



Community *Fibre*

**Response to The Department of Digital,
Culture, Media and Sport Consultation
entitled 'New Build Developments -
Delivering Gigabit Capable
Connections'**

December 2018

Executive Summary

Community Fibre thanks the UK Government, and in particular DCMS, for its encouragement and efforts to support the roll out of full fibre to all properties in the UK. The interventions have created a safe and stable market which has attracted billions of pounds in investment and the growth of new competitors such as Community Fibre, City Fibre, Gigaclear, Truespeed and Hyperoptic.

Any changes to regulation and legislation should be considered carefully to ensure they do not unintentionally disrupt the stability of the current dynamic market.

We support INCA's proposals to develop a new set of standards for full fibre delivery as this will help developers understand what is required. These standards should make it clear that all physical infrastructure installed should be able to accommodate fibre-optic connections from at least five different infrastructure providers to each property unit.

We believe the current dynamic market will mean that developers will be able to find Communication Providers that are willing to cover the reasonable costs of installing full Fibre to the Home (FTTH) infrastructure between the development boundary and into each home.

The key variable cost of connecting a new development with full fibre is the backhaul duct between the development boundary and the nearest fibre network interconnect point. The cost of installing this duct should be borne by the developer, who chooses the location of their development, or, where appropriate, public subsidy.

The Local Authority / Highways Authority would be best placed to install the shared duct that all Communication Providers could then make use of.

DCMS may want to consider incorporating the new standards into Part R of the current Building Regulations as this may not require further primary legislation.

Introduction

Community Fibre would like to thank the Department for Digital, Culture, Media and Sports for their efforts to encourage the roll out of full FTTH to all properties across the UK. Significant progress has been made over the last two years to encourage investment into the infrastructure competition that will keep the UK's Digital Economy competitive within the global marketplace. Of particular note:

- The Communications (Access to Infrastructure Regulations) 2016 that allows innovative infrastructure builders, such as Community Fibre, to install fibre optic cables into the infrastructure of other utility providers. This has been complimented by the ongoing work by OFCOM to make Openreach Physical Infrastructure Access (PIA) service useable by other Communication Providers.
- The introduction of Part R of the Building Regulations which ensures that renovated and new build properties incorporate the necessary infrastructure to enable the installation of full fibre networks in the future.
- The DCMS Barrier Busting team have published guidance on street work best practice to help standardise the process for arranging public highways works across local authorities.
- The City of London has published a standard wayleave toolkit that strikes a balance between the needs of Communication Providers and landlords. However it should be noted that it has taken seven months for this to be updated since the last change to the Electronic Communications Code in December 2017.
- HM Treasury has established the National Digital Infrastructure Fund which has, in conjunction with private sector investors, raised a fund of around £1 billion to invest in the new full fibre-optic networks that the UK needs in order to compete in the growing global digital marketplace.

Delivering a Dynamic Market

These changes to legislation and regulation have created a safe and stable market into which billions of pounds have now been invested:

- In November 2018 The Mubadala Investment Company announced a further £500m equity investment into Hyperoptic who currently deliver fibre to the basement (FTTB) solutions across the UK. This was on top of £250m of debt funding raised by Hyperoptic in August and means they have a target to deliver their FTTB solution to 5 million homes by 2024. Also G.Networks announced they had raised an initial £60m to fund roll-out of their network to 120,000 properties.
- In October 2018 CityFibre announced a £2.5bn investment plan to bring Full Fibre to the Home (FTTH) solution to 5 million homes by 2025.
- In August 2018 BT Group announced a change to its network investment plans to focus more on FTTH with a target of 3 million properties by 2020 and 10 million by the mid-2020s
- In April 2018 Community Fibre raised £25m, to add to the £10m it had raised in June 2017 from investors including the Railway Pension Fund and HMT's National Digital

Infrastructure Fund managed by Amber Infrastructure Group. Community Fibre has already built London's largest FTTH network and has an ambition to pass more than 1 million homes with full FTTH by 2025.

- In March 2018 M&G Investment Management Ltd invested £270m to purchase Gigaclear who deliver FTTH in rural areas of the UK
- In July 2017 TrueSpeed announced additional investment of £75m from Aviva Investors.

