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Submission to DCMS call for evidence: Future Telecoms Infrastructure Review

Invesco Perpetual is one of the largest asset managers in the UK, investing on behalf of our clients who are private individuals and institutions (such as pension funds). We have been long term investors in the telecoms sector and currently hold shares worth well over £1bn in UK telecom companies.

We are not persuaded that a rapid deployment of FTTP is necessary and believe that interim technologies coupled with steady deployment of FTTP makes more economic sense and achieves the same goals. We look to companies to be good stewards of our clients' capital. Under the current regulatory framework, the lack of certainty, short duration and associated risks, the conditions are not consistent with a positive investment case for a wide scale FTTP roll out.

Under the current environment, we would not be persuading BT to accelerate investment in fibre to the premise.

Below we have set out answers to your questions, focusing particularly on FTTP.

Question 1: What is the existing UK telecoms market structure and policy framework able to deliver?

- It is difficult to see that FTTP can be rolled out in a meaningful way under the current regulatory conditions. Legislation is too short dated relative to the investment it governs. The sums required to invest in a scale roll out of FTTP are huge and the returns under current regulation are very uncertain.
- There are some areas where investors will be more comfortable with the risk/reward trade off. Typically, these will be areas where cost per homes passed is low, such as new builds and blocks of flats, or where there is a wealthier customer base and an ability to pay higher prices.
- As such, there will be smaller operators willing to accept the high risks of investing in these niches, companies such as Gigaclear, HyperOptic and Cityfibre have all made announcements to this effect.
- Finally, free from regulation Virgin Media is likely to continue its targeted Project Lightning. But there is a risk that lowly priced FTTC under the WLA review leads to an unattractive price umbrella under which its VIVID products need to fit.

Question 2: What barriers exist to long term investment in the UK telecoms market?

- Investors supported BT's investment in FTTC, despite the uncertainty over what demand would lie ahead, the costs of the overall project and the double digit years of payback over which the investment would be returned.
- At the time, the legislation gave BT a period over which it would be free from price regulation, in which it could reap the reward for the huge risk its investors took on: the so called "Fair Bet". And yet, before the project has even been finished the latest three year WLA[i] is already threatening BT's pricing of FTTC, within the time over which the investment should pay back.
- This illustrates a conflict at the heart of the regulatory framework, ie the duration issue between a three year regulatory cycle and the length of time it takes to roll out nationwide infrastructure. Should the WLA set the precedent that a "Fair Bet" should be expected only in the short term, then investors are unlikely to support BT's position in scale roll out of FTTP.
- While there appears to be demand for faster broadband speeds, the evidence of FTTC would suggest that this is not at any price. The market is only around 1/3 penetrated currently[ii], with Sky and TalkTalk significantly less penetrated than BT Consumer[iii]. This illustrates the riskiness of adding further speeds at significant cost, ahead of the prevailing demand.

Question 3: What can the UK learn from the widespread deployment of fibre networks in other countries?

- The read through from other countries to the UK is not easy.
- There are significant differences between the UK and other countries in terms of the housing stock and related infrastructure. Full fibre roll out in countries such as Spain and France are significantly higher than the UK[iv], but when comparing the average broadband speeds, the UK is ahead[v] due to its investment in interim technologies.
- Apart from Netherlands, the UK has the largest roll out of fibre broadband technologies at 87% at the end of 2016, compared to Spain at 75%, Germany at 66% and France at 39%[vi].
- The cost of roll out in Spain has been low (estimated at £146 per home passed[vii]), given it has one of the highest proportion of MDUs (multi dwelling units / flats) in Europe[viii]. This compares to the UK where just 12% of total premises are MDUs which is second lowest in Europe after Ireland[ix].
- The UK appears to have managed a broader increase in average broadband speeds than other European countries, despite lower penetration of full FTTP. By using interim copper technology, BT has managed to improve speeds on a more cost effective basis.

Question 4a: What different market models might work in the UK in the longer term, and what risks and opportunities do they present?

- It does not make sense to have competing infrastructure for broadband, except where the cost to provide it is low or the price customers are willing to pay is high. As is typical of other major infrastructure, building a single broadband network, fully utilising its capacity and then providing a regulatory framework to oversee its operation appears to be the most cost effective way to deliver a scale network in the UK.

- The recognition of the long term risk taken by the investor is critical. There needs to be a clear regulatory environment which gives investors certainty over a long period.
- One means of delivering this certainty is to add incremental capex on the broadband infrastructure to the existing regulated asset base, which is then referenced to determine how the provider is to be remunerated.
- Another market model would offer a longer period of initial price freedom as the network is rolled out. In this case, it would be important that there is requisite freedom to ensure the operator is paid back for the investment made, before regulation limits returns going forward. In this case, BT would need to be given a chance to make an excess return in the latter years of the roll out, such that it pays back on the initial years when customers are less likely to want to pay for the extra speeds and the costs incurred for the roll out are amortised over fewer customers.
- As far as co-investment is concerned, the recent examples would suggest that retail partners are loathe to share the risks with the infrastructure providers. There has been *a de minimis commitment* from non-infrastructure CPs, such as Sky and TalkTalk[x]. Even the financial commitment from Vodafone to Cityfibre covers only 200,000 homes by 2027[xi].

