

# Speech: Building a full fibre Britain

Thanks for the opportunity to speak with you today.

Like many of you, I often meet interesting people in my job. But there's one serious frustration. And that is, just as I'm talking to them about the many fascinating things they do, instead they want to badger me about their broadband. Every day.

This problem reached its zenith just last week when I met Tim Peake, Britain's inspirational astronaut, and he collared me about the broadband on his space station.

Tim, for next time you're up there, I'm sure one of our ambitious Altnets can help.

So today is different. Because today, it's you who've got to listen to me talk about broadband. And not just my broadband, but everyone's.

It is a full year since I spoke to the Broadband World Forum, and set out our plans for a full fibre future. Today I want to talk about the exciting momentum that is building in this industry and about our plans for the future.

Let's start by acknowledging Britain's current high levels of connectivity.

The recent Global Connectivity Index published by Huawei, once again ranked the UK top five out of 50 major nations in terms of connectivity.

Our superfast connectivity is the best in Europe.

Our economy has the biggest digital economy, by proportion, of major nations, and we have one of the highest percentages of individual Internet usage. President Trump's use of Twitter probably contributes to America's higher score.

This is in no small part because Government has strongly supported the digitalisation of the economy, and made sure the business environment is friendly to new innovations and the growth of the market.

The statistics to back this up are clear.

We have announced that up to £645 million is to be made available to help take superfast broadband coverage to 98 per cent of the nation over the next few years.

In total we are investing £1.1 billion in our digital infrastructure to support the next generation of fast and reliable mobile and broadband communications for consumers and businesses.

And to support businesses we are introducing 100% business rates relief for

operators who install new fibre on their networks.

Superfast broadband is also now available to over 94% of premises, on the way to hitting our target of 95% by the end of the year, and on mobile, the MNOs are legally obliged to reaching ninety per cent geographic coverage by December. 4G coverage continues to rise sharply.

The Connectivity Index also predicts that, as these amazing digital technologies advance, our advantage will drive future economic growth. That's one economic forecast I am prepared to make.

But we can always, always do better.

Over the past year we have published both our Digital Strategy and published our 5G strategy.

We have agreed on the separation of BT and Openreach.

Virgin Media continues at pace with the rollout of Project Lightning bringing ultrafast speeds to more and more of the country.

KCOM are also doing their part and are on track to cover 150,000 premises with their Lightstream Project in Hull.

We have seen record levels of investment into the altnets, including £500 million from Cityfibre and £200 million from Hyperoptic.

Openreach has established its independent board and declared its clear direction in the pursuit of the full fibre future.

We have published proposals for the US0.

We have secured over a billion pounds more of taxpayers' money for next generation technologies and we have introduced rate relief for putting new fibre into the ground.

So we have been busy.

I think this effort demonstrates beyond any doubt the UK Government's commitment to a full fibre and 5G future. We are guided by our mission to deliver full connectivity where people live, work, and travel.

I said a year ago that "I will be on the side of the challenger, helping in every way I can to deliver fair competition and a level playing field."

I meant it then, I mean it now.

And I'm delighted the Altnets are going from strength to strength.

CityFibre, which is already in more than 40 cities, has announced plans to extend its network in more than ten extra cities across the UK.

Gigaclear is bringing ultrafast speeds to consumers and their network now spans over 15 counties.

Community schemes like B4RN and others are expanding.

Indeed INCA has estimated that coverage from its members could potentially reach 18 per cent of UK premises by 2020.

We welcome these developments and encourage more.

But before I set out our next steps on delivering full fibre and 5G, let's turn first to progress on the current technology of fibre to the cabinet or, as it might better be known, copper-to-the-premise.

We have invested £1.7bn of UK taxpayers' money in delivering superfast broadband. For today's needs, it delivers what an average household wants.

Reaching 95% by the end of the year is a very important milestone, and not least with the over £600m of funding from claw-back in the existing BDUK contacts, we hope to go further.

Universal coverage of high speed broadband of at least 10Mbps is an important manifesto commitment that we must deliver, so everyone has today's technology, as we develop the solutions and market for tomorrow's.