The targets communicated by the UK's Communication Providers above will exceed the UK Government's target of 50% of properties with full fibre connection by 2025 as long as the risk profile for investors remains stable - a core objective set-out of the Government's recent Future Telecommunications Infrastructure Review (FTIR).

Market Stability Required

The evidence above indicates that the interventions already made by the Government are attracting sufficient investment into the full fibre-optic industry to meet the FTIR's ambitions of 50% of properties with full fibre in 2025 and all properties by 2033 (along with the proposed outside-in approach to public subsidy). This is evidence that the market is working efficiently meaning that further legislation and regulation at this stage would be inappropriate.

Change has a destabilising effect on the market whilst impacted parties understand the implications of the new rules and adjust their behaviour accordingly. For example it has taken almost a year since the last changes to the Electronic Communications Code for the first tribunal ruling to be made. A number of landowners, and their advisors, have told us that they are delaying the signing of wayleaves until they understand the outcomes of these tribunals. Indeed DCMS have previously told us it will be difficult to make further legislative changes until the existing legislation has been tested through the tribunal. There is a risk that introducing new changes before the previous changes have had time to bed in will lead to unintended consequences and market instability.

Our Responses to Specific Questions

1) Do you have any further evidence on the state of New Build Development connectivity in the UK?

Community Fibre has been approached by a number of new build developers, both small and large, for advice on what they should be installing to ensure multi-Gigabit connection at their developments. Many of our landlord clients have a published set of 'Employers Requirements' which detail the specifications they require from their new build contractors. They have also asked us what they should include within their Employers Requirements to ensure future proof connectivity to their new build developments.

We support INCAs suggestion that the industry should work on a new set of standards that new-build developers, planners and building controllers can use to ensure the correct infrastructure is being installed into new properties. This standard should specify the need for passive infrastructure within a development site which would enable at least five separate full fibre network builders to install their own fibre to each property unit.

The standard should also provide a specification for 'backhaul' duct that would need to be installed between the development site and the nearest national dark-fibre interconnect point. This backhaul duct should be capable of accomodating fibre from many (at least 12) different Communication Providers.

There should be an obligation on the duct owners to ensure all Communication Providers have access to mapping data that clearly shows the location of all of the passive infrastructure, both on site and backhaul, installed.

2) Do you have any information or evidence to suggest that the costs developers would incur under the proposed policy would prevent homes being built?

We believe that the private investment into full fibre that the Government's policies have encouraged means that most developers will be able to find Communication Providers that will cover any additional costs developers incur in installing full Fibre to the Home (FTTH) physical infrastructure and connectivity from their development boundary and into their new build properties.

Where further intervention may be required is for the fibre backhaul from the development boundary to the nearest national dark-fibre interconnect point. This is more likely for a smaller more rural development. This is where the Government's outside-in approach to public subsidy could be used to fund the installation of an open duct from the development boundary to the nearest dark-fibre network. This public duct would then be available for many Communication Providers (at least 12) to use to install their own fibre cables.

3) We propose that developers would be obliged to provide a simple connectivity plan for their developments to LAs. This plan would demonstrate that developers had consulted with at least two network providers to provide gigabit-capable networks

and inform LAs when a site is connected. Do you have any comments on this proposal for a connectivity plan?

We believe that developers, local authority departments and Communication Providers require more detailed guidance on what should be included in an acceptable connectivity plan. This definition for a connectivity plan should be included in the work proposed by INCA's for the development of a new set of standards.

Community Fibre would also recommend, to ensure future-proofed infrastructure is installed, that developers are required to install future proof full-fibre gigabit-capable networks, rather than gigabit-capable. This will ensure that no copper cabling is installed.

4a) Do you agree with the assumption that deploying the necessary infrastructure to deliver gigabit-capable networks is best achieved when the site is being built?

Yes - Community Fibre has some evidence to show that the costs associated with installing a fibre optic network during the build phase of a project is less than installing the fibre-optic network retrospectively to a building.

However, as has been shown in Spain¹, if the correct infrastructure is installed at the build phase, which enables fibres from multiple Communication Providers (at least 5) to be connected to each property, then the marginal installation cost for subsequent Communication Providers can be considerably reduced.

