

**Promoting investment and competition in fibre networks: Approach to geographic markets**

**Virgin Media consultation response**

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## Executive summary

Virgin Media welcomes the opportunity to respond to Ofcom’s consultation on promoting investment and competition in fibre networks - approach to geographic markets (“the consultation”). This consultation is a critical component, and an enabler, of Ofcom’s overall package of work aimed at achieving that aim, as set out in its Strategic Policy Position of July 2018<sup>1</sup>. It is central also to Government’s ambitions for the wide spread availability of high-speed connectivity.

We are very strong advocates of Ofcom’s overall objective. Virgin Media has invested more than £13billion in networks in the UK to date – and we want to go further still. In this we are not alone: there is great prospect for competing, Gigabit capable networks to be deployed across a much broader footprint in the UK. This is, however, fundamentally dependent upon attracting further investment – which in turn is fundamentally dependent on the right type of regulatory support and incentives. And there is competition for this investment: put simply, if investors do not believe that the regulatory regime will support and encourage the deployment of infrastructure (and that this regime will endure in the longer-term), they will divert their funds to another territory or sector.

Attracting additional investment requires a change in the way that Ofcom considers markets and regulates them and we agree with the overall approach that Ofcom is proposing to take. In the context of the specific characteristics of the UK market, and Ofcom’s overall objectives, we believe that considering previously separate wholesale markets holistically, and recognising differences in competitive conditions by geography, is appropriate.

We also think that the overall structure that Ofcom envisages of three clear and distinct categories of market condition represents a suitable compromise. However, we have some concerns about the criteria applying to those categories and the factors that will be used to determine their bounds. In particular, we believe that Ofcom must go further than it proposes when assessing if an area may be subject to competitive entry in the future. Specifically, we believe that it should consider additional factors and seek further input from individual providers, beyond its high-level size and density criteria. To attract the levels of investment needed, Ofcom’s “investment friendly” approach to regulation must extend across the largest area possible. This requires an open-minded approach to identifying areas in which there is the potential for competition. It also requires Ofcom to assess the appetite for investment under this new holistic approach to regulation, not the conditions that exist today.

We acknowledge that any approach to geographic markets must achieve a balance on the granularity of assessment and structure – and we think that Ofcom has got the overall balance right. Again, though, we have some concerns about the specific criteria that Ofcom intends to apply. We set these out in the sections that follow.

We also wish to emphasise that Ofcom’s approach to geographic markets is only part of the solution: applying the right regulatory remedies will be critical to achieving its aims. We acknowledge that

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<sup>1</sup> Regulatory certainty to support investment in full-fibre broadband - Ofcom’s approach to future regulation, 24 July 2018

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remedies are not the subject of this consultation but we await with interest Ofcom's forthcoming consultation on the matter.

Evolving the regulatory approach to attract the required investment requires Ofcom to be bold. However, Ofcom should not be daunted by this. There are a number of supportive factors from which it should take comfort. Not least of these is substantial Government backing (and soon guidance, in the form of the Statement of Strategic Priorities) for the shift in approach that Ofcom proposes to make. Moreover, numerous providers have stated their intention to build new networks<sup>2</sup> and there is growing momentum behind schemes aimed at removing barriers to network build. Perhaps most importantly, the historical approach to regulation, whereby Ofcom sought to promote competition within the confines of existing networks, rather than promote new entry, has not – and will not – lead to the outcomes that it is now seeking to achieve (fundamental to which is the need to better tailor remedies to the nature of actual or potential competitive conditions). This is, therefore, less of a leap of faith, but more of a sensible – and necessary – forward looking approach to ensuring that the UK has the connectivity that it needs to remain a digital leader in the future.

With this exercise, Ofcom has a once in a generation opportunity to effect a sea change in investment, innovation and competition in Gigabit capable networks in the UK. However, that opportunity will be wasted if it does not lead to the right regulatory remedies being applied. Those remedies must also have sufficient longevity: investors need assurances (as far as possible) beyond the anticipated five-year market review window. We urge Ofcom to make the bold decisions that will be necessary for its aims to be realised.

