



## Strengthening Openreach's strategic and operational independence: Proposal for comment

### Summary

In the Digital Communications Review Ofcom appreciates that competition between *different* networks is the best way to encourage investment in high quality, innovative services for consumers. This has prompted a *major shift in its strategy*: to encourage the large-scale deployment of new ultrafast networks, including fibre direct to homes and businesses; it is reasonable to ask whether greater independence for Openreach is congruent with this strategic shift.

The forced divestiture of Openreach will do nothing to encourage more fibre build by it, or its competitors: structural separation is what you do not do if you want other providers to build infrastructure of their own.

Similarly, we believe that Ofcom acknowledges that greater independence for Openreach will not, in itself, result in more investment in fibre on its part. Openreach will still want to 'sweat its existing assets' until it is convinced that consumers' willingness to pay for higher speeds warrants the deployment of its capital in FTTP. The sweating of assets is not a phrase that should be used pejoratively: FTTC can be deployed quickly and cost effectively and is readily upgradeable; this means that as customer demand evolves, Openreach can move fibre ever closer to the customer. In this way, it can align its capital expenditure with demand. Ofcom should welcome this; indeed, it has in the past been concerned about efficient use of capital.

However, under greater independence Ofcom asserts that "new models of investment", in particular co-investment, will become more "likely" because Openreach will become a "better partner", but it does not link these statements to any evidence or a chain of reasoning. When we try, we struggle, and the prospect of co-investment appears an insufficient justification for seeking greater independence for Openreach. Outside of views on prospective revenues and costs, whether co-investment is attractive to any of the potential partners is dominated by the wholesale conditions that will apply to the new assets and services, irrespective of how Openreach is organised.

Moreover, there are risks that making Openreach more responsive to the needs of its customers could *retard* its investment in ultrafast broadband, especially if Ofcom makes reselling superfast broadband more attractive by reducing the price of VULA. There are all sorts of incentives for game playing if the prize from the failure of Openreach to participate in "new models of investment" is full structural separation. These risks deserve more attention by Ofcom because there are legitimate reasons why BT may *not* want an investment partner, not least because it believes that, by acting solo, it will garner higher profits.



If the new arrangements for Openreach are unlikely to result in more fibre, but simply make Openreach a better supplier of access products (surely Ofcom's strategic shift in reverse?) Ofcom should be wary of a costly and protracted intervention; far better to reach a negotiated settlement with BT.

The best way to see more investment in new networks is to encourage competition through: reducing the costs of deployment through reforms to the Electronic Communications Code and providing better access to BT's passive infrastructure, and not denting the prospective returns for investors by regulating the price of wholesale access to the BT NGA network; requiring BT to provide dark fibre (*as well as* access to poles and ducts) or subsidising BT to provide service to postcodes that can and will be served by competing providers. Ofcom's resources are better deployed in contemplating these matters.

## Ofcom's Strategic Shift

1. Ofcom has stated, a number of times, that the Digital Communications Review marks an important shift in its strategy.

*At the heart of our strategy is a **major strategic shift** to encourage investment in new telecoms networks, including the rollout of new 'fibre to the premise' networks to homes and businesses, as an alternative to BT's planned innovation in copper-based technologies. To deliver this, we are making it easier for competing providers to build their own fibre networks, across as much of the UK as is practicable, by providing them with access to Openreach's network of underground ducts and telegraph poles. [Consultation paragraph 2.2, our emphasis]*

*There's a **major shift in our strategy** to promote competing new fibre networks both built entirely independently of BT's infrastructure, but also using BT's ducts and poles, using BT's passive infrastructure. [An extract from the transcript of the analysts' call on 26 July, our emphasis].*

2. Ofcom is making this strategic shift because it believes that network competition is the most effective spur for continued investment in high quality, fibre-based networks. And, by extension, this will deliver a better outcome for consumers.
3. Importantly, Ofcom concedes that a strategy based on LLU and VULA "has limitations" in that it "provides limited incentives for Openreach to upgrade the underlying fixed network, and limited opportunities and incentives for others to invest in their own networks." Ofcom notes that "it has historically been cable that has played a greater part in driving [Openreach's] network upgrades".<sup>1</sup> We would add that this competitive 'dynamic' has been greatly assisted by Ofcom's enlightened approach to the regulation of superfast broadband.
4. In our response to the original consultation we expounded at length about the benefits of infrastructure competition; for example:

