there's still more to do."

Mike McTighe Openreach Chairman "We believe in a full fibre future. In fact, I think it's essential to the UK's productivity and prosperity that we build a futureproofed digital network that will serve our people and businesses for decades to come."

Mike McTighe Openreach Chairman

We have over 97,000 street cabinets and 4.8 million distribution points (telephone poles and junction boxes).

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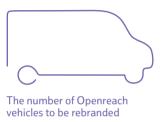
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Why is it so important that Openreach is more independent?



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In 2006, Openreach was created to help promote retail competition across Britain's telecoms market. And in the 12 years since, Britain has become one of the most competitive telecoms markets in the world, with some of the lowest prices in Europe. More than 600 Communications Providers (CP) businesses – the likes of BT, Sky, TalkTalk and Vodafone – taking advantage of our open access network to offer services to their customers.

Simply, enabling competition and treating customers equally is part of our make-up and we're going through the biggest reform in Openreach's history to reinforce that.

This is a direct response to Ofcom's 2015 Digital Communications Review which was all about making sure Britain's digital communications market continues to work for consumers and businesses, where Openreach plays a crucial role.

During the review, Ofcom noted that relationships between Openreach and our CP customers had become strained over the years. Their perception was that we had an incentive to make decisions in the interests of our owner, BT, rather than on behalf of all our CPs.

We also simply weren't meeting the performance standards that we expect of Openreach, or that others expected of us – and this led many people to feel that more investment was needed in our network.

We're now addressing all of these concerns and perceptions head on.

"We're tracking well against all of the commitments BT made as a result of Ofcom's review and we're ahead on many, including our governance and rebrand."

Mike McTighe Openreach Chairman

How are we using these new freedoms?

We're working directly with more than

Working more closely with

Communications Providers

With greater independence, Openreach is becoming more transparent, with a stronger focus on customer service. We're able to collaborate and engage more closely with customers, the industry and with government, and that's helping to deliver better outcomes for our shareholders, the wider economy, businesses, communities and households, as well as improving our own operational performance.

For a start, we have regular and direct interaction with all of our CP customers, and our new, more confidential consultation process is allowing them to speak more freely and openly about their plans, priorities, and concerns.

This year we've conducted major consultations on big strategic issues such as full fibre, rural not-spots and business connectivity. These give us a stronger understanding of how our investment decisions affect our customers, and that means we can define our network strategy to better meet their needs.

As an example, our FTTP consultation showed there was broad support for Openreach to start building a large-scale FTTP network in the UK, and it gave us - and BT as our parent – the confidence to accelerate our build plans by 50%, targeting three million premises by the end of 2020.

Meanwhile our discussions with CPs about a better alternative to dark fibre helped to us to define, develop and refine a new high-bandwidth product called Optical Spectrum Access (OAS) Filter Connect. It offers them all the key benefits of dark fibre - like the freedom to use their own equipment to control and increase bandwidth usage over our fibres, at no extra cost - but without compromising on the service and maintenance levels we can offer.





More than
5000
Community Fibre Partnership
projects agreed

Our greater independence within the BT Group means we're also able to discuss and consider new business models, including co-funding opportunities – and that could push our network expansion and improvement plans yet further.

We've already pursued successful partnerships with communities and groups of businesses (via our Community Fibre Partnership programme) as well as major property developers like Redrow and Grosvenor Estates. And we're open to exploring other models that could deliver better broadband, to more people, more quickly.

We also want to work more closely with central and local government bodies, and to play a stronger role in helping to tackle major issues which affect consumers, businesses and the entire industry. To that end, we've restructured our business to have our own voice at industry forums and in major consultations, and to bring more focus in building partnerships with local authorities and commercial developers. Plus we've created a political case-handling team that works directly with elected officials to tackle and resolve issues.