Given the broad focus of Ofcom's overall initiative, our response should read in conjunction with our responses to other, related consultations, including the Physical Infrastructure Market Review and the Business Connectivity Market Review.

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<sup>2</sup> For example, most recently CityFibre has announced a £2.5bn plan to deploy fibre to five million premises in at least 37 locations; Hyperoptic has announced a target to build fibre to two million premises by 2021 and five million premises by 2024; and, Openreach has announced further locations to benefit from its Fibre First programme, bringing the total number of locations to 25.

## Introduction

The proposals that Ofcom sets out in the consultation represent a notable change in focus, away from the (de facto) promotion of service-based competition, towards a more forward-looking approach based on competition between different networks. It is underpinned not only by Ofcom's own ambitions for the deployment of multiple, competing high speed networks, but also by Government's comparable aims.

Government has been clear on what is needed to achieve the desired outcomes. The Future Telecoms Infrastructure Review ("FTIR") concluded that the most effective way to deliver nationwide full fibre connectivity at pace is to promote competition and commercial investment wherever possible, and to intervene only where necessary. In that same document Government advocated stable and long-term regulation that incentivises network investment and ensures fair and effective competition between new and existing networks. And it has gone further still. The recent consultation on the proposed Statement of Strategic Priorities (the "SSP consultation")<sup>3</sup> is clear in establishing a specific direction to Ofcom. In particular the SSP consultation sets out Government's view that promoting investment should be prioritised over interventions to further reduce retail prices in the near term<sup>4</sup>. It also sets out an expectation that there should be no regulation in areas where there is actual or prospective effective competition between networks, as competitive pressures should shape investment and pricing<sup>5</sup>.

Ofcom sets out an intention to change its approach to regulation and to "*think about the markets that we regulate differently*"<sup>6</sup>. We support this. A key consequence of Ofcom's historical approach of promoting greater levels of competition within the existing market structure (or on the networks already in situ) has been a sustained downward trend in retail prices, with a tendency for competition to be confined to price, rather than innovation or true product differentiation. While this approach may have served a purpose at a particular point in time, or in particular circumstances (e.g. where there is no choice of network provider and no prospect of competitive entry), it has not led – and will not lead – to the scale deployment of competing networks (and therefore step change in investment) that Ofcom, and Government, now desire. The historical approach essentially creates a vicious circle – and arguably entrenches BT's market power: confinement of competition to retail prices limits the prospect of generating the value required to justify what are ultimately risky investments. New entrants therefore have little or no incentive to deploy alternative networks, leading to a stagnant infrastructure market.

From the consumer perspective, short term price reductions are undoubtedly attractive. However, sustained promotion of a regime that de facto confines competition to retail prices can only lead to a poor outcome for consumers in the medium to long term. Put simply, consumers will ultimately lose out

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<sup>3</sup> Consultation on the Statement of Strategic Priorities for telecommunications, the management of radio spectrum and postal services, 15 February 2019

<sup>4</sup> Ibid, paragraph 20

<sup>5</sup> Ibid, paragraph 22

<sup>6</sup> Consultation, paragraph 2.7

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if price is the sole differentiator between providers. And the consequences are far broader and more fundamental than this: the tech sector is evolving at a rapid pace and is fundamentally dependent on ever higher quality, ever higher speed connectivity. If there is no incentive for the providers of that connectivity to invest in new networks or upgrade existing plant, the UK will fall behind in the “tech race”.

This does not, however, mean that retail prices need necessarily to rise. Rather, what is needed is to prevent erosion of value in infrastructure investments. Moreover, in our view the more important measure for consumers is the overall value and benefit that they accrue from connectivity services. This is borne out by recent research undertaken by A. T. Kearney<sup>7</sup>, that finds the price of broadband and WiFi services is less important to European consumers than factors such as network quality, coverage and access to innovative products.

It is also important to recognise that unit prices of communications services have fallen consistently over the last decade, as has expenditure on services in real terms.