4b) What technical specifications should the physical infrastructure (ducts etc) have?

We would expect detailed technical specifications to be defined as part of the new standard development as proposed by INCA. However the physical infrastructure installed at a development site should be capable of accommodating multiple Communication Providers (at least 5) installing their fibre to every property unit either during the build phase or subsequently, as per the Spanish example.

Backhaul ducts between the development site and the nearest national dark-fibre interconnect point should be able to accommodate fibre from at least 12 different Communication Providers.

There should be an obligation on the duct owners to ensure all Communication Providers have access to mapping data that clearly shows the location of all of the passive infrastructure, both on site and backhaul, installed.

4c) Do you agree that developers should deploy, and pay for, the necessary infrastructure from the in-building connections to the boundary edge of the development?

¹ Telecommunications Infrastructure International Comparison by NERA Economic Consulting (March 2018)

We believe that most developers will be able to find Communication Providers who are willing to contribute towards their reasonable costs of installing this infrastructure in the current dynamic market.

5a) Do you agree that developers should have to engage with at least two network operators who can provide gigabit-capable connections to the development?

Yes - It would be useful if there was a central register of Communication Providers, including contact details, that developers could access to make it easier for them to obtain proposals from a sufficient number of developers.

5b) What further measures could we consider to promote the availability of networks from multiple providers at an early stage to minimise costs and disruption?

As previously discussed the main barrier preventing multiple providers connecting to a new development site will be the cost of the backhaul duct. We think that the entity who can install a shared duct from a remote development site to the nearest existing fibre interconnect point would be the Local Authority, who are also the Highways Authority. Going forward public subsidy should be focused on installing these shared ducts where required. The backhaul duct should be capable of accommodating fibre from many (at least 12) different Communication Providers.

We believe that if duct is installed and mapping information is easily available, both within the development site and for the backhaul portion then the infrastructure competition policy articulated by the Government and OFCOM can scale quickly. The construction of a shared backhaul duct network will not only benefit the new build development but also surrounding properties which can then be full fibre enabled more cost effectively.

6) Taking £3,000 as a suggested aggregated cost cap per premise, how should costs be divided between developer and operator?

If the variable of the backhaul duct cost can be removed from the equation then the cost of connectivity from the site boundary to each individual property is likely to be far less than £3,000 per property. We believe that developers will be able to find Communication Providers, in the current competitive market, that will be prepared to cover the full cost of this installation.

7) What information and evidence can you provide to help refine the 'in scope sites' policy design choice - aggregated cost cap or number of premises?

We believe that the costs associated with installing infrastructure between the development site boundary and each individual property unit for a full FTTH solution is similar irrespective of the number of units, in other words the aggregated cost per unit for this part of the installation will be similar irrespective of the number of units.

The key variable is the cost of the backhaul duct from the site boundary to the nearest dark-fibre interconnect point which in some cases will be a few meters and in others will be many kilometers. If Government wants to encourage development in a particular geographic area then it should provide public subsidy to construct this backhaul duct. Ultimately it is the developer's decision on where to locate their development. As such the developer should incur the costs of installing this backhaul duct where no public subsidy is available.

8a) Do you agree that developers should have the overall responsibility to ensure Gigabit connectivity for their developments (allowing for the fact that developers can oblige operators to connect using the 'duty to connect' provision)?

Yes - However new standards need to be developed so that developers understand exactly what their obligations are. The new standard should include the developer's obligation to install the necessary backhaul passive infrastructure that many FTTH Communication Providers can use. They would only be able to enforce their 'duty to connect' once this backhaul infrastructure is in place.

8b) How would this policy affect small housebuilders?

Our proposals would have no greater impact on small housebuilders than large housebuilders. The key variable would be in where the developer chooses to locate their development. Developments close to existing dark-fibre interconnections would incur less costs whereas those located further away would incur higher costs - it may be appropriate for these to receive public subsidy through the Government's proposed outside-in approach to public subsidy for full fibre infrastructure.

9. Do you have any comments on the proposed legislative approach? Do you have an alternative solution that would deliver gigabit-capable connections to NBDs?

It may be possible to incorporate the proposed new technical standard within Part R of the Building Regulations.