*"t]here is now an abundance of empirical evidence which shows that investment in, and competition between, end-to-end providers of infrastructure with networks of their own delivers the best benefits for consumers: higher uptake of services; more innovation and a lower cost per unit of output. Building, not reselling, is best for consumers, and it is this form of competition that Ofcom should champion."*

5. We also noted that the current regime is working well:

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<sup>1</sup> DCR Initial Conclusions paragraphs 4.10 and 4.11

*“And yet, in more recent years, the UK’s enlightened approach to the regulation of superfast broadband—active access with wholesale pricing freedom and broadly stable copper prices—has encouraged investment to flow. There is no better evidence for this than Virgin Media’s intention to invest £3 billion to expand its network so that it will pass 17 million homes and businesses. By 2020, the majority of UK households will be able to choose between two end-to-end infrastructure providers offering speeds of over 100Mbps. Ofcom’s approach to date has resulted in positive outcomes. Ofcom therefore has a ready-made model for how to get this aspect of the regulatory regime right.”*

6. Ofcom has also been explicit about how *much* infrastructure competition it hopes to see:

*“At present, about half the country has access to two network providers. We have suggested that a good long-term outcome would be to achieve full competition between three or more networks for around 40% of premises, with competition from two providers in many areas beyond that.”*

7. An obvious question is whether the proposals in this Consultation will aid Ofcom’s strategic shift by promoting greater investment in end-to-end infrastructure, or whether, under some conditions, they pull in the opposite direction or are likely to make very little difference (but possibly cost BT a lot to implement). It is these issues that we address in our response.

#### Does greater independence mean more investment in ultrafast?

8. One of the main justifications for Ofcom’s wish to see greater independence for Openreach appears to stem from avoiding things that might go wrong in the future, rather than a desire to avoid the mistakes in the past.
9. Ofcom is concerned that the current model of functional separation fails to remove sufficiently BT’s ability to discriminate against competitors. This is derived from the control retained by BT Group over Openreach’s *strategic decision-making* and over specific decisions on the budget that is spent on the parts of the network used by competitors. It seems that Ofcom considers that, without addressing this, BT’s retail arm will be ‘favoured’ in some way and consumers and businesses are less likely to see the benefits of competition, which include improvements to the price, choice and quality of communication services.
10. Ofcom clearly believes that Openreach possesses both the ability and the incentive to discriminate in favour of BT’s retail arm, but it does not give any examples of where it has done so in the past to the detriment of its customers. Openreach’s major investment over the last half a decade has been in its NGA

network. However, Ofcom has not made the case that this investment has been skewed to the advantage of the BT Group or BT Retail or that consumers and businesses have suffered, or that investment in NGA has been retarded. Indeed, Ofcom has argued that the outcomes for consumers compare favourably with other European countries.<sup>2</sup>

11. An undercurrent throughout the debate on separation is that Openreach's status (i.e., the absence of sufficient separation from BT) has somehow incentivised it against upgrading to FTTP technology.<sup>3</sup> The corollary of this belief is that independence will increase the chance of this type of investment.
12. We examine this chain of reasoning below in two parts. First, will greater independence result in more investment in fibre on the part of Openreach by itself? Second, will it result in more fibre build via co-investment or some model of risk sharing?

### *Openreach and Fibre*

13. Ofcom has already answered the first question. In the initial conclusions to the DCR, Ofcom stated that *"[s]tructural separation itself may not itself change Openreach's incentives to operate efficiently, invest, or deliver a good quality of service. This is because these incentives are dampened by a lack of sufficient competition at the infrastructure level, and not because BT is vertically-integrated."* Furthermore, given *"that the costs of rolling out the copper network have already been sunk, a structurally separate Openreach would have an incentive to exploit these assets for as long as possible, rather than investing in new networks – unless there was sufficient competitive pressure from alternative infrastructure providers."*<sup>4</sup> We would add that that structural separation is what you *don't* do if you want other providers to build infrastructure of their own: it puts off those that are currently building, and encourages those that are renting to continue doing so.
14. Given that Ofcom does not even believe that full structural separation will lead to more investment in fibre, it cannot credibly claim that greater independence on the part of Openreach will somehow change its outlook on building more fibre. It will still only overbuild its FTTC network when it sees sufficient demand (at the right price) to justify the extra capital investment; this would be the same for any rational investor, regardless of its structure. The status of Openreach