Virgin Media undertook analysis in 2016 that indicated that the price per Megabyte (Mb) of download speed declined at a CAGR of 27% between 2008 and 2014 – from more than £5 to less than £1 per Mb. Moreover, in its Pricing Trends report of May 2018,<sup>8</sup> Ofcom found that for communications services in the UK *“The greater take-up of faster broadband services, and faster connection speeds, have delivered a better user experience for data services, even when multiple devices are using the same connection, and this, combined with the increasing popularity of video-on-demand services, has boosted average broadband data use. Average monthly residential fixed broadband data use increased by 44% to 190GB in 2017, while the average monthly data used per SIM increased by a similar proportion, from 1.3GB to 1.9GB. Although there has been a considerable increase in the amount of data consumed by users over residential fixed broadband lines, the average price per GB fell from £0.74 in 2012 to £0.11 in 2017 in real terms, according to data provided by communications providers.”*

Between 2006 and 2016 average household spend on communications services fell by 8% in real terms<sup>9</sup>. Over the same period expenditure on fixed internet and mobile voice and data fell by nearly 6%. Just 2% of UK adults have reported “affordability issues”<sup>10</sup> with regards to their communications services according to the most recent Ofcom/Kantar analysis.

In summary, the average household expenditure on broadband (and mobile) has declined in real terms over the last decade, but the consumption of data has increased many-fold over the same period. Put, another way, quality adjusted unit prices for data have declined exponentially. In the main therefore,

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<sup>7</sup> <https://2zn23x1nwzzj494slw48aylw-wpengine.netdna-ssl.com/wp-content/uploads/2019/02/New-study-reveals-what-European-consumers-most-value-about-broadband-20-February-2019.pdf>

<sup>8</sup> [https://www.ofcom.org.uk/\\_\\_data/assets/pdf\\_file/0030/113898/pricing-report-2018.pdf](https://www.ofcom.org.uk/__data/assets/pdf_file/0030/113898/pricing-report-2018.pdf)

<sup>9</sup> Ibid

<sup>10</sup> Defined as those who have been behind on their payment for any communications services by one month or more in the last year, or have sold items/taken out a loan as part of their monthly spending in order to afford communications services. [https://www.ofcom.org.uk/\\_\\_data/assets/pdf\\_file/0026/95138/Affordability-of-Communications-Services-Tracker-2016.pdf](https://www.ofcom.org.uk/__data/assets/pdf_file/0026/95138/Affordability-of-Communications-Services-Tracker-2016.pdf)

customers get, and will continue to get, more for less. There is no reason to believe that these trends will not continue – particularly if the case for investment (and therefore innovation) is improved. Ofcom can therefore afford to take some risks in defining prospectively competitive markets as broadly as possible.

It is against this backdrop that we respond to the consultation. We welcome, and strongly support the shift in approach and policy by both Ofcom and Government and believe that it is overdue. Ofcom's Strategic Review of Digital Communications<sup>11</sup> promised much in this regard but failed to deliver. It now has the opportunity to rectify that missed opportunity, bolstered by political backing.

### **General approach to regulation**

Central to Ofcom's plans to promote investment and competition in networks is the intention to consider the geographic variation in the existence of and potential for investment and competition. This would lead to different regulatory approaches being applied to reflect differing market conditions. Government also advocates this approach<sup>12</sup>. We think that this is an appropriate model. Maintaining a "one size fits all" or compromise approach to regulation across all areas – and, most importantly, failing to tailor remedies sufficiently to reflect actual or potential competitive conditions - is unlikely to lead to the outcomes that Ofcom is seeking. We take this view in the context of geographic differentiation being used as a tool to apply a more "investment friendly", forbearing approach to regulation in the areas that warrant it – not for the purposes of applying more intrusive regulation or extending regulation to other providers. This would be counter-intuitive and would lead to opposite outcomes to those sought by Ofcom and Government. Put simply more regulation turns off investment.

As Ofcom appears to acknowledge, key to the shift in thinking and policy approach – and indeed fundamental to its success – is the need to take a longer term, more holistic view of the market and competition within it. We agree. We note that Ofcom "expects" to place more emphasis on the competitive impact of *future* network build<sup>13</sup> (our emphasis). This is very welcome, but Ofcom should be unequivocal: certainty about the regulatory approach is critical to investment decisions.