Question 4b: Copper to fibre migration

- The benefits of fibre are in: 1) speeds; 2) symmetry of service; and 3) reliability.
- The benefit of copper is that it is already here. That we have a copper network is therefore a virtue. If we were to start from scratch then we may not have designed it this way, but the sunk cost of copper has the potential to deliver an excellent service to parts of the population, rather than waiting for full fibre.
- Before FTTP is rolled out, it would be sensible to maximise the capacity in the copper network through the use of interim technologies (such as G.Fast) which still use copper for the last mile. And this extra bandwidth could also enable more balanced upload / download symmetry. Meanwhile, there are areas of the country where reliability is much less of an issue, hence the upgrade to FTTP will have a lower utility for the end customer.
- Once FTTP is available, rather than running two networks side by side (copper and FTTP), the most cost effective way of delivering broadband should be to switch all users over to FTTP, regardless of the speed they want to pay for. In this regard, we see BTs suggested cutover as making a lot of sense.
- We strongly believe in copper to fibre migration, but have more realistic ambitions on the timescale over which this transition is achieved.

Question 5: The Government wants to achieve its digital infrastructure goals at the least additional cost. How should new digital infrastructure be paid for?

- The current market would suggest that the majority of customers don't want to pay for the new technologies. FTTC is less than half the total market and Virgin has only 5.9 million cable customers from 14.7 million homes passed. And of those, one third choose the slowest 50MB speed[xii].

- Government needs to give more certainty and visibility around the return that infrastructure investors are going to receive. Most important is the short dated nature of the legislation that requires Ofcom to look at price regulation on a three year cycle.

- If there are to be competing networks, with Virgin and BT offering scale ultra high speed broadband and the alternative networks cherry picking certain parts of the market, then the requirement for regulation should be limited. In signalling this, the regulator would give the market some certainty over return potential.

- Alternatively, if there is a regulated asset base with a single provider, then there would clearly be a need for regulation, but again, this would at least provide a framework within which the risk/reward could be fairly judged.

- As it stands, Ofcom has suggested that the latest WLA will be the last time it looks at price regulation in the medium term[xiii], but in the same breath states that the European Commission telecommunications regulation compels it to look at prices again in three years time[xiv]. This contradiction creates exactly the sort of risk that will put off scale investment in FTTP for BT.

Yours sincerely,

[redacted]

[i] https://www.ofcom.org.uk/__data/assets/pdf_file/0022/108166/Regulatory-financial-reporting.pdf (page 24, paragraph 4.7)

[ii] https://www.btplc.com/Sharesandperformance/Quarterlyresults/2017-2018/Q2/Downloads/Newsrelease/q217-release.pdf (page 5: 8.6m Openreach fibre base against 27.1m homes passed)

[iii] BT: https://www.btplc.com/Sharesandperformance/Quarterlyresults/2017-2018/Q2/Downloads/Newsrelease/q217-release.pdf (page 12: "57% are now fibre". Sky: https://assets.contentstack.io/v3/assets/bltdc2476c7b6b194dd/bltc7d5548c9b7118a5/5a69d11bc3db60790b43589e/download (page 7: "… increase fibre penetration to 33%"). TalkTalk https://www.talktalkgroup.com/dam/jcr:8a087332-cadc-4f59-b943-e1ca3880ec79/TalkTalk%20H1%20FY18%20Results.pdf (page 3: "29%)

[iv] https://www.ofcom.org.uk/__data/assets/pdf_file/0032/108896/icmr-2017.pdf (page 53).

[v] https://www.ispreview.co.uk/index.php/2017/05/q1-2017-average-global-broadband-speeds-top-7-2mbps-uk-hits-16-9mbps.html (UK 16.9Mbps, Spain 15.5Mbps, France 10.8Mbps).

[vi] https://www.ofcom.org.uk/__data/assets/pdf_file/0032/108896/icmr-2017.pdf (page 53).

[vii] Openreach: Upgrading the Access Network with FTTP, 17th July 2017 (page 21, paragraph D3).

[viii] http://ec.europa.eu/eurostat/statistics-explained/index.php/Housing_statistics

[ix] http://ec.europa.eu/eurostat/statistics-explained/index.php/Housing_statistics .

[x] https://www.talktalkgroup.com/dam/jcr:813a729f-d203-47c8-9e47-35788d8425f6/TalkTalk%20Group%20FY17%20ARA.pdf (page 6: "roll-out to over 14,000 homes was completed in March 2017)

[xi] https://irpages2.equitystory.com/websites/rns_news/English/1100/news-tool---rns---eqs-group.html?article=26677583&company=city ("…the first phase [to] a minimum of one million UK homes… Vodafone has made a minimum volume-based commitment for ten years, which scales over the period, maturing at 20% of homes passed".)

[xii] http://www.libertyglobal.com/pdf/fixed-income/virgin-media-Fixed-Income-Release-Q3-2017-FINAL.pdf.

[xiii] https://www.ofcom.org.uk/__data/assets/pdf_file/0022/106465/Analyst-briefing-13-Sept-2017-transcript.pdf (Jonathan Oxley on page 17 "…it is certainly our intention not to extend regulation beyond the 40/10 product into the higher bandwidth space".)

[xiv] https://www.ofcom.org.uk/__data/assets/pdf_file/0034/99637/Vol2-Charge-control.pdf (page 19, paragraph 2.76).