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<sup>2</sup> See for example The European Broadband Scorecard  
<http://stakeholders.ofcom.org.uk/binaries/research/broadband-research/scorecard/2016/european-broadband-scorecard-2015-update.pdf>

<sup>3</sup> For example: *"SMP obligations and the Undertakings have achieved good outcomes by preventing BT from supplying inferior products and services to its competitors compared with its own retail businesses. However, as they only apply once Openreach has invested in the network, they do not limit the ability of BT to discriminate when making key decisions that shape the network itself."* (paragraph 3.12). And again at paragraph 3.24 *"This governance structure means that the way Openreach allocates its capital expenditure can be influenced by the priorities of the BT Group rather than the needs of all of the Openreach customers..."*.

<sup>4</sup> Paragraphs 6.59 and 6.60

within the BT Group does not change this calculus. Greater independence for Openreach will not therefore further Ofcom's 'strategic shift'.

### *Co-investment and risk sharing*

15. Ofcom does however claim that the changes to Openreach proposed will result in more investment via co-investment or risk sharing:

*The proposal should also result in new models of investment, by making Openreach a much more attractive and open partner for risk-sharing and co-investment opportunities. These make it easier to deploy new networks, including those based on fibre to the home. This is because they allow the demand from different providers to be aggregated, thereby making it easier to achieve the necessary penetration for such deployments to be profitable, and they spread the associated risk across multiple providers. (paragraph 6.13)*

Similarly, on the analysts' conference call on 26 July:

*I would emphasize though that this is why I come back to the co-investment point is why, the way in which more money could come into the system is through partnership with other CPs, risk sharing co-investment models. That is the model which we think can increase total levels of investment where we're not relying on Openreach to be able to independently raise debt off essentially Group assets.<sup>5</sup>*

16. Ofcom does not however share *why* these new models of investment are more likely under its proposals i.e., what is it about independence that means that co-investment/risk-sharing for new FTTP build is more likely? Potential co-investment partners may be more comfortable in sharing their ambitions with Openreach because of the better protections for their confidential data, but this does not explain why co-investment is more likely to happen. We are aware of a number of possible arguments, and we examine these below.
17. Richard Feasey<sup>6</sup> has argued that greater independence will result in some variant of co-investment. His counterfactual (which might be wrong) is that if Openreach rebuffs a co-investment partner(s) then the latter will build FTTP. He then argues that:

*A genuinely independent Openreach does not know how BT's retail business will react to the threat of a new network competitor. Since Openreach's sales are derived in large part from the retail sales of BT,*

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<sup>5</sup> We note that the desire for greater independence for Openreach was a *conclusion* of the DCR, but in the statement of 25 February co-investment is mentioned only once at paragraph 6.66: "[o]ne outcome of this increased autonomy **could** be the ability for Openreach to reach co-investment or risk sharing agreements with operators other than BT." (our emphasis).

<sup>6</sup><http://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbXNmZWZzZl13YWxl3xneDo3NTRiYjJmZjY5ZWJyZzcz>

*this lack of visibility and inability to co-ordinate with downstream customers will have a significant impact upon Openreach's strategy. At present, Openreach can be confident both that it will retain revenues from a large group of 'captive customers' that it holds through its relationship with BT Group and that BT Group has a strong interest in the future viability of Openreach as a platform for those sales. BT Group can be expected to manage revenues and prices across both its retail and network businesses in a way that best serves its overall commercial interests. A genuinely independent Openreach would face much greater uncertainty in relation to the future pricing and competitive strategies likely to be deployed by BT's retail business, which have an immediate impact on Openreach's own position, and in relation to competitive developments generally. Co-investment aims to reduce some of those risks and uncertainties, and an independent Openreach that is seeking to reduce uncertainty is likely to be attracted to such models.*

18. Simply put, post independence, Openreach is more likely to favour co-investment because the potential adverse consequences of not doing so could be worse because it cannot be certain of the reaction of BT Retail (but it can under the current arrangements).
19. We think that this is unlikely to be the case. In a paradoxical way, Openreach will act independently of BT, but BT does not act independently of Openreach and Ofcom is not attempting to make it do so. BT Retail will know that it is not in the best interests of the BT Group to ditch Openreach and put its business with another network provider (and in reality it is unlikely to be feasible, given the need for any alternative network effectively to have complete coverage of the UK). Openreach will surely figure this out and therefore it will not make its decisions about co-investment with this risk in mind. In fact, not much changes from the existing model of functional separation; it will make a decision about co-investment based on the likelihood of the threat of overbuild and the damage that this will inflict on the BT Group. We do not see that greater independence makes Openreach any more likely to sanction co-investment.
20. There is another more prosaic reason why co-investment is no more likely: BT controls the purse strings. Openreach will be unable to raise debt<sup>7</sup> and meaningful investment in FTTP is likely to be outside of Openreach's agreed capital expenditure envelope and require approval from BT Group. The latter will consider the same factors as it would under the existing model of separation.<sup>8</sup>