Taking a longer term view of the prospects of competition requires Ofcom to avoid being hamstrung by the approaches of the past. Whilst this may be viewed by some as a leap of faith, we think that there are a number of factors that can give Ofcom the confidence to move forward on the new basis. These include (but are not limited to): the expressions of intention to invest from a number of network providers; the clear direction from Government to promote investment in infrastructure ahead of short-term retail price reductions; the shift towards infrastructure level remedies that Ofcom is itself already enacting; and, the numerous initiatives aimed at reducing the cost of, and barriers to, deploying networks. We also note the significant level of interest among competing providers in using the

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<sup>11</sup> Making communications work for everyone - Initial conclusions from the Strategic Review of Digital Communications, 25 February 2016

<sup>12</sup> SSP consultation, paragraph 22

<sup>13</sup> Consultation, paragraph 2.8

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improved BT PIA product, as highlighted by BT in its response to Ofcom's Physical Infrastructure and Business Connectivity Market Review consultations<sup>14</sup>.

Ofcom must also allow sufficient time for planned build to take place and for (unplanned) new entry in potentially competitive areas to materialise. Network deployment takes time and unexpected barriers and frustrations can occur. Equally, strategies and plans take time to evolve and so the impact of recent or prospective policy and regulatory changes may have a lag. Again, investors need to have certainty that Ofcom will not rescind its new-found enthusiasm for promoting investment and competitive network entry if the results of its policy are not immediately forthcoming.

Incumbent in this more holistic, longer term approach to regulation is Ofcom's intended shift in two key aspects of its consideration of markets, namely using networks, rather than services, as a reference point and an emphasis on regulating (where appropriate) at a more upstream or physical infrastructure level. We believe that this is a sensible approach and a complementary part of the overall proposed model, but Ofcom must keep in mind that they are a means to an end, rather than the end in itself.

Ahead of Ofcom's forthcoming consultation on the matter, we urge Ofcom to take a similarly bold approach to remedies. Again, perpetuating the approach of the past will not lead to the outcomes desired.

The manner in which any fair bet principle is applied will have a critical influence on investment incentives. Whilst, as a concept, this principle is just, much depends on its frame of reference. In its Strategic Policy Position of July 2018<sup>15</sup>, Ofcom set out that it "*support[ed] the fair bet principle for risky investments*"<sup>16</sup>. We welcome this confirmation. However, Ofcom then went on to discuss the fair bet in the context of Openreach's investment risks and costs<sup>17</sup>. This misses the point. The relevant fair bet here is that of alternative investors, given that their investment risk will undoubtedly be greater than those applying to Openreach (for example because their costs will be higher, they will not have the same economies of scale and scope and they will need to "win" new customers, rather than simply up-selling higher speed services to existing customers). We note that Government recognises this concern also. In the SSP consultation, it sets out its view that an effective fair bet regime would be one that allows firms making large and risky investments to have confidence that any regulation will reflect a fair return on investment, commensurate to the level of risk incurred at the time of making the investment decision (i.e. with a generic reference to "firms")<sup>18</sup>. We urge Ofcom, therefore, to take full account of this expectation.

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<sup>14</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0025/136627/BT-Group.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0025/136627/BT-Group.pdf), page 56

<sup>15</sup> Regulatory certainty to support investment in full-fibre broadband - Ofcom's approach to future regulation, 24 July 2018

<sup>16</sup> Ibid, page 27

<sup>17</sup> Ibid

<sup>18</sup> SSP consultation, paragraph 22



### **Approach to considering networks**

As Ofcom notes networks will, in the future, become more service agnostic: they will be capable of providing services in each of the legacy markets that Ofcom has defined. In the longer term perpetuating an approach to regulation that focuses on specific downstream services therefore risks an inconsistent, fragmented approach to market definition and remedies that will generate inefficiencies and prevent networks from realising their full potential (including making the most of economies of scope and scale).

We believe that it is also important for this new, holistic approach to incorporate not only service agnosticism, but also to be technology neutral. That is, if a network is capable of delivering ultrafast services, it should be considered to be a potential competitive constraint. We make further comment on this point later in our response.

