Ofcom
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6th October 2015

Dear Ofcom,

Evidence to the Digital Communications Review: "Separate and Upgrade"

Redburn is a leading European independent stockbroking firm, which offers investment advice and trade execution to institutional fund managers. We do not advise corporates or trade on our own account.

We make this submission to the review as independent observers. In the interests of full disclosure our current investment recommendations are BT 'Neutral'; TalkTalk 'Sell'; Liberty Global 'Buy' and Vodafone 'Buy'. We do not currently cover Sky.

As part of our work on BT we have highlighted to our investing clients that:

- Openreach is over-earning substantially versus its cost of capital;
- Openreach investment including fibre has been flat since FY09 and BT shows no sign in its recent presentations (e.g. September 22) of planning to increase investment;
- The BDUK subsidy has likely funded BT's wider costs and poses future risk to BT to the extent it will be clawed back; and
- Openreach's vertical integration with BT could be challenged by regulators.

On the other hand we are positive on other aspects of BT's business, including the push into content and the acquisition of EE.

Our submission to this review consists of four parts:

1. Our March 2015 pamphlet "Cutting the Gordian Knot" (click here to access) which set out our view on the current problems in UK broadband and the advantages of separation;
2. A PowerPoint presentation which is a summary of this pamphlet;
3. A report on BT called "Why BT Should Volunteer the Split" (24th September 2015) **which in particular covers the positive experience of separation in New Zealand;**
4. This letter.

Summary

Openreach investment has been growing below inflation for six years. UK broadband speeds are already low by worldwide standards – London is just ahead of Minsk in the capital city league table – and are likely to fall further behind given the lack of fibre investment. There has been very limited investment outside the historic cabled areas of the 1990s.

The question of what speeds are needed, and what technology will deliver them is certainly a complex one. We would make some broad observations at the outset:

- **The speed we need is not known.** The broadband minister Ed Vaizey's statement that most people can live with 6-8Mbps (FT, September 30 2015) is a statement of the obvious: if that is all that is provided, that is what people will live with. The question is whether we should provide more capable networks that allow video upload, and capacity for new services. Without such networks in their home markets British companies will not have the full set of opportunities to develop the products of the future, whether holographic TV, higher quality user generated films, professional photo storage or ideas yet to be developed.
- **The cost of copper is high.** The cost of living with the copper network is high. Openreach has EBITDA margins 10-15pp lower and capex/sales 5pp higher versus fibre wholesalers because the network is old and inefficient. The UK (and BT) needs to plan for copper shutdown.
- **Getting it right first time lowers costs.** The UK risks building infrastructure for one set of assumptions (that 6-8Mbps is 'OK' and 24Mbps is plenty) and thus sticking with the copper network (via VDSL and G.Fast) even though this costs more to run. The width of the M25 is brought to mind: *building only for the services we know now would be a mistake,* particularly in this case as the cost of building a far better network can be achieved around current retail prices.
- **Vertical integration of access and service raises prices and reduces choice.** The US model leads to high prices and patchy connectivity. Both BT and Virgin are allied in wanting vertical integration, and have far more in common from a regulatory perspective than many realise. Separation of access and service can solve many issues, including net neutrality and complex 'margin squeeze' tests.
- **Openreach separation is not complex.** Ed Vaizey has said: "I think full separation would be an enormous undertaking, incredibly time consuming [and have] lots of potential to backfire". We disagree. The separation of Telecom New Zealand and the break-up of British Gas were relatively quick. If functional separation has been as effective as its proponents claim, there should be no risk of anything 'backfiring' with full separation. Australia is a poor example of separation.
- **'Anchor tenancy' arguments are very weak.** BA does not own Heathrow; Apple does not own its suppliers; and oil and gas companies do not vertically integrate exploration, extraction, pipelines and refining. In fact a separated Openreach would have a greater probability of contracting with a variety of CPs for network upgrades, and could offer volume discounts to co-investors as in Germany under the 'Kontingentmodell'. Conversely a separated BT Retail would be able to contract with non-Openreach access providers, which would be likely to improve Openreach's customer service versus the current 'captive customer' relationship. As Cave & Doyle note (Communications and

Strategies, 2007) anchor tenancy arguments are based on excessively pessimistic assumptions on the effectiveness of both regulation and contracting.