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<sup>7</sup> "We think that's one of the things that, while we understand why people would like that to happen, we think that's one of the things that's probably just a step too far. If Openreach were able to raise finance independently, presumably off the back of the Openreach assets, that's one of the things that I would think cross the line where effectively you incur substantial costs for BT." [Transcript 26 July].

<sup>8</sup> "BT Group would need to have visibility of major investment or operational decisions that could have a material bearing on BT Group finances. It would also need to be able to decide whether or not to proceed with these." (paragraph 4.54)

21. One of the most crucial determinants in any decision about co-investment is surely the regulatory conditions that will apply to that investment; both the rules that govern participation in the co-investment / risk sharing project and the obligations on access to the assets that it builds or the services that it supplies (i.e., the extent to which those that do not partake in the risk enjoy the 'upside'). Ofcom has provided some clues on the latter:

*So, something about gaining penetration fast is something about risk sharing in relation to subscriber acquisition. Those are the things that that type of model can deliver. Clearly, in return for that type of risk sharing model, people, if you put money in up front, you'd expect to pay a lower price down the line. It would still need to be, **it'd still be important though that those services were made available to other providers in a way that wasn't in a broad sense, discriminatory.** But, there would have to be some allowance, clearly, in pricing for the risks that the co-investors have taken. [Call Transcript, July 26, our emphasis]*

22. Under this model, the risk sharer gets cheaper access, but others can still enjoy all other benefits if the investment is successful. It might be the case that only BT Retail is prepared to "put money in upfront", but it is hard to see why the independence or otherwise of Openreach matters. In all cases we would expect Ofcom to have oversight of the conditions attached to participation in the venture and presumably these would look the same however Openreach is organised.
23. In its proposals for reform of the Common Regulatory Framework, the European Commission proposes to go further than Ofcom and give NRAs the power *not* to impose wholesale access obligations relating to the full capability of a new NGA infrastructure (with the exception of civil engineering), provided that it has been deployed following a genuine co-investment offer, including a possibility for smaller players to participate in tranches taking into account their current scale. In the presence of a co-investment arrangement, there might actually be no obligation to wholesale.
24. Clearly, the more of the potential upside from investment that can be captured by the co-investors, the more attractive the investment, all else constant. The extent to which Openreach is independent of BT is either an irrelevant factor or a very marginal one.

#### *Openreach and its cost of capital*

25. It is asserted that the constituent parts of BT have different cost of capital, although there is a disagreement about whether Openreach's cost of capital is higher or lower than BT Group's.