Our senior and executive teams are now more directly engaged with city mayors and council leaders, and we're busy establishing closer links with important organisations like the CBI, Institute of Directors, the Country Land and Business Association, local councils, Chambers of Commerce and the Federation of Small Businesses. We've also joined industry bodies such as the ISPA and Tech UK, which has not only led to more constructive dialogue across the industry, but also with strategic stakeholders like politicians and Cabinet members.

To sum it up, the new Openreach Limited is living up to the spirit – not just the letter – of the commitments made to Ofcom under its Digital Communications Review – and we believe it's benefitting the economy, our customers, their customers, our shareholders and the entire industry.

Dark Fibre is an unlit length of optical fibre, through which a Communications Providers can control and manage connections by using their own equipment.

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How have we been improving customer service?

Halted and reversed a



The first step in fixing something that's not right is to hold your hands up. We know that in the past we weren't as focused or proactive as we should have been in addressing what's important to our Communications Provider customers (and their customers). But making amends for this is top of our agenda, and we're making progress.

By working closely and openly with our customers, we're understanding their service headaches and priorities and taking action to resolve them.

For a start, we've halted and reversed a six-year rise in the total number of faults on our network. By investing more than \$30 million into proactive maintenance, we saved 175,000 engineering visits last year – because we were fixing faults before our CP customers even reported them to us. This is obviously the way to go, and we plan to invest more next year to keep the fault volumes falling.

At the same time, we know that when a customer does need a visit, missing the appointment isn't acceptable. It's a massive inconvenience for people to wait in all day for nobody to appear. That's why we've taken action to reduce the number of missed appointments we're responsible for by almost a third this year, having halved them the year before.

We're fixing faults and installing new lines faster than before. During 2017/2018, we met or exceeded all 60 of the voice and copper Minimum Service Levels (MSLs) set by Ofcom. Of course we see these as a minimum, not a target, and with tougher measures coming into play over the next three years, we're committed to fulfilling or bettering those too. On-time customer provisions are now at just under



We halved the number of missed appointments we were responsible for in 2016/17 and reduced them by a further 29.7% this year.

openreach.co.uk

Openreach Connecting you to your network

We grew our Ethernet customer base by 11.6% this year.

"Early signs are reasonably positive. On Ethernet – these fast lines for businesses which have been a huge problem over the years – things are turning round, and if you have the Chief Executive of TalkTalk or Sky here I think they would say the intention is there and some of the delivery is starting to improve."

Sharon White Ofcom

Customer satisfaction increased by **3.89/0**

during the year

Another frustration for customers in the past has been when they couldn't contact Openreach with their issues. We want to make it easier for people to report problems, so this year we worked with CPs to launch a live eChat service on our website, and built a dedicated Twitter service team to make it easy for people to come to us directly.

These are just some of the reasons why our CP customer satisfaction grew by 3.8% during the year.

We've also made huge progress on our Ethernet services – the dedicated lines we provide to businesses – and our customers are noticing the difference.

It's fair to say that two years ago we weren't the best at delivering these services. But today we're providing more Ethernet circuits than ever before, and we've reduced a large backlog of complex historic jobs so that we can now fix 95% of Ethernet faults in just five hours. And the feedback we're getting from our major CP customers and the regulator reflects that.

Finally, we have also been correcting the mistakes of the past by compensating CPs affected by the misapplication of Deemed Consent.

Deemed Consent is an agreed contractual process between us and our Communications Provider customers, which allows us to stop installation and reschedule the delivery date for providing Ethernet circuits in various circumstances beyond our control.

Last year we acknowledged the findings of Ofcom's investigation which noted that Openreach had breached its contractual and regulatory obligations by inadequately and retrospectively applying Deemed Consent between January 2013 and December 2014.

We have taken this matter seriously, put additional measures in place to stop it happening again and introduced a new, proactive payment scheme, which compensates CPs in any circumstances where our checks show that the quality of our Deemed Consent applications falls short. We've now agreed terms with the majority of affected CPs, and we will continue to work with the outstanding one to reach a reasonable conclusion.