Answers to the consultation questions, p169 of the discussion document

Q1: Do stakeholders agree that promoting effective and sustainable competition remains an appropriate strategy to deliver efficient investment and widespread availability of services for the majority of consumers, whilst noting the need for complementary public policy action for harder to reach areas across the UK?

Fibre broadband access in the long run may be no different from electricity, gas or water as the fourth utility, with no parallel infrastructure competition required. In addition, the current model which pays BT a high price for the legacy copper network in the hope that competing infrastructure will be built in parallel has for the most part failed: the main competing network – Virgin – was built as a TV distribution network and only by chance has been repurposed for broadband.

However maintaining a high price for copper-based services is essential to manage the transition to new fibre access and changing the whole basis of telecom regulation at this time is premature. Furthermore, this question presumes the UK has freedom to change the basis of regulation when in fact this has already been determined by the EU framework directives.

Q2: Would alternative models deliver better outcomes for consumers in terms of investment, availability and price?

The best alternative model to be considered could be a form of concession areas (similar to CATV in the UK or US ‘no redlining’ rules) whereby fibre builders in a defined area are given a temporary monopoly or other incentives in return for a commitment to build to 100% of consumers and businesses and open access to all retailers.

Alternatively, Ofcom could institute measures against predatory overbuild by SMP providers. The risk that the SMP operator will build is a significant chilling factor on competing investment. BNetzA has recognised this, and has just prevented Deutsche Telekom from upgrading to VDSL in Karlsruhe simply to forestall the local council’s investment. We believe Openreach could be asked to submit investment plans at least 5 years or more in advance to enable competing providers to have greater certainty of investment in the remaining areas. These plans would have to be committed, with fines for non-execution. This could unlock significant new investment.

Ofcom could also evaluate the French model of variable regulation in ‘Dense’, ‘Less Dense’ and ‘Non Dense’ areas pioneered by Arcep.

The Spanish system, with low build costs due to aerial fibre deployment and limited wholesale requirements on Telefonica (and therefore upward pressure on Telefonica's retail market share) is unlikely to be attractive to UK policy makers in our view.

Q3: We are interested in stakeholders’ views on the likely future challenges for fixed and mobile service availability. Can a ‘good’ level of availability for particular services be defined?

What options are there for policy makers to do more to extend availability to areas that may otherwise not be commercially viable or take longer to cover?
See Q2. Electricity distribution would never have been built to remote areas without government intervention…

Q4: Do different types of convergence and their effect on overall market structures suggest the need for changes in overarching regulatory strategy or specific policies? Are there new competition or wider policy challenges that will emerge as a result? What evidence is available today on such challenges?
As a regulatory principle, reducing vertical integration where possible as well as regulated access to bottlenecks will reduce the competition risks of convergence. This could include access to mobile towers in time given the de facto duopoly of MBNL and Cornerstone.

Q5: Do you think that current regulatory and competition tools are suitable to address competition concerns in concentrated markets with no single firm dominance? If not, what changes do you think should be considered in this regard and why?
A more active pro consumer stance could be required. Automatic opt in to new charges for voicemail or content products could be outlawed; and ease of switching from the separate parts of a convergent bundle could be ensured. This might require the individual charges in the bundle before any bundle discount to be clarified.

Q6: What do you think is the scope for sustainable end-to-end competition in the provision of fixed communications services? Do you think that the potential for competition to vary by geography will change? What might this imply in terms of available regulatory approaches to deliver effective and sustainable competition in future?
There are signs that rural builds are progressing well (Gigaclear). These could be supported in new ways (see Q2).