### **Approach to geographic analysis and categorisation of different areas**

Ofcom is proposing to group geographic areas into three categories, reflecting variations in the level of existing, and potential competition between networks. Each of these categories would then be subject to a specific regulatory approach, reflecting competitive conditions. Clearly, there is a balance to be achieved between ensuring that investment and competition is promoted as far as possible, while protecting consumers where competition is not (or has no prospect of being) present.

There is no “right” answer to how such geographic differentiation should be determined: too many categories risks over-complication and classification becoming out of date in the short term as new network is deployed; too few risks false categorisation of the competitive conditions in a given area. In the context of Ofcom’s objectives, we think that the three category model is, in principle, appropriate. However, the effectiveness of the model has a high dependency on how the boundaries of those areas are defined and how the competitive conditions within them are categorised. We comment on the specific parameters (including the proposed geographic unit and network presence threshold) in later sections, but we have set out below our view on the three categories.

#### Competitive areas

Subject to the broader comments and concerns that we set out elsewhere in this response, we think that Ofcom’s overall approach to competitive areas is generally appropriate.

#### Potentially competitive areas

This category is central to Ofcom’s proposed “investment friendly” approach and key to the realisation of its, and Government’s ambitions. As Ofcom rightly acknowledges, encouraging entry by new networks in a given area is fundamentally dependent upon the right regulatory conditions being in place. In order

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to realise the full potential for investment and future competition, it is essential that Ofcom takes an expansive view of the areas included in this category and takes the right regulatory approach to it.

We therefore support the combining of areas where at least one alternative network is present, where there are plans to build an alternative network and where there is potential for alternative network entry, in to this potentially competitive category. Taking a consistent regulatory approach to these areas will help to create regulatory certainty and will mean that investors have a consistent “regulatory factor” in their business cases across areas that demonstrate fundamentally homogeneous competitive conditions. However, as we set out later in our response, it is important that Ofcom takes a sufficiently forward looking and open-minded view of the prospects for competition to ensure that areas that may be within the scope of future investment are not included erroneously in the non-competitive category. Economies of scale can be a significant factor in investment plans: Ofcom must therefore make sure that its “investment friendly” approach to regulation extends to as broad a group of areas as possible. Of particular importance in determining potentially competitive areas is the need for Ofcom to take the fullest account of the potential for the PIA product to facilitate new network entry.

Openreach will publish its new PIA Reference Offer on 1 April 2019. This Reference Offer will represent the culmination of 12 months of extensive negotiations across industry, many system releases, changes to processes and changes to the underlying product specification itself. No CP, including Virgin Media, will yet have clarity on the full potential of PIA. Fundamental changes, such as the network adjustments regime are not yet live. Similarly important changes (for example, the proposed introduction of ‘project areas’) are planned for launch later in 2019. In addition, Ofcom proposes to remove all restrictions on PIA’s usage, further expanding the prospects for its adoption. These and other changes have the potential to lead to a step change in industry’s appetite for the product.

Therefore, as these improvements are introduced and the product evolves towards being fit for scale use, so too will CPs’ plans to adopt it. [X

X]

Our experience to date also indicates that PIA provides a substantial reduction in the cost to deploy, compared to self-build. The quantum of these savings is sufficient to give us confidence that other CPs will find PIA deployment commercially attractive, provided that the process for consuming the product improves over time.

As PIA evolves and our plans for use of it are refined, we would be keen to share these insights with Ofcom to help inform its analysis.

### Non-competitive areas

We recognise the need for a different approach to regulation where there is no prospect of competition. However, in order to avoid disincentivising investment where there is potential for it to emerge, the bar must be set very high for this type of intervention. In short, Ofcom should only proceed in this way

where it is proved beyond any reasonable doubt that there is no prospect of competition. Key in making this determination is gaining a full understanding of the parameters that determine whether a business case is viable [X X].

These parameters can vary by provider – we therefore urge Ofcom to engage further with individual providers to understand how they make their investment decisions and ensure that all areas of potential competition are excluded from this category. Again, we expand on this point later in our response.

## **Approach to assessing network presence in different geographic areas**

### Geographic Units

As Ofcom notes, there is a balance to be struck when selecting the geographic unit to be used for determining existing, planned and potential network presence. If the geographic unit is too small, the analysis will be overly complex; if it is too large, there is a risk of areas being mis-categorised.