We've made big progress on improving service but we recognise that there is a lot more to do and we're up for the challenge. Continuing to improve the service we deliver is our number one priority, and it always will be.

How are we faring in our mission to get decent broadband to everyone?

"I want to deliver decent broadband to everyone in the UK. It is not like it is the Government's agenda and not mine. I will have a happier customer base if everyone could get fast broadband."

Clive Selley Openreach Chief Executive Broadband enriches people's lives and the internet has become integral to the way we communicate, find out about things, entertain ourselves, and conduct our business.

Each year, the demand for digital services increases. The latest figures show that data usage is increasing 40% year-on-year, with video being the key driver of that demand. And with the rise of on-demand TV services like Amazon Video and Netflix, it's estimated that video will take up 80% of all internet traffic by 2021.

People are now demanding faster speeds as a right, and at Openreach, we believe that everyone in the UK should have access to decent broadband, no matter where they live. That's why we've invested more than £11 billion into our network over the last decade and built a superfast network – using our fibre-based Fibre to the Cabinet (FTTC) technology – more than 27.5 million homes and businesses can now access.

We've also invested in more than 45 partnerships with local and central government to bring faster broadband to areas that were just too costly for other private investors.

All that work has put the UK in a strong position. We have the largest digital economy in the G20 and today 95% of homes and businesses can access superfast speeds.

But it isn't enough. 5% of Britain still can't buy a decent broadband service offering at least 10 Mbps.





Community Fibre Case Study

Altnaharra and Skerray

The remote Sutherland hamlet of Altnaharra and nearby Skerray now have among the fastest broadband speeds (up to 330 Mbps) in Scotland thanks to a partnership with Openreach. As part of the ultrafast pilots, local people and workers from the Altnaharra Estate helped dig in around 4,800 metres of cable. One of the beneficiaries is the Altnaharra Hotel, a 17th-century hotel near the shore of Loch Naver. Hotel manager Becy Robertson said: "Our broadband was snail pace. We now have fibre in the office with a download speed of 80 Mbps and it makes a big difference. Whether it's cyclists wanting to blog, folk coming in for a coffee, or visitors checking in or even booking, the first thing everyone wants to know is whether there is WiFi. People really do see it as essential."

"The first thing everyone wants to know is whether there is WiFi."

Becy Robertson Altnaharra Hotel Hotel Manager

Community Fibre Case Study

Otter Brewery, Devon

The award-winning Otter Brewery, set in the remote Luppitt Valley near Honiton, now enjoys some of the fastest broadband in the UK. The project was co-funded by the Brewery and Openreach. Extensive engineering work was needed, including the installation of about four kilometres of underground and overhead cabling. Patrick McCaig, managing director of Otter Brewery, said: "We're already finding that ultrafast broadband is giving our business a major boost. Our remote and rural location helps to give the beers that we produce their purity and character, the downside has always been that we have lagged behind in terms of connectivity."

"Ultrafast broadband is giving our business a major boost."

Patrick McCaig Otter Brewery Managing Director



"Access to decent broadband across the United Kingdom is important for all of us to participate in today's society."

Mike McTighe Openreach Chairman

"I want to deliver decent broadband to everyone in the UK. It is not like it is the Government's agenda and not mine. I will have a happier customer base if everyone could get fast broadband."

Clive Selley Openreach CEO Of course it's more difficult to access remote, rural areas, and many of the communities in this final few percent are so difficult and expensive to reach that they've been turned down or ignored by other network builders and the publicly subsidised schemes.

But we're not giving up on them.

Openreach is still making faster, better broadband available to more than 17,000 more properties every week and we're continuing to explore commercial opportunities to extend our footprint further.

We've also promised that wherever people are, and whatever they need faster broadband for, our Community Fibre Partnerships scheme enables us to build them a customised broadband solution to meet their needs.

Whether people live in a city-centre block of flats, a small hamlet or represent a group of businesses, we've promised to work with them to bring fast-fibre broadband to their area through co-funding. Where possible, we support self-dig projects and we bring together funding from local authorities, government voucher schemes, and other grants to help make things affordable. And we always contribute toward the costs in line with our own commercial model too.