Q7: Do you think that some form of access regulation is likely to continue to be needed in the future? If so, do you think we should continue to assess the appropriate form on a case by case basis or is it possible to set out a clear strategic preference for a particular approach (for example, a focus on passive remedies)?
As in Q1, access for the most part will remain a natural monopoly with access regulation. Active product regulation is likely to be required in a fibre world. Passive remedies are superficially attractive but if limited to duct require that duct to be mapped and easily utilisable without digging (unlikely to be the case), while dark fibre might require a more cumbersome Point To Point fibre system as opposed to GPON.

Q9: In future, might new mobile competition issues arise that could affect consumer outcomes? If so, what are these concerns, and what might give rise to them?
Access to towers, and/or landlord blocking of tower sharing could be looked at in the long term.

Q10: Does the bundling of a range of digital communications services, including some which may demonstrate enduring competition problems individually, present new competition

challenges? If so, how might these issues be resolved through regulation, and does Ofcom have the necessary tools available?
Content is increasingly being used as a switching tool by operators for broadband and mobile access services. Regulators could consider "must offer" obligations on all high value content. The price of the obligation needs careful consideration if this is to be successful in reducing consumer prices. However Ofcom would need to be ready to face down fierce resistance from the content lobby, in particular the English Premier League.

Q11 & Q12: What might be the most appropriate regulatory approaches to the pricing of wholesale access to new and, risky investments in enduring bottlenecks in future? How might such pricing approaches need to evolve over the longer term? For example, when and how should regulated pricing move from pricing freedom towards more traditional charge controls without undermining incentives for further future investment?
BT's VDSL investment is not detectable at the divisional level, and therefore it is probably not "risky". It has also enabled 'double dipping': BT still charges for the unused copper pair from the exchange to the street cabinet.

In the longer term, a RAB and WACC based system could be instituted, especially if copper switch-off is also mandated as this will essentially guarantee demand.

The costs of a fibre network build could be discovered by a process of comparison across a variety of concession builders to avoid the SMP operator inflating costs.

Q13: Are there any actual or potential sources of discrimination that may undermine effective competition under the current model of functional separation? What is the evidence for such concerns?
(1) Sky has produced evidence that Openreach responds more slowly and less favourably to "Statements of Request" from non-BT CPs.

(2) The heavy cash flow Openreach provides may support and therefore distort the bidding for sports rights by BT.

(3) There may be evidence Openreach is less willing to provide business parks with GEA connectivity in order to protect BT Wholesale leased line revenues.

(4) BT itself says that the payback on GEA would have been 20 years but this was shortened to 12-13 years including gains for BT Retail. We dispute these figures. However either BT is saying it gained market share by integrating with the SMP provider Openreach, or it is saying that BT Retail avoided share loss (likely to Virgin which was otherwise offering much higher broadband speeds). The former is anti-competitive, while the latter could have been achieved by a contractual relationship, much as BA built Terminal 5 without owning Heathrow Airport.

Q14: Are there wider concerns relating to good consumer outcomes that may suggest the need for a new regulatory approach to Openreach?
CPs other than BT Consumer / Business are unlikely to contract with Openreach to upgrade the network while the capital commitment would go to their main retail rival.

The combination with EE could result in new competitive distortions whereby BT offers hybrid mobile/DSL routers in preference to upgrading the fixed access network while being under no obligation to offer equal access to an equivalent wholesale mobile product. Ofcom may need to consider this if the CMA has not already done so in its review of BT/EE.

Q16: Could structural separation address any concerns identified more effectively than functional separation? What are the advantages and challenges associated with such an approach?
Only full structural separation can address these concerns, as they are inherent in a blended balance sheet and integrated group structure. Full structural separation would remove the need for complex, intrusive and time consuming margin squeeze tests, which become very hard to implement in a quad-play market. The challenges are small, given that Openreach already exists as a functionally separate entity.