We consider postcode sector, as Ofcom has used in its illustrative analysis, to be the most appropriate geographic unit of assessment. There are a number of reasons why we take this view.

First, the unit of postcode sector is well understood and stable: postcode sectors are long-established, widely recognised geographical areas.

Second, it represents a reasonable compromise on granularity. In our view, assessment of competition at an individual premises level would be onerous and unnecessary (since competitive conditions are likely to be consistent across a number of premises). Similarly, the effort required to assess competition at a postcode level is unlikely to be outweighed by the benefits. This is because the bounds of network deployment rarely correspond to postcode areas, instead straddling multiple postcodes and parts thereof – and in the types of scale deployment envisaged by Ofcom, multiple, adjacent postcodes are likely to be served, meaning that the “macro effect” of these deployments in a given area may not be reflected appropriately in any assessment at a postcode level. In these circumstances, competitive conditions within a postcode sector are not likely to vary to any material extent (and may even be consistent across adjacent sectors).

Third, postcode sector is a provider agnostic, neutral geographic unit that is free of influence from the network deployment patterns of any particular provider. Conversely using, for example, Openreach exchange areas risks skewing the assessment of competitive conditions, as areas of alternative network build may not be reflected appropriately.

### Coverage threshold for considering network presence

Ofcom asserts that it is not necessary for a network to cover every premises in a given area in order for it to exercise a competitive constraint. For the purposes of what Ofcom is seeking to achieve in this exercise, we agree that this is likely to be the case. However, there does need to be “significant” coverage in order for this constraint to be present. As with the question of how many categories of

competitive state is appropriate, there is no “right” answer to what the proportion of coverage in a given area should be.

We acknowledge the challenge in determining this figure and the risks in setting it either too high or too low. In the context of Ofcom’s ambition to incentivise investment and promote competition, we believe that a relatively lower threshold is preferable in this case, given that it is more likely to lead to more areas being classified as potentially competitive than would otherwise be the case – and therefore more likely to lead to more areas becoming competitive.

In balancing the risk of Type 1 and Type 2 errors we believe that in the context of what Ofcom is seeking to achieve, it is better to avoid false negatives, than to mitigate against false positives. That is, it is better to designate an area as prospectively competitive, that turns out subsequently not to be competitive, than to eliminate the prospect of the benefits of competition through designating an area non-competitive.

Ofcom proposes that 65% of premises would need to be served by existing, planned or possible future networks in order to determine that a geographic area is covered, planned to be covered or within the scope of potential future network deployment. We think that this strikes a reasonable balance and errs sufficiently on the side of giving prospect areas the “benefit of the doubt”. In the absence of any other determinants, we also think that using the same figure as was used to assess the competitive constraints of rival network presence in the 2008 (and subsequent) WBA market review and in the latest review of the Business Connectivity markets ensures not only consistency, but provides some grounds on which to base the threshold.

#### Approach to assessing existing, planned and potential future network rollout

Ofcom intends to consider a single product market for downstream wholesale network services. We acknowledge that networks will, in the future, become more service agnostic, being capable of providing services in each of the legacy markets that Ofcom has defined. As we noted above, in the context of what Ofcom is seeking to achieve, perpetuating the traditional, fragmented approach to regulation in the longer term, such that different downstream wholesale services provided over a common infrastructure are regulated in different ways, is unlikely to provide the best climate for investment.

However, if there is to be a move to this new, single market approach, Ofcom must be careful to ensure that networks that continue to be (downstream) service specific are identified and that the effect of them is appropriately reflected in any resulting regulation. Ofcom must also take account of the fact that service agnostic networks will not materialise overnight – i.e. existing networks will take time to evolve into such and new, service agnostic networks will be deployed over time. Ofcom must therefore allow sufficient time for its new framework to have effect and deliver.