So far, we've committed to more than 500 of these projects across the country, and some 65,000 homes and businesses that weren't in anyone's plan to get a broadband upgrade have now benefited as a result of partnering with us.

Meanwhile, the UK Government is supporting investment to take superfast broadband beyond 95% as part of its Broadband Delivery UK (BDUK) programme, and introducing a Universal Service Obligation (USO) – so that by 2020, everyone in the UK will have the legal right to request broadband speeds of at least 10 Mbps.

This is a huge and costly challenge for government, with significant hurdles to overcome, but as Ofcom works to design and implement a scheme to deliver the USO, we will continue to work with our parent, BT, to support Ofcom and government's objective to make slow speeds a thing of the past. Our superfast broadband network is available to nearly 27.6m homes and



How much investment has gone into high-speed broadband?

We've now made superfast fibre broadband – of over 24 Mbps – available to

27.5m homes and businesses, of which

9.8m

We're upgrading over **17,000** more homes and businesses each week Our commitment as Britain's national digital infrastructure provider is long-standing and it's long-term.

Over the past ten years, we've invested more than £11 billion into the Openreach network. A massive amount of money that's funded an enormous build – making superfast broadband available to more than 27.5 million homes and businesses across the country.

In doing that, we helped the UK become the leading digital economy in the G20 as a proportion of GDP.

And we want it to stay that way.

We want to deliver faster, more reliable, more future-proof Fibre to the Premises (FTTP) technology across Britain, so in February 2018 we fired the starting gun on our next big build.

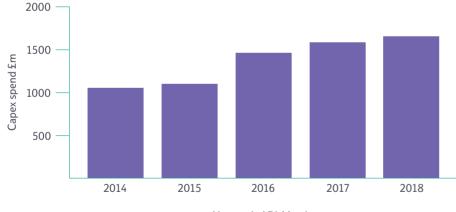
Full fibre is where the future lies, and we've called this programme Fibre First because our attitude is just that. Full fibre is our default technology choice and we'll build it as fast as we can, wherever it makes economic sense.

We've already built our full fibre network to well over half a million properties – mainly in rural areas – but our target is to reach three million homes across the UK by the end of 2020. And we don't want to stop there.

"We won't be just the fastest full fibre builder in the UK, but we'll be Britain's national, dependable full fibre delivery machine for years to come."

Clive Selley Openreach CEO

We've been investing more each year into our network



Year ended 31 March

We're accelerating our build of Fibre to the Premises by 5000/00 to make it available to 3000 premises by the end of 2020

We're changing your broadband, starting with eight major cities Birmingham Bristol Edinburgh Manchester Cardiff London Leeds Liverpool With superfast broadband, we upgraded two thirds of the country on our own. And if we can get the right conditions to invest, we want to repeat that with full fibre.

With the right business case, we want to build a ten million footprint by the mid-2020s and ultimately to reach the majority of Britain. It's an unrivalled national ambition.

Last year, with financial support from our parent BT, we spent more than ± 1.5 billion on our network. This year we'll invest more than any prior year.

Last year we built more FTTP connections than in any previous year. This year we'll double our FTTP footprint.

Last year we hired more than 2,300 new engineers to support our fibre ambitions. This year we're running the largest recruitment drive in our history – with 3,000 more set to join the ranks.

We're also investing in Gfast technology [read more on page 38], which builds on our existing network and makes it capable of providing ultrafast speeds of over 100 Mbps. Gfast is still a key part of our strategy and, because it involves less civil engineering, it means we can upgrade millions of homes and businesses over a much shorter period of time. We've already reached one million homes with this technology.

But full fibre will be the priority and we won't build Gfast where we intend to put in FTTP. We also don't know yet how fast we can go. But be assured that Openreach will go full throttle, at scale, to deliver a full fibre future.