On the USO, we have published our consultation on the regulatory option and will be responding to the consultation shortly.

We are also considering the offer put forward by BT to deliver the USO. We welcome their proposal, and we are considering both options on the table, but unless BT can convince us they will deliver universal coverage by 2020 we will have no option but to go down the regulatory route.

We are determined to deliver high speed broadband to all by 2020.

And then, we turn our attention to full fibre. For while the existing copper network is important today, a copper-to-the-premise solution is not fit for the future.

So while completing the rollout of today's technology is important, we are determined to be on the front foot with the technology of tomorrow too. That means full fibre. We cannot stress enough that full fibre is the future.

For we are in the very early days. UK full fibre coverage is just 3%. This will not stand. We will strain every sinew to get it rolled out in Britain.

Over the last year we have unveiled a whole suite of policies to get the UK's full fibre roll out going.

Like the CTPP roll out, this is a mixed-economy approach: with some taxpayers' funding, but the majority of funding from the market.

First, we are helping to level the playing field by supporting insurgent altnets reach their fibre ambitions through the Digital Infrastructure Investment Fund, which will improve access to commercial finance.

Next, we are investing £200m to fund locally-led projects across the UK. This "Local Full Fibre Networks" programme aims to provide the fastest and most reliable broadband available.

Working with providers and local bodies we have shaped a programme focused on improving the business case for the private sector to invest in fibre networks, and to connect even more homes and businesses.

The Local Full Fibre Network project involves upgrading connections into public buildings with fibre, providing gigabit connection vouchers to increase business take-up; and improving access upgrades to publicly-owned infrastructure. And we're working with Network Rail and others to open up existing fibre, and roll out new fibre down train lines. This rail project is incredibly important and we welcome approaches from industry on how to get connectivity down our railways.

We've got going. Our six wave one projects will trial the approaches outlined for the programme, including public sector as an anchor tenant, reusing public sector infrastructure, and testing gigabit vouchers.

We are particularly interested in how the market responds and how much full fibre build is stimulated.

But we're not just waiting for the results. We're already pushing on with the next wave.

We are developing a competitive process for local areas to bid for resources from a 'Challenge Fund', and that is for projects that will support the stimulation of large scale commercial investment in full fibre networks. Recently we invited local bodies from across the UK to submit expressions of interest in the programme, and their responses will help further shape how we operate this fund.

Details on how the fund can be accessed will be announced shortly, and at that launch we will clearly explain the competitive process through which funding will be allocated. Be clear, there will be no ring fencing of funds to particular regions. Regional roadshow events in support of the Challenge Fund process will take place over the coming months.

The crucial thing about all these projects is that they are actively designed to show this works, to level the playing field, and to help make the business case both inside and outside Government.

Of course taxpayers cash isn't everything. So we're also working on reducing cost and ensuring the market is structured right.

Many of you have complained about the cost of laying fibre. Ofcom are working to reduce costs, to open up ducts and poles, to reduce burdens and to get the wholesale pricing structures right. They and we are determined to ensure there is a strong return on the investment that is so badly needed. We very much welcome Ofcom's efforts in these areas and hope the outcome of the Wholesale Local Access market review will further encourage fibre investment. And I welcome the laser-focus of Lord Adonis's National Infrastructure

Commission which is demonstrating the case for and the terrific returns to connectivity.

To reduce some of the direct costs of roll out, on top of the business rates holiday, we have set up a barrier busting taskforce across Government.

In May 2017 the Broadband Stakeholder Group published its report 'Tackling Barriers to Telecoms Deployment'. This looked at the factors slowing down the rollout of UK Broadband, including local authority planning and the business rates regime for fibre.

As a direct response to this excellent report, our Barrier Busting Taskforce aims to reduce the costs of street-works, liberalising planning, to simplify wayleave agreements and tackle every and any barrier to rollout. We will systematically examine every issues flagged in the report, and then working with local bodies to identify solutions or to implement best practice. We are working with local authorities to standardise their approach and reduce bureaucracy, and we're prepared to change regulations if needed, on planning, transport, and wayleave rules if we need to. We want to hear from you about the practical barriers to deployment.