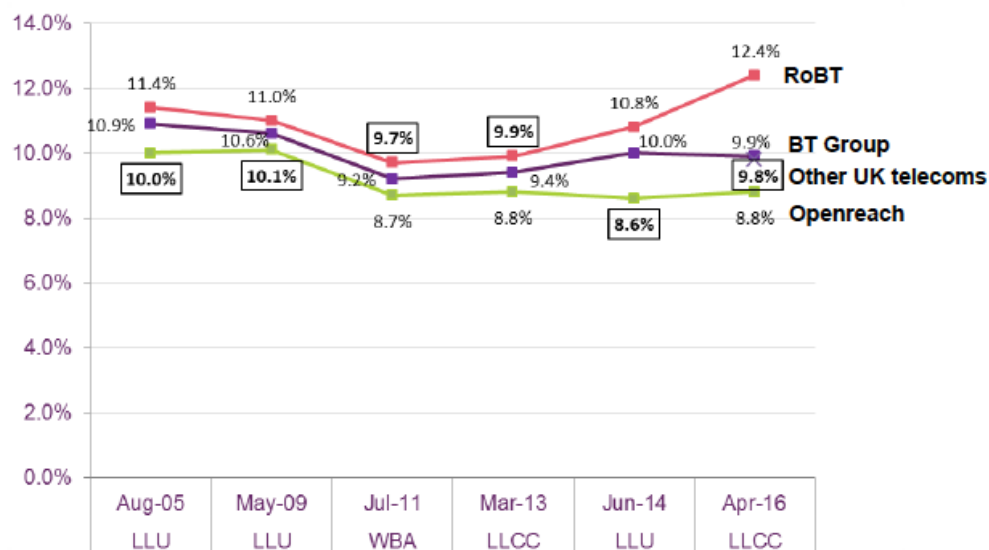


26. In a supplementary submission to the DCMS' enquiry into broadband, Ofcom stated that it believes Openreach's cost of capital is lower.

*We consider that some regulated parts of BT, in particular the copper access products provided by Openreach, face lower systematic risk than BT's other activities. [Supplementary written evidence submitted by Ofcom to the DCMS].*

27. This is shown in the graph below submitted by Ofcom to the DCMS:

**Figure 2: Disaggregated WACC estimates**



*Note: cost of capital is expressed in pre-tax nominal terms.*

28. The DCMS has stated that:

*This decision by BT to allocate capital between its various businesses on the basis of a single group-wide hurdle rate is bound to lead to sub-optimal investment in (relatively low-risk) Openreach. Estimating the magnitude of this investment shortfall would require additional analysis, with considerable data requirements concerning the investment opportunities available to BT and their associated costs, but is likely to be substantial and could perhaps even run into the hundreds of millions of pounds. By adopting this approach BT is likely to be sacrificing shareholder value and, with this, the public benefits that would flow from these investments. [Annex p 58]*

29. Put simply, the case is that BT Group is made up of constituent parts that have varying riskiness. Openreach is assumed to be less risky than BT Retail and therefore has a lower cost of capital. However, BT evaluates investments using the Group's cost of capital. If it instead used Openreach's hurdle rate it would

have a different portfolio of investments because these would have vaulted Openreach's hurdle but not BT Group's. The implication is that FTTP falls into this cost of capital 'trap' and that is why we have less investment in FTTP in the UK than other countries.

30. A better, or at least a rival, explanation is that, at this time, the better return on investment can be achieved through investment in G.Fast and FTTP to only new build premises rather than a large-scale fibre build. If there are insufficient people willing to pay a large enough premium for gigabit speeds to warrant the investment in laying fibre to the home then this is the best strategy for BT. Put another way, even if FTTP is viable for Openreach but not BT Group, FTTC is still the better option to Openreach because it earns the higher return on investment and therefore is the best use of capital; greater independence (or separation) will not alter these economics: FTTC still trumps FTTP.

#### *Misaligned incentives*

31. Ofcom does not appear to have considered that giving Openreach's customers greater influence may actually reduce investment in FTTP. The non-BT ISPs were reportedly not big fans of VDSL deployment, which threatened their sunk costs in ADSL.
32. Moreover, in the eyes of some Openreach customers, there might be a bigger prize available from not participating in a co-investment venture: the full structural separation of BT. Ofcom has reiterated that this is not 'off the table' but it has proposed that one way in which it will evaluate the success of Openreach is *"to seek evidence from customers on the responsiveness of Openreach, in particular to new investment ideas and new models of co-investment."* (paragraph 6.5).
33. Ofcom should keep in mind that there may be very good legitimate reasons why Openreach – however it is structured – may want to rebuff offers of co-investment, not least the view that its return on investment will be greater whether or not the rejected parties then decide to build themselves.

#### Summary

34. It is hard to fathom how greater independence for Openreach makes much difference to the prospects of it investing in FTTP. The economic calculus is unchanged for Openreach, and co-investment is likely to depend on the conditions that apply both to participation and access to the assets and services by non-participants. The way that Openreach is organised within the BT Group does not appear to matter much.
35. Greater independence for Openreach does little to support Ofcom's strategic shift. The benefits appear confined to making Openreach a better partner for its customers for example by resulting in speedier new product development. In

fact, making Openreach a better partner might make its customers *less* likely to build their own networks and therefore it could undermine the shift in strategy and therefore make it less likely that Openreach, or its competitors, will invest in FTTP.

36. Ofcom therefore should be pragmatic about the extent of independence required of Openreach and agree a route forward with BT that is least burdensome and quickest to implement.