Often the headlines about full fibre focus on speed. But FTTP's about more than that. It's about a consistent, dependable service – and the same is true of Openreach.

What are the latest innovations exciting us at Openreach?

There are all kinds of breakthroughs, innovations and technologies that are helping our industry progress. Some of them improve the way we deliver faster broadband and provide a better service to consumers and businesses, while others make it easier to build and maintain our network.

Here are ten innovations that are changing the way we think and work.

01.

Connectorised fibre

We have developed a new 'plug and play' method of connecting properties to our FTTP network. It means we don't need to splice fibre to create joints – which typically takes much longer – we just plug our fibre cables together. It's a great development because we don't need expensive and complex equipment, it's quicker, there's less training involved and more of our engineers can do it. We estimate that connectorised fibre and changes to our build process have helped us halve the cost of deploying FTTP.

02.

Ditch witch digger

The ditch witch is a new lightweight digger for creating cabling trenches. To the uninitiated, it looks something like a quad bike with a chainsaw attached to the front and is designed to gouge out a 4-inch wide trench in the verge by the side of the road. It doesn't affect passing traffic and it's particularly useful in remote rural areas, where many roads are single-track lanes. This makes closing them for extensive digging work extremely inconvenient for locals, and possibly even dangerous if there is an emergency.

03.

Slippery fish

Slippery fish is the nickname for a 12-fibre cable with two glass reinforced stiffening rods. This gives it enough strength to be pushed through congested ducts and even blockages, so we don't have to dig up the road to lay the fibre. Slippery fish is not exactly the most glamorous of innovations, but it means we can upgrade customers more quickly and it saves us considerable time and money.

04.

Aerial drones

We've used aerial drones to deliver fibre broadband to people who may never have been reached by traditional methods. These are areas where our engineers face challenging terrain - like a densely forested area of Wales, for example, where we flew a drone in over the top of the tree canopy. We hooked it up to a length of high strength fishing line, which was then flown around 100 metres and dropped across the top of the trees. That line was attached to a draw-rope – itself attached to a fibre cable – which could then be pulled along the unobstructed route laid by the drone.



nnectorised block for FTTP





Slippery fish optical cabl



37

05.

standards.

Gfast Gfast delivers ultrafast broadband speeds of more than 100 Mbps. But the great thing about it is that it builds on our existing infrastructure. changing the way we transmit broadband signals to make them ultrafast without the need to dig up roads and install new cabling all the way to a property. It means we can make speeds of up to 330 Mbps (nearly ten times today's UK average) available to millions of homes and businesses in a fast. cost-effective way, with minimal disruption. Our R&D team pioneered Gfast, including development of international

06.

Virtual reality headsets We used virtual reality headsets in a recent recruitment drive to attract over 2,300 new trainee engineers. Potential candidates were able to discover exactly what life as a field engineer involves, such as climbing a telephone pole or exploring the local exchange building in immersive 3D, all from the perspective of a real engineer. Have a look for yourself on our YouTube channel.

07.

first time round.

New iPhone apps Portable and focused, mobile phone apps are proving extremely handy in supporting our engineers in the field. MyJobs, one of our most popular apps, helps engineers analyse the performance of customers' broadband lines. They can see the history in the form of graphs, making it easy to spot patterns and identify issues. It means we're spotting things we might not have found so quickly in the past, and that means less repeat visits for our engineers and more issues resolved

08.

Optical Spectrum Access (OSA) Filter Connect

This is a high-bandwidth service for our business customers that blends the responsiveness of managed offerings with the benefits (flexibility and scalability) of dark fibre access. We describe it as virtual dark fibre because it allows Communications Providers to use their own kit to increase their bandwidth requirements at no extra cost, whilst we continue to manage the connection for them. It means that unlike with dark fibre, we can still spot and fix issues in under five hours.

09.

