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DELIVERING THE FULL-FIBRE VISION

Connectivity brings us many benefits – it has shaken up our lives and transformed our place of work and home. It has become the key to unlocking greater efficiencies, flexibility, streamlining processes and ensuring we can go about our daily lives anywhere, anytime. It also underpins our commercial prosperity. Research from property consultancy and adviser Cluttons shows a clear link between good connectivity, business performance and employee satisfaction. For example, a well-connected office means a better performing business and employees who are more satisfied in their roles. This in turn leads to increased productivity and enables more flexible working practices. Charles Thomas, Cluttons' Head of Fibre Networks, explains.



Improving connectivity across the UK is a complex and long-term challenge. This involves deploying full-fibre access networks to deliver significantly faster speeds (e.g. multi-Gigabit), as well as a much more reliable service. The old legacy copper network will gradually be switched off although this will be a long and complicated process.

Government initiatives

The Prime Minister's recent optimism and support for meeting the connectivity challenge is welcome, as indeed is Sajid Javid's pledge for £5bn of investment to support the rollout of full-fibre unveiled at the Conservative Party conference at the end of September 2019. However, delivering on this promise will need the Government to support the Electronic Communication Code legislation which is designed to make it easier for network operators to install and maintain apparatus such as phone masts, fibre exchanges and cabinets on public and private land - and ensure the principles are put into action to drive the rollout of full-fibre and 5G and fill in the gaps to rural 'Not Spots' areas – see the side panel.

The new Code goes some way to providing clarity and structure for mobile and fixed line operators regarding wayleaves but not nearly enough. There is still a huge amount of ambiguity and it is certainly open to interpretation. Here at Cluttons we see all manner of financial requests which are wholly inappropriate and lead to unnecessary delays which the UK just can't afford.

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CHARLES THOMAS Why connectivity is key

The telecoms industry was quick to respond to Government by publishing an open letter that welcomed the PM's focus on improving digital connectivity and promised to rise to the challenge whilst also demanding of the Government that it would fully commit to giving the industry the tools to deliver future-proof connections across the UK.

The letter set out four areas for urgent attention before significant progress could be made. This included reforms to building regulations and the tax on fibre cables, prioritising investment in digital and engineering skills, and allowing telecommunications providers access to properties when landlords are not collaborating as effectively as they should. On this latter point, recent figures published by Openreach suggest that, in the City of London alone, it was unable to gain consent from owners of 848 high-rise buildings containing 9941 residential or business premises. This is down to difficulties in

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securing wayleave agreements which give Openreach the right to enter apartments or office blocks.

The letter also addressed the issue of funding and described the \pounds 3 to 5bn in public funds as 'a good start' but wanted the regulatory landscape to be addressed, pointing to the amount of red tape – including fibre tax and wayleaves access – and the challenge of new-build properties that hit the market without being fibre-ready.

Cluttons' own research conducted earlier this year highlights the scale of the challenge. It is clear that significant digital connectivity gaps across the UK prevail. For example, in London and the South East, 18% of commercial property landlords said broadband performance does not meet their needs. Occupiers of commercial property echo this point.

Streamlining the process

Cluttons is one of the few property consultancies in the UK offering a service that focuses on one simple statement "when the fibre industry meets the property industry". Cluttons infrastructure team has the experience in both the fibre and the property sectors to translate each other's needs, ensuring a smooth path to the end goal. The Cluttons team has identified two areas that require urgent attention if fibre providers and the Government are to reach their target to achieve full-fibre by 2025:

- · Wayleaves.
- Acquisition, design and planning of fibre exchanges (mini data centres).

Cluttons has a dedicated unit aimed at delivering these two critical activities. Wayleave agreements are a crucial part of putting the infrastructure in place because they give permission to providers to install and maintain apparatus on privately-owned land or buildings, such as offices and apartment blocks. However, achieving a signed wayleave poses several challenges because of the large number and variety of stakeholders involved in the process, the limited regulatory reporting and delays due to the landlords not signing the wayleave. It can be frustrating and unnecessarily slow.

How does the UK ensure that rural areas are not left behind?

There is a gap in internet adoption between rural and city areas and a lack of infrastructure is responsible in many cases for this division. However, there are developments in place to ensure there are a range of technologies that can deliver next generation connectivity.

For example, following an agreement between the Government and the Church of England, it has been announced that church spires across the UK will be used to increase digital connectivity across rural areas. Over 65% of Anglian Churches and 66% of parishes in England are in rural areas but, being at the centre of their local communities, they will be able to strategically address connectivity and coverage issues. This new digital connectivity will assist to deliver Government's commitment to infrastructure being at the heart of the Digital Strategy to support Britain's world-leading digital economy.

The UK Government Department for Digital, Culture, Media and Sport has also announced the 5G Rural Integrated Testbed, for rural use cases in Monmouthshire, Cumbria, Northumberland, North Yorkshire, Lincolnshire, Inverness-shire and Perthshire. Led by small and medium enterprises, the use cases will test 5G across a range of applications, including smart farming with drones, using Inernet of Things to improve healthcare in homes, increasing manufacturing efficiency and maximising the future benefits of autonomous vehicles.

One of the ways this is being addressed is through the partnership Cluttons has established with BT to help streamline the process and more effectively navigate the red tape by analysing wayleave impediments and failures to understand the key issues which result in delays. This process has three parts:

- A Managed Wayleave service has been developed. This offers a single point of contact which means that service providers no longer have to deal with an overwhelming number of stakeholders, for example Landlords, surveyors, solicitors and tenants.
- Any specific wayleave is managed from cradle to grave, tracking the wayleave lifecycle through a dedicated online portal to streamline and enhance the service. This includes data validation management to ensure the quality and consistency of the data within mandatory wayleave templates, proactive intervention management, wayleave tracking through a dedicated workflow management system and regular management of all interaction with stakeholders, keeping everyone informed at the touch of a button.

