OFCOM - The question of separation

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There appears to be a view that the full separation of Openreach from BT is a 'no-brainer', whereas the opposite is the case. An obvious objection is that it is a long and difficult path, taking several years to implement, and that once selected it cannot be diverted from, without considerable disruption and uncertainty, indeed it may not be reversible. Moreover, anyone proposing structural separation needs to address the public belief that the same process for the railways was an abject failure.

Economic theory might suggest that vertical separation would be beneficial, in order to stop the leverage of market power into the broadband market.² However, the effect on investment is not determined by separation, but by its combination with regulation, the distribution of risks and the contribution from state aid.³

It is important to note that there is already a form of vertical separation, since telecommunications operators are, compared to other sectors, surprisingly uninterested in vertical integration,⁴ preferring to outsource many functions (e.g., customer care and tower management). By comparison, manufacturers of network equipment have truly global presence, use global production networks,⁵ and are much more vertically integrated, notably in managing networks on behalf of operators. The nature of the policy and regulatory processes cause operators to focus on a narrower range of activities.

OFCOM, having decided in its previous review to accept a limited, though still substantial, form of separation,⁶ modified an existing pattern of competition that has considerable influence on the options available in this its decennial review.^{7,8} Much of that competition is service-based, relying on the Openreach platform, therefore any changes have to be considered carefully, since they might reduce competition or discourage investments in the Openreach network, whether the laying of more fibre or the introduction of services using G.Fast.^{9,10}

⁹ More formally, ITU-T G.9700 https://www.itu.int/rec/T-REC-G.9700/en

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² Boaz Moselle & David Black (2011) "Vertical separation as an appropriate remedy" *Journal of European Competition Law & Practice*, **2** (1) 84-90. http://dx.doi.org/10.1093/jeclap/lpq054

³ Maria Paula Vicente Sarmento (2015) "Vertical separation and access pricing: effects of investment incentives" *Actual Problems in Economics* **5** (167) 228-241.

⁴ BT did once try vertical integration in its acquisitions of Mitel.

⁵ It is useful to compare the footprints of BT for business customers and for consumers.

⁶ OFCOM (2005) Final statements in the strategic review of telecommunications and undertakings in lieu of a reference under the 2002 Enterprise Act. London: Office of Communications.

⁷ OFCOM. Ofcom announces strategic review of digital communications. Press release: 12th March 12 2015. Office of Communications: http://media.ofcom.org.uk/news/2015/digital-comms-review/

⁸ OFCOM (2015) Strategic review of digital communications: terms of reference competition and investment in converged communications infrastructure. London: Office of Communications.

Much of the work of BDUK in providing state aid has been, in effect, to expand the footprint of Openreach. This has allowed service providers using that platform access to more customers and given customers a choice of provider. Infrastructure competition comes from Virgin Media and Liberty Global, with no realistic prospect of further market entry of national significance, though those networks appear likely to expand. For some customers, 4G wireless services offer competition, with OFCOM having taken the view that the revival in the poor adoption of broadband in Glasgow was not on the Openreach network but on 4G networks.

In the last parliament the issue of rural broadband provision and the use of state aid was considered at length.¹¹ It was taken up very early in the present parliament in a debate called by the MP for Boston and Skegness,¹² then in a further debate called by the MP for Tiverton and Honiton,¹³ with a debate scheduled in the House of Commons on 12th October.

A case has been made for more diversity of supply in rural areas, but this is different from Openreach, which already addresses the "95 per cent" of homes,¹⁴ but not yet the "last 5 per cent".¹⁵ Satellite broadband addresses 100 per cent of homes. To be effective, local and community initiatives addressing rural and remote customers need access to IXPs,¹⁶ not to the Openreach platform, which requires services from the business connectivity market, even though small providers rarely make contributions to those consultations.¹⁷ Any changes in the incentives for Openreach, whether to the regulations or through further state aid, that cause it to expand its footprint, would seem likely to diminish the scope for local and community networks. This is aggravated by the offers using Openreach being bundled with movies and sports content, something which smaller networks are unlikely to be able to offer, because they lack the scale to negotiate such deals.