Hyperfast broadband We have developed a brand new hyperfast broadband service, which can achieve speeds of 100 Gbps. Working with our technology suppliers, we used a standard residential Fibre to the Premises (FTTP) connection with some advanced transmission technology that can boost the broadband signal, giving it capacity to stream 4,000 movies in ultra HD quality at the same time. It's going to take a fair few years for people to need that sort of bandwidth, but we've certainly shown what's possible when it comes to fibre.

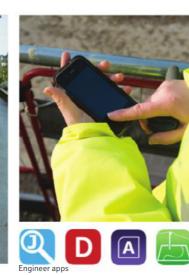
10.

3D printing

Having a 3D printer allows our engineers to guickly design and manufacture their own tools and kit to make their jobs easier or our network better. We're trialling and evaluating their creations, and if there's a positive impact on customers, then it's likely we'll roll them out nationwide.















Openreach is all about our people and our network – so we're really proud of the scale and capability we can muster when it comes to our people power.

We have the UK's largest team of telecoms experts, and they're working across the country, in every community, to expand, upgrade, maintain and install our network.

Our 30,400 people range from trainees to advanced engineers, from network architects and specialists to qualified planners. They're hugely skilled, innovative and resourceful, and their experience, dedication and character are critical to our success.

Last year we hired more than 2,300 new engineers to help us deliver better, broader and faster services and this year our ambitions have grown considerably.

That's why we've launched the largest recruitment drive in our history, hiring 3,500 engineers over the next 12 months to support our fibre and service improvement plans from Penzance to the Orkney Islands.

But it's not just about bringing in new recruits. We need more people with fibre skills and we want happy, motivated, talented people that want to stay with Openreach as we continue to deliver Britain's digital revolution.

To that end, we recently launched new career pathways which map out the opportunities and options for all of our engineers, and guide them through the skills, accountabilities and experiences they'll need to get to where they want to be. "We are putting more people into field engineering, which is the sharp end of the business for us. That is where services are provisioned for customers and where faults are fixed."

Mike McTighe Openreach Chairman



"The work Openreach have done to shift their culture in the last 18 months is exemplary. They're creating more avenues and opportunities for their employees to learn, giving them the opportunity to put those skills into practice, and it's having a genuine impact on their service levels as a business. It's been a great example of how a company can create the conditions for a workforce to thrive."

Sir Brendan Barber Openreach board member



We're also building 12 new regional training schools across the country which will support our people to make our Fibre First ambitions a reality. We've modernised our approach to training, including the design and build of our first Open Street in Bradford – a cutting edge training environment which emulates a typical British street – giving our engineers the perfect setting to practise and enhance their skills without touching the live network.

We'll replicate this approach throughout the country and, during 2018, we'll deliver 140,000 training days for our engineers – double the amount we provided four years ago in 2014.

We've also redesigned our induction programme and learner pathways to give new joiners the skills they need to improve service, whilst our traditional apprentice programme has evolved into a new trainee scheme linked to a National Vocational Qualification (NVQ).

Our annual employee survey suggests that all of this activity has led to a huge rise in engagement and optimism – particularly relating to progression opportunities – amongst our people.

"It's great news that Openreach is creating 3,500 new permanent jobs rolling out full fibre broadband. This digital infrastructure will be welcomed by families and businesses across the country."

Philip Hammond Chancellor of the Exchequer "Every day, Openreach engineers are working in all weathers across the length and breadth of Britain, connecting homes and businesses and making sure people can access the highquality broadband services they need."

Clive Selley Openreach CEO

5000 work placements this year At the same time we've taken on 500 work placements during the course of the year to give young people a taster of what it's like to work for Openreach and it's really encouraging that our recruitment drive in 2017 generated more than 25,000 applications – the best response we've ever had to a jobs announcement.

We're really pleased that people see Openreach as an exciting place to build a career, and they're eager to help us improve service and roll out more fibre.

But we recognise there's more to do.

We're keen to continue investing in building a rich, diverse and motivated workforce that reflects and serves our customer base and continues to drive Britain's digital revolution. Because as we said before, Openreach is all about our people and our network.