The pension fund is frequently mentioned as a barrier to separation. However Cable & Wireless successfully split its pension fund between CWC and CWW, and the pensions and government (via the Crown Guarantee) should not be disadvantaged by a split.

Questions not asked, that we think should be
The following questions were not asked in the discussion document but we think should have been:

- **How should the windfall from low gilt yields be recaptured?** *The EC September Recommendation fixes ULL prices in real terms until 2020, even though since then the cost of capital has fallen by more than 200bp. Compliance with the Recommendation could be squared with a signal from Ofcom that it will reduce ULL rates beyond 2020 to recapture the difference; or by investment commitments for upgrade in the intervening period. The excess earnings could also be redirected into a new BDUK investment fund or universal service fund.*
- **What other steps should be taken on economic regulation? Does the current regulatory structure provide sufficient incentives to transition to a more efficient fibre network?** *A separated Openreach would still benefit from a largely depreciated copper network and might still resist making further investment without ever greater de-regulation and price rises if new capital is not attracted into competing fibre builds. We would be no closer to seeing a transition to a more efficient, more capable FTTH network. Openreach would still have annual cash flow (EBITDA-capex) of £1.5bn, which at current low rates would support an excessive valuation of over £20bn while only investing £1bn per annum in the network, a large portion of which is capitalised own work. Unbundling the copper network has the unintended consequence of setting the current network topography in aspic and preventing the long term cost gains from moving to fibre. In the long run most central offices should close, as fibre networks require far fewer points of presence. But BT has no current incentive to reduce costs in this way. Ofcom could look to reduce copper unbundling prices in the long run to force Openreach to invest.*
- **How should Ofcom reward symmetric, upgradeable and equally available broadband?** *Whether separated or not, Ofcom will need to think hard about what incentives it gives*

Openreach to invest in 'future-proof' access technologies. Unlike FTTH, G.Fast is unlikely to offer an even experience to customers as it is highly dependent on loop length. It will not be fully symmetric, and it will not be easily upgradeable beyond a certain speed. Without abandoning technology neutrality, Ofcom could specify symmetry, upgradability and equal availability in the local area as a preferred product. The EC is also considering this in its current framework review. As a side benefit FTTH is cheaper, not just faster in the long term: Stokab and Reggefiber have far higher EBITDA margins (65%+ versus 50%) and far low maintenance capex / sales (likely <10% versus 15%+) than Openreach.

- **Why is BDUK structured as a subsidy rather than a debt or equity participation?** *This is a government, not an Ofcom, issue. However it is worth noting that in New Zealand, government money has been structured as debt and equity. Future government money could be structured as an equity participation to capture upside, or as debt to enable future reinvestment in new areas.*
- **What is the best form of cost discovery?** *An approach of creating concession areas would create a process of cost discovery in a variety of build types and locations that would help compare Openreach's costs to upgrade versus peers, and set reasonable long term returns for investment. Openreach build costs would be compared to Gigaclear, Hyperoptic, CityFibre and other likely concessionaires.*
- **Should Ofcom encourage or support the creation of a common ordering platform?** *As numerous access providers build, a common ordering and provisioning IT platform for the major ISPs may be desirable.*

Conclusion

The philosophical debate of utility regulation set against the productive role of capitalist 'equity risk' is a complex one. However Ofcom in its Digital Communications Review has the opportunity to steer a middle way which can:

- Create a more competitive market structure in the UK, whereby 2/3 of cash flow is not controlled by one company, BT;
- Create new mechanisms to encourage new competing access providers to build fibre, while requiring 100% building connectivity even in rural areas;
- Reduce over-earning at Openreach and avoid a situation whereby consumers continue to pay for the legacy copper network for the next 20 years;
- Maintain a vibrant retail market, where consumers who want excellent connectivity but do not wish to buy bundled broadband, content and mobile services are not disadvantaged.

If you would like to discuss any of these issues, please do to not hesitate to contact me.

Yours faithfully,

Nick Delfas
Partner, Telecommunications Service Research