#### What really matters for fibre build?

37. To assist its strategic shift, Ofcom will make BT's poles and ducts easier to use for rival networks and thereby lower the cost of building a fibre network. It also intends to broaden the scope of the services that can be provided over this infrastructure to include those supplied to businesses.<sup>9</sup>
38. The other leg to Ofcom's strategy is its decision about how to regulate access to BT's network for the next three years. It will consult on this in the autumn.
39. The current approach is to set LLU prices on a cost oriented basis whilst allowing pricing freedom for VULA. The basic copper loop based ADSL product acts as an "anchor product", constraining scope for abuse of dominance through excessive pricing in relation to NGA products (alongside strong and growing cable competition) whilst leaving open scope for price experimentation and service-price differentiation for NGA.
40. The price of access to VULA is of critical importance for those building rival networks. If the price is reduced, and this is reflected in retail prices, the returns that can be expected from deploying networks to supply superfast and ultrafast networks will be reduced, and fewer homes will be passed by these new networks. The corollary of this is that the more BT is required to reduce the price of VULA, the more the buyers of this product are likely to want to discourage the rollout of ultrafast services by BT.
41. A number of options are under consideration including continuation of the status quo, a modified anchor product and adoption of cost orientation for VDSL. Ofcom has framed this discussion in terms of whether or not the "fair bet" is coming to an end – fair bet being the opportunity to earn a return commensurate with the risk at the time investment was made.
42. As the market develops the anchor product may become a weaker substitute for NGA, thereby offering less constraint on possible abuse of dominance. However, our examination of evidence does not suggest this time has come. ADSL still has a strong position in the market. Evidence from the UK and other markets

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<sup>9</sup> Unfortunately, it has also decided to require BT to supply dark fibre for business connectivity services; this does not, in our view, support Ofcom's strategic shift.

suggests that demand and willingness to pay for speeds beyond a few tens of Mbps is weak whilst few applications need speeds beyond this, even with aggregation of demand within households. In addition, third party infrastructure competition has intensified with 4G rollout, cable extension and competing fibre to the premise deployment all acting as a significant constraint on BT's pricing – and this should not be underestimated.

43. Moreover, it is extremely challenging to evaluate whether or not the fair bet has played out since the question depends on expectations at the time investment was made coupled with anticipated future demand. Further, should adoption of very high speed NGA proceed faster than anticipated, VDSL may also reach economic obsolescence earlier than expected (with an early upgrade required to avert loss of market share).
44. The end of fair bet<sup>10</sup> is, any case, neither a necessary or sufficient basis for introducing direct regulation of prices since competitive constraints from the anchor product and competing infrastructure may be sufficient even if the fair bet was judged to have played out. Alternatively, pricing power might assert itself before the fair bet had played out. Thus Ofcom should focus its assessment on demand for NGA and the existing constraints from regulated current generation access and competing NGA.
45. Whilst these constraints are sufficient to constrain pricing of NGA, even if they were not, there are more proportionate options than moving to direct price control. An anchor product intermediate between ADSL and VDSL could be adopted. The “virtual” anchor product could be provided over either VDSL or fibre to the premise, decoupling the anchor from ADSL. One option would be to set this anchor product at the same level as the proposed broadband USO.
46. A proportionate approach would, in our view, be to maintain the existing anchor product approach for the next price control period. Whilst we consider an ADSL anchor coupled with growing infrastructure competition sufficient to constrain NGA pricing, if Ofcom is able to demonstrate that it is not, an updated anchor could be adopted. Either option would in our view be preferable to moving to price control for VDSL – an option that is complex, requires judgement over uncertain future demand and would reduce scope for service pricing differentiation and experimentation. The outcome would be weaker incentives for investment, reduced adoption and reduced investment in competing infrastructure. In short, it would risk undoing the positive outcomes and

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<sup>10</sup> The ‘fair bet’ might be an appropriate framework for analysis when the objective is to encourage a monopoly provider to invest in a new technology with uncertain demand. However, it is not the right approach when the objective is to encourage others to build. Crucially, regulating sub-100Mbps NGA on a cost basis would reduce retail prices and lower what networks can charge for 100Mbps and undermine the incentive to invest in FTTH. The appropriate question is not whether the fair bet is exhausted (we doubt that this can even be answered given that the future is unknowable) but whether Openreach is constrained from pricing its wholesale NGA products excessively.



achievements that have resulted from Ofcom's approach to date and thereby undermine Ofcom's major strategic shift.

**Virgin Media**  
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