What are our main priorities for next year?

"We'll continue to invest in our people and we're already in the process of re-training and upskilling to make Fibre First a reality. We plan to hire around 3,500 engineers to kick-start Fibre First and further improve the reliability and performance of our existing networks."

Clive Selley Openreach CEO First and foremost, improving customer service is – and continues to be – our top priority. And whilst we made huge progress this year, we know we have a lot more to do.

We are set Minimum Service Levels (MSLs) by Ofcom – and we see these as just that, a minimum. We don't just plan to meet the MSLs, we aim to beat them and provide the best for all of our customers. That includes making repairs on our fibre network at least 3% faster than we did this year.

To help us do that, we'll be hiring 3,500 new engineers, delivering double the amount of training and setting even higher standards for ourselves.

We'll also continue to support our parent, BT, in working with the Government and Ofcom as they create a universal and cost-effective solution to deliver decent broadband to everybody in Britain.

We were proud to do the heavy lifting on the Government's commitment to make superfast available to 95% of UK homes and businesses by the end of 2017. But that still leaves 5% of homes and businesses that have been turned down or ignored by other companies and publicly subsidised schemes.

The Government's solution is two-pronged and we'll be supporting both efforts this year. Its Broadband Delivery UK programme will continue to push superfast broadband coverage further, and government has introduced a Universal Service Obligation (USO) giving everyone in England, Wales and Northern Ireland the legal right to request a service with speeds of at least 10 Mbps from the end of 2020. We'll be hiring **3,500** new engineers

An accelerated plan to make full fibre/FTTP connections

homes and businesses by the end

available to

of 2020

The Scottish Government is also aiming to deliver a minimum of 30 Mbps speeds throughout Scotland and we share their desire to deliver faster, more reliable broadband to the final 5%.

For our part, we'll always help a community find a solution when it wants faster, more reliable broadband through our Community Fibre Partnership scheme.

We're still building our superfast network into more remote areas, and we're exploring new solutions and innovations that could help expand our footprint. We'll also work directly to connect communities, by contributing as much funding as a business can when it has employees, pensioners and shareholders to consider. We ask such communities to cover the remaining costs of the build, and we work with them to take advantage of other funding sources that are available to help deliver fibre broadband.

Meanwhile we'll be putting our foot to the pedal on our next big build.

The Fibre First programme will see us building a full fibre network to three million premises by the end of 2020 across an initial eight cities – Birmingham, Bristol, Cardiff, Edinburgh, Leeds, Liverpool, London and Manchester. By the end of May 2018, we'll be building to 1,000 homes each week in all eight of these first wave cities – and we'll announce plans for more towns, cities and boroughs later this year. Under the right investment conditions, we believe we can build full fibre to ten million homes and businesses by the mid-2020s and ultimately to the majority of the UK. What are our main priorities for next year? Continued This is an expensive, massive and complex civil engineering project. We know we have the skills and expertise to get the job done and we're constantly looking at ways to build the business case for wider deployment, and to accelerate our own build and cut costs, without compromising on quality. For example, by co-locating with our suppliers and local authorities, we're finding better ways of working on planning, road closures, and permissions to access private land.

But to create a truly national full fibre network, builders like Openreach will need help from government, local authorities, CPs and Ofcom to create the conditions that incentivise investment and reward risk appropriately.

"We will double our FTTP footprint this year."

Clive Selley Openreach CEO We need to work in partnership to remove the barriers and red tape that get in the way of delivery and, whilst we've been encouraged by the approach of the DCMS barrier-busting team, the whole industry needs a solution to business rates that better reflects the long term nature of full fibre investments.

Ofcom's Wholesale Local Access market review has also given us more certainty on pricing, but regulation needs to promote FTTP investment and take-up over the long term, and to incentivise investments by allowing a fair return. We will also be looking for unequivocal support for cost recovery, the switchover from legacy copper networks to new fibre ones, and greater flexibility to withdraw products when we're launching new ones.