The 'metaphor' behind telecommunications policy has been the 'ladder of investment', with various regulatory 'rungs' being created to facilitate market entry, but withdrawn once entrants have constructed their networks.^{18,19,20,21} In reality

¹⁰ Christopher Williams "BT pledges boost for slowest broadband and '£1bn' ultrafast investment" *Daily Telegraph*, 22 September 2015.

http://www.telegraph.co.uk/finance/newsbysector/mediatechnologyandtelecoms/telecoms/11881360/BT-pledges-boost-for-slowest-broadband-and-1bn-ultrafast-investment.html

¹¹ Ewan Sutherland (2015) Broadband and telecommunications markets—policy, regulation and oversight. *Parliamentary Affairs*, forthcoming http://dx.doi.org/10.1093/pa/gsv019
¹² Hansard, 24 June 2015, col. 287 WH.

http://www.publications.parliament.uk/pa/cm201516/cmhansrd/cm150624/halltext/150624h0001.htm ¹³ Hansard, 10 September 2015, col, 137WH

http://www.publications.parliament.uk/pa/cm201516/cmhansrd/cm150910/halltext/150910h0001.htm ¹⁴ HMG has set a target of reaching 97 per cent of homes, which will most be provided by extension of Openreach.

¹⁵ This is the subject of a parliamentary inquiry.

¹⁶ The principal Internet eXchange Point being LINX https://www.linx.net/

¹⁷ http://stakeholders.ofcom.org.uk/consultations/bcmr-2015/

¹⁸ Martin E Cave (2006) "Six degrees of separation - operational separation as a remedy in European telecommunications regulation" *Communications & Strategies*, issue no. 64, 89-103. http://ssrn.com/abstract=994798

there has been limited ascent up the ladder, with providers preferring Virtual Unbundled Local Access (VULA). For better or worse, the United Kingdom finds its options limited by path dependency, the history of decisions by HMG, OFCOM, the EU institutions, BT and the service providers.^{22,23}

An obvious question is why separate Openreach and neither the mobile networks nor content, which are variously bundled together or are in competition with each other. Given the increasing consolidation in the mobile market, a reasonable solution would be to accept a single infrastructure provider, on which there could be service-based competition. For now, wider separation is not being considered.

While OFCOM declares this review to be strategic, the reality is that it is but one step on the public consultation treadmill (PCT). For example, there is the BEREC review of the regulation of oligopolistic markets,²⁴ the European Commission (EC) review of the legislative framework, on which HMG has set out its priorities,²⁵ and the ITU World Radiocommunications Conference (WRC-15), with consultations by CEPT and OFCOM. Consequently, it is more tactical than strategic.

The possibility of the victory at the next general election of the Labour Party raises the prospect of a surge of funding for infrastructure from renewed quantitative easing, some of which would be directed to Openreach. However, it is difficult to see how this could avoid driving out local and community ISPs, and while it would extend the network, additional adoption would rely on the service providers and consumers. A structurally separate Openreach would be easier for a future Labour government to nationalise.

Detailed analysis of the geography of competition is very difficult in the absence of data sets showing in which exchanges and street cabinets the various alternative providers have located equipment. Some data are available from Point Topic, suggesting competition is found only in a few major exchanges. Whereas, OTA² provides almost no data of value, failing to comply with HMG policies on open government and open data. With a comprehensive data set it would be possible to see the pattern of roll-out by the various providers and to compare this with their

http://dx.doi.org/10.1016/j.telpol.2008.08.004

Telecommunications Policy, **34** (1) 80-85. http://dx.doi.org/10.1016/j.telpol.2009.11.006

¹⁹ Martin E Cave (2006) "Encouraging infrastructure competition via the ladder of investment" *Telecommunications Policy*, **30** (3-4) 223-237. http://dx.doi.org/10.1016/j.telpol.2005.09.001

²⁰ Jos Huigen & Martin E Cave (2008) "Regulation and the promotion of investment in next generation networks: a European dilemma" *Telecommunications Policy*, **32** (11) 713-721.

²¹ Martin E Cave (2010) "Snakes and ladders: Unbundling in a next generation world"

²² Barbara A Cherry (2003) "The political realities of telecommunications policies in the U.S.: how the legacy of public utility regulation constrains adoption of new regulatory models" *Michigan State DCL Law Review*, **3** pp 757-790.

²³ Filippo Belloc, Antonio Nicita & Pier Luigi Parcu (2013) "Liberalizing telecommunications in Europe: path dependency and institutional complementarities" *Journal of European Public Policy*, **20** (1) 132-154. http://dx.doi.org/10.1080/13501763.2012.693409

 ²⁴ BEREC (2015). Draft BEREC Report on oligopoly analysis and regulation. BoR (15) 74.
 http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/5042-draft-berec-report-on-oligopoly-analysis-and-regulation

http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/5042-draft-berec-report-on-oligopoly-analysis-and-regulation 2⁵ HMG (2015) *UK non-paper: Review of the electronic communications regulatory framework*. London: Department of Culture, Media and Sport.

https://www.gov.uk/government/publications/uk-non-paper-review-of-the-electronic-communications-regulatory-framework

use of VULA, which would allow an evaluation of the likely future spatial patterns of competition. A further spatial analysis could usefully identify the location of points of interconnection (e.g., IP and Metro-Ethernet).