In the Passive Infrastructure Market Review Ofcom rightly acknowledges that full-fibre investors will seek to maximise revenue streams to support their investment case. Ofcom goes on to note that removing usage restrictions on PIA will allow business connectivity focused CPs to expand their product portfolio and for multi-service networks to compete effectively in business connectivity markets. It

would therefore be counter-intuitive to disregard the impact of leased line infrastructure, as it is a key input to broadband services. Moreover, we note that certain providers, for example Hyperoptic, have made use of a network originally deployed to provide business connectivity services, to provide broadband services. We do not think that Ofcom should therefore make a general assumption that existing leased lines networks should not be considered to be multi-service networks, or to be substitutable for them<sup>19</sup>. Instead, it must take a cases-by-case approach to considering networks.

Ofcom's intended benchmark for the assessment of competition in its forthcoming review is "ultrafast capable" networks. Given the temporal scope of its consideration (five to ten years), Ofcom must be careful not to exclude emerging and new technologies that will be able to meet this criterion, and therefore act as a competitive constraint during that time period. In particular, there is significant potential for - and a strong likelihood of - FWA, 5G and evolutions in 4G technology being capable of exercising a competitive constraint on fixed, ultrafast capable networks in the medium term. Ofcom should therefore ensure that full account is taken of these technologies in its identification of areas that are potentially competitive. This should not be difficult or contentious: whilst they may be nascent in terms of deployment, the economic and other factors determining the case for deployment of such technologies in a given area are well understood.

Ofcom must also ensure that it takes the fullest account both of providers' explicit plans to deploy networks in certain areas and of areas that have the potential for entry. This latter category is particularly important in determining the boundaries of potentially competitive areas: failure to take account of the full potential for competition to emerge will result in the application of the "investment friendly" approach to regulation to a smaller overall area, with the corresponding prospects for investment curtailed.

We welcome the fact that Ofcom acknowledges that there can be differences in the level of certainty that can be attributed to build plans. This is true both between providers and within a provider (as providers have finite resource and must sequence their assessment and planning processes). To ensure that the full extent of likely rollout is captured, Ofcom intends to categorise as planned network, any plan that is sufficiently detailed to identify the town(s) or city(ies) in which it will deploy. Further, when assessing coverage, Ofcom intends to map any plans that are at a more granular level of detail than postcode sector or exchange area to the chosen geographic unit (and to apply the 65% coverage threshold) and, where the plan is at a higher level of granularity (e.g. town or city), to assume that all premises in the town/city will be covered (before again mapping this to the chosen geographic unit and applying the coverage threshold). We support this approach. As we have said throughout this response, a broad approach to determining potentially competitive areas is critical to Ofcom's ambitions.

It is also important to note that operators' plans to deploy new networks may not extend particularly far into the future (and this is true of very specific plans, higher level plans and plans at different stages of internal approval). This is because, amongst other things, funding tends to be released in short-term tranches (rather than, say, a five year period); it is difficult to be definitive about longer term plans as

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<sup>19</sup> Consultation, para 3.30

barriers and other constraints on deployment can arise; and, contracts relating to the required resource (for example dig crews) tend to be renewed on an annual basis, with tenders issued and change of supplier frequent.

This does not mean, however, that providers will not deploy network in areas beyond those set out in their plans. [X

X]

We note that Ofcom has considered a number of factors that it believes to be determinative of whether build in a certain area is economically viable. We agree with these factors as a starting point. We also acknowledge that certain of the factors will vary on a case-by-case basis and will therefore be difficult for Ofcom to take account of in its identification of relevant areas. However, Ofcom's intended simplified approach of confining its analysis to size and density criteria risks excluding areas that may be viable.

Size and density are certainly critical factors in determining the viability of network deployment, however, there are other factors that may render an area viable even if it does not meet the required size or density. The size and density factors should therefore be used to determine an initial collection of areas that have potential for future network deployment, but Ofcom should work with individual providers to establish areas beyond these that are nonetheless within the scope of potential network deployment. For example, new deployment techniques [X X] have the potential to bring additional areas into the scope of economic viability – as does the PIA product. With regard to PIA, we note that Openreach is assessing the opportunity to introduce a single fixed price for PIA licences for customer connections, rather than a per metre price as exists today. [X

X]

[X

X] It is important, therefore, that Ofcom works with providers to understand these fully to ensure that the full potential for network expansion is captured.

### Response to specific questions

We have incorporated our responses to Ofcom's specific questions in the sections set out above.