We will continue to support and feed into the Government's Future Telecoms Infrastructure Review to ensure these barriers are addressed and to create a supportive environment for digital infrastructure investment in the UK. "I'm often asked whether it is hard to get the money [for full fibre]. That misses the point. The point is creating the business case. For full fibre that is fairly challenging because it is expensive and takes a long time to deploy."

Clive Selley Openreach CEO



homes and businesses could upgrade to our superfast services today

Openreach was created in **2006** to help promote retail competition across Britain's telecoms market

"Working closely with central and local government and our Communications Provider customers, we will identify the cities, towns and rural areas where we can build a future-proofed, FTTP network that's capable of delivering gigabit speeds to all homes and businesses at an affordable cost."

Clive Selley Openreach CEO Next year we'll also continue to build our Gfast platform – which will make ultrafast speeds available to millions of premises between now and the end of 2020. The beauty of Gfast is that we can build it fast, and we'll be targeting areas that aren't in our initial plan for FTTP, so more people will benefit.

More than 17 million homes and businesses that could upgrade to our superfast services today, haven't – so we'll be encouraging them to do so, and in particular for people to move onto our full fibre network quickly once we build it. Mass market adoption is critical to making a national full fibre business case work, so we'll also be exploring ways to reach commercial agreements with Communications Providers in order to achieve this.

And finally, we'll continue our role as an enabler for others.

Openreach was established in 2006 to promote competition in the telecoms market. It's the reason we exist. And in delivering Britain's full fibre future, we'll also be a partner for businesses that want to use our poles and holes to increase their full fibre footprints.

Our passive network has been open since 2011. And by investing in automation, digital maps and self-service tools, we'll continue to make it as easy for others to build full fibre networks as it is for Openreach. So far, more than ten companies have earmarked around 1,000 kilometres of our network to deploy their own fibre, and we're very much open for more business.

So often the headlines about full fibre focus on speed. And in that respect it's a truly amazing invention. But FTTP's about a consistent, dependable service – and the same is true of Openreach.

We don't just intend to be Britain's fastest full fibre builder, we plan to be its consistent, dependable, national infrastructure provider for years to come.

Our operating costs were up

Despite around £230m of regulatory price changes, we held revenue flat thanks to strong demand for fibre products.

Our operating costs were up 1% (2015/16: 1%) reflecting investment in delivering our copper minimum service levels, halving missed appointments by the end of the financial year and upskilling our workforce.

EBITDA decreased 1% (2015/16: 2% increase). With depreciation and amortisation up 5% (2015/16: down 3%), operating profit was down 7% (2015/16: up 9%).

Capital expenditure was £1,573m, up £126m or 9% (2015/16: up £365m or 34%) reflecting our ongoing investment in fibre coverage and speed, and the delivery of more complex Ethernet circuits.

This was after gross grant income of £159m (2015/16: £320m) directly related to our activity on the BDUK programme build and offset by the deferral of £185m of the total grant income (2015/16: £227m) due to strong levels of fibre broadband take-up.

01. Clive Selley **Openreach CEO**

02. Katie Milligan MD - Customer. **Commercial and Propositions**

03. Kevin Murphy MD – Fibre and Network Delivery

04. Olly Kunc MD – Service Delivery

05. Kim Mears MD – Strategic Infrastructure Development

06. Andy Whale Chief Engineer

07. Kevin Brady **HR** Director

08. Matt Davies Chief Financial Officer

09. Nigel Cheek General Counsel

10. Richard Allwood **Chief Strategy Officer**

11. Mark Shurmer MD – Regulatory Affairs

12. Catherine Colloms Director Corporate Affairs

13. Colin Lees Openreach CIO

























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Community Fibre Partnerships https://www.openreach.co.uk/communityfibre

Working with our customers https://www.openreach.co.uk/orpg/home/home.do

Openreach Annual Report and Accounts https://www.homeandbusiness.openreach.co.uk/ourperformance/annual-report

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