OFCOM has been very reluctant to use its power to define geographic markets, even when it is clear that conditions of demand and supply vary spatially. While such analyses would be time-consuming, not least since the definitions might end up as being single premises, the decision not to use regional and local markets imposes an obligation to ensure that those located in such markets are no worse off than they would be if more granular analyses were conducted.

International experience

International evidence on structural separation is not encouraging and appears to be against separation. However, the experience is somewhat limited.

Singapore is not an obvious comparator with the United Kingdom, having the population of Scotland on an island the size of Skye.²⁶ The Infocomm Development Authority of Singapore (iDA) undertook a separation exercise of considerable complexity (see figure 1).^{27,28} The result was purportedly separate and independent firms controlling the different layers, but with the government having significant holdings in each layer through Temasek Holdings.²⁹

Layer	Function	Firm(s)
Retail Service Providers (RSPs)	Sell services to business and residential end users. Fully competitive.	M1, Singtel, StarHub, etc.
Operating Company (OpCo)	Offers wholesale network services over active infrastructure (i.e. switches and transmission equipment)	Nucleus Connect ³⁰
Network Company (NetCo)	Designs, builds and operates the passive infrastructure (i.e. dark fibre and ducts)	Netlink Trust ³¹

Figure 1 Singapore broadband industry structure

²⁶ Singapore is somewhat flatter than Skye.

²⁷ Ewan Sutherland (2009) "Optical fibre access networks and the recession" presented at the 8th Conference on Telecom, internet & media Techno-Economics (CTTE) 15-16 June 2009, KISTA, Stockholm. http://www.ssrn.com/abstract=1523648

https://www.ida.gov.sg/policies-and-regulations/consultation-papers-and-decisions/completed/Review-of-Interconnection-Offer-for-the-Provision-of-Services-on-the-Next-Generation-Nationwide-Broadband-Net work

²⁹ http://www.temasek.com.sg/

³⁰ http://www.nucleusconnect.com/

³¹ http://www.netlinktrust.com/

In New Zealand, structural separations was imposed by legislation, avoiding the usual regulatory processes for the assessment of its likely effects. One complaint is that separation has minimal supporting policy analysis and no empirical analysis.^{32, 33} The government made a significant investment in Chorus, something highly unlikely to be permitted in the United Kingdom under the state aid rules. Nonetheless, Chorus has rolled out 'ultrafast broadband' to many premises, initially giving priority to businesses, schools, health service plus greenfield developments and certain tranches of residential areas.^{34,}

The saga of Australian broadband has been bloody and heroic, contributing to the fall of two prime ministers, with the last communications minister having organised a party room rebellion against his erstwhile leader.³⁵ The National Broadband Network (NBN) was to to deliver services to all homes as the largest infrastructure project in Australian history, requiring the launch of two satellites. The negotiations between the Department of Communications, the Australian Competition and Consumer Commission (ACCC), NBN Co and Telstra were technically complex and bruising, made more difficult be several changes in policy. Telstra sold its copper network to the state-owned NBN Co, but retained its pay TV and mobile networks. What began as the poster child for state-planned next generation broadband, has turned into a political football, with frequent changes of rules.

There is no simple foreign model for OFCOM to copy on structural separation, rather the routes followed have been path dependent and political, if somewhat opaque in the case of Singapore. There is no record of evidence to support structural separation for broadband, only questions about the balances of incentives, risks and state aid.³⁶ The antipodean levels of state aid would be acceptable neither under the EU rules nor to HM Treasury.

Scenarios

The structural separation of Openreach from BT creates a number of possible scenarios:

OFCOM rejects structural separation and retains the status quo:
 a. Sky and Talk Talk appeal the decision

³⁵ https://twitter.com/TurnbullMalcolm

³² Bert Sadowski, Bronwyn Howell & Alberto Nucciarelli (2013) "Structural separation and the role of public-private partnerships in New Zealand's UFB Initiative" *Communications & Strategies*, issue no. 91, pp 57-80. ftp://ftp.repec.org/opt/ReDIF/RePEc/idt/journl/CS9103/CS91_SADOWSKI_et_al.pdf ³³ Bronware E Howell (2014) "Separation any integration in the second seco

³³ Bronwyn E Howell (2014) "Separation anxieties: structural separation and technological diffusion in nascent fibre networks" presented at Telecommunications Policy Research Conference (TPRC), Arlington, USA, September 2014. http://www.econstor.eu/bitstream/10419/106840/1/816646821.pdf

³⁴ Marlies van der Wee, Fernando Beltrán & Sofie Verbrugge (2014) "Evaluating the impact of financing structure decisions on FTTH deployment: a comparison between New Zealand and Europe" presented at TPRC Conference, Arlington, USA, September 2014. http://ssrn.com/abstract=2416811