Like you, we want to get the cost per premise passed down.

As well as government funding, and busting barriers, we are determined to ensure that we get the market structure and incentives right.

I believe that the market for full fibre will look very different to the market for copper connections, and we want to see a fully competitive market for full fibre with a panoply of potential players. And I'm pretty sure one of the reasons so many players large and small are getting going at scale now is to play a part in that competitive market in the future.

The first action we took last year of course was to reach agreement on the future structure of BT and Openreach. I welcome that agreement, and I can already see the new Independent Board under the astute Chairmanship of Mike McTigue making a difference.

The test of the success of the legal separation will be twofold.

First, significantly increased investment by BT Group, through Openreach in the country's full fibre digital infrastructure.

And second, Openreach becoming more responsive to its industry customers, both by entering into new arrangements with customers other than BT group, and being proactive and enthusiastic on working with others on the ground, for example opening up access to ducts and poles. Like Ofcom, we want Openreach to provide better access to data on its duct and poles so competitors can plan new networks.

While I welcome the work Openreach are doing to reposition themselves, I am concerned at the speed BT Group are moving in formally implementing the agreed split. Unless we make significant progress very soon we will have to talk to Ofcom about what would be needed to make this happen.

So, we have made progress in improving the market, to ensure we have a competitive market for our full fibre future.

But we want to make sure we get it right.

So in the coming months, we will be examining the market for investment in future connectivity in the UK, to ensure we have markets and regulations that encourage investment now and in the future. The purpose of this work, which we shall lead, will be to build on what has been achieved so far, and make sure that the conditions are as good as they can be to maximise investment in full fibre and new technologies.

This commitment to developing a full fibre Britain will make the country the best place in the world for a telecommunications company to invest, because with full fibre comes unlimited potential for business. I'm not sure if I mentioned, but we really are determined to deliver Britain's full fibre future.

Finally, I want to turn to the interaction with mobile. Because of course what really matters to people is not the mode, but the connection. A fast, reliable, secure connection, whenever you need it, wherever you live, work, and travel.

In a market that's increasingly vertically integrated, the links between fibre and mobile are increasingly clear.

At a basic level, I find it astonishing that a large proportion of 4G base stations today are connected via copper and radio links. While this may be adequate for 4G services, it makes it hard to maximise the benefits of 4G, let alone reach the fast approaching multi-gigabit demands of 5G.

And we're going to need fibre spines in much greater density to deliver that 5G connection.

I don't believe 5G and full fibre are alternatives. Even if 5G can bring great speeds to your phone, there's only ever limited spectrum, so full fibre and 5G are complementary technologies.

Our 5G strategy, published at Budget 2017, sets out how we will lead the world in 5G, and we are working on an update to be published before the end of the year.

In October, we launched a competition to select a number of projects to be funded in 2018/19 as part of the 5G Testbeds & Trials programme.

This first phase of the programme will help encourage the development of a 5G ecosystem in the UK and builds on the foundations laid by our investment in the 5G university research announced at the Budget. As with full fibre, our aim is to demonstrate the benefits 5G can deliver for businesses and how new applications and services can be developed using 5G technology.

The full fibre and 5G programmes are being taken forward under a shared budget, and we hope to fund joint projects that explore the interplay between

the two.

As I travel the world I am yet to find a country more prepared than we are for 5G. I'm absolutely determined that Britain will be at the front of the queue.

So there you have it.

I'll end by saying this.

We all want people to stop badgering us about their broadband. And I want to ensure they don't have to badger us ever again, whether they are up in space or down here on earth.

We have set these goals. We've hired some brilliant people to deliver them. We are clear-eyed in our ambition.

But we can't do it without you.

We can get the ball rolling. We can set the framework.

But it is you, the businesses of Britain, who are going to deliver the connectivity people crave.

So take this moment. Rise to the challenge. And together we will give Britain what it needs to be fit for the future.