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 All delays are analysed and Cluttons identifies resolutions using existing property management knowledge and tools, improving efficiency and ultimately cutting time and costs. Clearly, anything that can be done to reduce the complexity in the wayleave process will speed up improvements in the UK's digital infrastructure.

Due to this unique partnership, BT saw a 57% reduction in time saved on the average wayleave, failure rates or cancelled wayleaves down from 11.5% to 1% and a 70% reduction in customer delays. Cluttons' research has clearly demonstrated that where landlords have invested to improve connectivity, most have been able to achieve increases in rents, reflecting the value of well-connected office buildings. The majority have also been able to reduce voids, or periods of vacancy.

When it comes to acquiring planning consents and wayleaves for data centres or fibre exchanges, Cluttons takes the traditional commercial agency stream and the telecoms acquisition stream and combines them into one; the team acquiring sites has the expert knowledge in both remits enabling it anticipate any future obstacles, for example, flood risks, ransom strip negotiations, environmental impact assessments, contamination reports, and so on, and manage them ahead of time.

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Delivering an alternative fibre network

CitvFibre is one of the challenger firms competing with the likes of Openreach and Virgin Media to rollout wholesale full-fibre network infrastructure. With major fibre infrastructure projects across 50+ towns and cities throughout the UK, it provides a portfolio of active and dark fibre services to its customers.

CityFibre is making significant investments in a number of cities across the UK and rapidly expanding the number of homes and businesses which have access to full-fibre. It is know for its Gigabit speeds, near unlimited bandwidth and consistent reliability. CityFibre has recently partnered with Vodafone to bring Gigabit-capable fullfibre broadband to up to one million UK homes and businesses by 2021 and is targeting five million by 2025. This commitment has been reinforced by a £2.5bn investment programme which identifies 37 towns and cities which are primed for fibre-to-the-premise expansion.

In July, it announced a further 14 towns and cities are being planned and mobilised for full-fibre deployment. They are set to join its 'Gigabit City Club', alongside the 12 cities that are part of CityFibre's £2.5bn investment plan to bring competitive fullfibre infrastructure to at least five million homes, more than 20% of the UK market, The 14 cities announced are Batley, Bradford, Derby, Dewsbury, Doncaster, Inverness, Ipswich, Leicester, Lowestoft, Newcastle-upon-Tyne, Rotherham, Slough, Swindon and Worthing. CityFibre will continue to work closely with each local authority to facilitate and accelerate the rollouts and to determine the sequence of towns and cities deployed. On completion, the total economic impact of full-fibre in these locations alone could exceed £16.3bn, creating over 115,000 indirect jobs.

CityFibre has commenced network design and is already investing in each location, extending its existing full-fibre spine infrastructure serving schools, hospitals and council offices, to reach nearly every home and business. Each Gigabit City design will include enough fibre capacity to serve the bandwidth demands of all market verticals far into the future. The networks, which are designed to be ready for 5G small cell densification, also provide a platform to realise Smart City ambitions.

This announcement adds over one million homes and businesses to the million already covered by the 12 Gigabit Cities previously announced. Construction is now underway in ten of those cities, and in five of them Gigabit-capable broadband services are live and on sale to customers.

With thousands of construction engineers and operatives required to roll out its networks at pace, CityFibre is investing in resourcing programmes and training centres as well as working closely with government to ensure its contractors have the necessary workforce to support this acceleration. CityFibre estimates that over 3,250 construction jobs will be created in its deployment to the two million homes identified so far.

Cluttons has recently acquired 27 data centres on behalf of CityFibre across 12 towns and cities facilitating the rollout of full-fibre networks. This is an involved and challenging project engaging Landlords and planning authorities to gain the required consents, a process that would certainly benefit from Government intervention. Nevertheless, Cluttons maintains a spotless planning record and is well on the way to delivering a further 30 exchanges over the coming 6 to 12 months.

AUTHOR'S CONCLUSIONS

We have heard a great deal about the UK's poor connectivity. Cluttons' research shows that there is still some way to go before the connectivity gap is closed and we can provide all UK businesses and homes with digital performance which outperforms expectations

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and competes on the global stage.

The Government and Ofcom need to take note of what the likes CityFibre, Gigaclear and G-Networks are already doing across both rural and urban scenes. We are also seeing collaborative initiatives such as the proposed Shared Rural Network which involves all four major mobile operators and will enable them to access each other's existing telecoms infrastructure in areas of the UK where there is only partial mobile network coverage currently to combat 'not spots'.

However, much more needs to be done to encourage private investment in this sector with clarification of regulations around 'over build' of infrastructure, ensuring a healthy competitive environment and clarity surrounding Fibre-to-the-Home versus Fibre-to-the-Cabinet advertising. Anything the Government can do to reduce costs and lower barriers to deployment and improve the business will be welcome if we want to switch off the copper network earlier than planned.

In truth, we don't yet know what new technologies are around the corner and exactly how they will transform our lives. But they will happen and they will have a huge impact when they become a reality think WhatsApp and the Internet of Things. One thing is for certain, delivering world class connectivity will require collaboration across all parties, including the property sector if buildings are to live up to the full potential the next generation of technology offers.

ABOUT THE AUTHOR

Charles Thomas is head of fibre networks at

Cluttons, the property consultancy and market-leading adviser to the largest mobile operators and fixed-line providers. Charles specialises in estate management, data centre acquisition and wayleave delivery. Through its network of offices, Cluttons offers a very wide range of professional property management, agency and consultancy services across both commercial and residential sectors.