³⁶ Fernando Beltrán (2013) "Fibre-to-the-home, high-speed and national broadband plans: tales from down under" *Telecommunications Policy*, **38** (8-9) 715-729. http://dx.doi.org/10.1016/j.telpol.2013.08.006

- 2. OFCOM concludes the existing separation of Openreach has failed or is failing and allows its reintegration into BT, preferring infrastructure-based competition
 - a. Sky and Talk Talk appeal the decision
- 3. OFCOM recommends full separation:
 - a. BT capitulates and spins-off Openreach
 - b. BT opposes OFCOM and the matter is referred to CMA:
 - i. CMA concludes in favour of separation:
 - 1. BT capitulates
 - 2. BT launches appeals to the CAT
 - ii. CMA concludes against separation:
 - 1. Existing arrangements remain in place
 - 2. Pre-Openreach arrangements reinstated
 - 3. Sky and Talk Talk appeal the decision
 - c. OFCOM moves separation from Enterprise Act to Communications Act

It is important to consider the timing of these events, with the Competition and Markets Authority (CMA) likely to take two years and with further judicial appeals, depending on their scope, taking longer. During that period investment by BT in the Openreach network would be likely to reduced, given the uncertainty, as would investment by the other ISPs. A further complications is that in the event of a vote to leave the European Union, parliament would be free to amend the Communications and Enterprise Acts, perhaps in 2018 or 2019.

The recent intervention by the Minister of State indicates that HMG is not minded to support separation.³⁷ Transparency International has noted the number of meetings that BT has held with government ministers, at which separation has, presumably, been a leading topic.³⁸ In theory, the position of HMG is irrelevant, since OFCOM is independent, though it is doubtful this is absolute. The comments suggest BT would have some support and encouragement in rejecting a decision to separate Openreach. It seems reasonable to infer that BT has lobbied HMG against separation, from which it seems unlikely that it would accept structural separation without a referral to the CMA, indeed it may have fiduciary duty to do so.

BT has switched its membership from the European Competitive Telecommunications Association (ECTA) to the European Telecommunications Network Operators (ETNO). This is not a positive sign, since ETNO strongly opposed the inclusion of separation powers in the present EU regulatory framework.

There is a significant lack of transparency in the lobbying by operators, ISPs and their various trade associations with HMG, OFCOM, and intermediary bodies, such

³⁷ Andrew Trotman "Taking Openreach out of BT could backfire, warns Ed Vaizey" *Daily Telegraph*, 30 September 2015.

http://www.telegraph.co.uk/finance/newsbysector/mediatechnologyandtelecoms/telecoms/11903239/Taking-Openreach-out-of-BT-could-backfire-warns-Ed-Vaizey.html

³⁸ Transparency International UK (2015) *Accountable influence: bringing lobbying out of the shadows*. London: Transparency International UK.

as the Broadband Stakeholders Group (BSG) and PICTFOR. There needs to be open data on the meetings held and the subjects covered, as already happens with the Federal Communications Commission (FCC).³⁹ The matter is complicated by the lobbying being conducted on multiple levels (e.g., with the EC, RSPG, OECD and ITU).

In some senses structural separation is a poker game, with various players seeking to threaten appeals to try to force the hands of OFCOM and BT.

Conclusion

While economic theory may favour structural separation, the evidence is against it in practice. Other things are not equal, indeed they are far from equal.

Indeed, a case could be made for following the example of the FCC and abandoning service-based competition in favour of infrastructure-based competition. However, once again path dependency makes this unattractive, since it would mean abandoning the service-based competition.

Consequently, OFCOM is left with fine-tuning the existing arrangements, if it is not to spend amounts of time and money on appeals and referrals.

If local providers are to be encouraged, then OFCOM must address affordable local IP interconnection and access for local providers to content that might otherwise be bundled.

³⁹ Records of the topics discussed in meetings with commissioners are posted on the Electronic Comment Filing System (ECFS) http://apps.fcc.gov/ecfs/

⁴⁰ J Gregory Sidak & Andrew P Vassallo (2015) "Did separating Openreach from British Telecom benefit

consumers" *World Competition: Law & Economics Review* **38** (1) 31-76. https://www.criterioneconomics.com/docs/did-separating-openreach-from-british-telecom-benefit-consumers.pdf ⁴¹ Gunther Knieps & P Zenhäusern (2007) "Stepping stones' and 'access holidays': The fallacies of regulatory micro-management" pp. 257-277 in P. Baake & R. Borck (eds.) *Public economics and public* choice: Contributions in honor of Charles B Blankart. Berlin & Heidelberg: Springer-Verlag. http://dx.doi.org/10.1007/978-3-540-72782-8_15