Response to Ofcom's discussion document for its Strategic Review of Digital Communications

Executive summary

Prospect is an independent trade union representing over 115,000 managers, specialists and professionals in both the private and the public sectors, including fixed and mobile communications providers.

The future shape of telecommunications is of key importance to our members in both business and domestic environments, and accordingly we welcome the opportunity to comment on Ofcom's discussion document.

A key concern is the widespread debate on structural separation. Prospect believes firmly that such separation would:

- chill investment
- represent a high-risk diversion
- undermine improvements in quality of service
- jeopardise the pan-BT research effort
- raise Openreach's costs (and those of its customers and thus consumers at large).

Above all, a move to structural separation would represent an enormous and untimely distraction from the essential challenges at hand in extending and improving the coverage of high-speed broadband and quality of service; and, thus, would actively undermine the consumer interest. We call upon Ofcom to rule out this option at an early stage.

We comment in detail on this and other issues in the following response and welcome further debate on the points we raise.

Introduction

Prospect is an independent trade union representing over 115,000 managers, specialists and professionals in both the private and the public sectors in a range of industries and organisations from the communications, media and digital industry to aviation, agriculture, defence, energy, environment, heritage, industry, scientific research and children's services.

Our members working in the information and communications technology area work extremely hard, and with a strong degree of personal commitment, for network operators and service suppliers to deliver timely and cost-effective network upgrades and repairs, as well as high-speed digital communications and entertainment services. They are very keen not only to deliver a good job, first time, but to deliver a level of customer service which surpasses customers' expectations. Our members take great pride in carrying out their roles.

The communications industry is evidently in the midst of extremely interesting times. Communications have the power to improve our lives both socially and economically as well as to change the way we interact with the world and the people around us. These powerful changes are not taking place by themselves: network investment by those who build, maintain and operate our communications networks facilitates our use and enjoyment of these developments. Without investment, progress would be slowed, our use of technology made more frustrating and technological leads would be taken elsewhere, by other companies.

It is easy to take communications networks for granted. We must, however, ensure that we get regulation right so as to ensure that network companies can deliver investment confident in their abilities to secure a return from it, thus allowing us all – right across the nations and regions of the UK – to get on with enjoying the advances in connectivity that modern communications can bring.

Our submission has been drawn up by the union's CMD Sector Executive and its BT Committee in conjunction, both being bodies of lay representatives responsible for the interface between communications companies and Prospect.

Summary of response

Prospect welcomes the Review: it is necessary to re-examine positions in order to assess their continuing relevance to the issues they seek to resolve. We note that Ofcom believes the consumer outcomes of the last ten years have been 'broadly positive' and 'good', and that is a view we would share (although we would go a little further than that).

Furthermore, Prospect believes that the functional separation model set in train by Ofcom's last strategic review ten years ago remains essentially relevant to today's market, although we can see a need for some changes to it to deliver the networks and services we all want.

The available evidence demonstrates that markets are, on the whole, working extremely well for consumers and citizens in delivering services and the investment that will improve their experience still further.

In spite of the general framework set by the consultation, most of the points we wish to raise are in connection with Chapter 11 of the Strategic Review Discussion Document. In particular, we would specifically call on Ofcom to make an early decision to rule out a structural separation remedy at this time.

Our evidence makes the following points:

On **Quality of Service**:

1. Quality of service is a legitimate concern. The industry as a whole does not have a strong QoS record.

2. BT comes in for particular criticism, which is perhaps inevitable as a result of its history as the incumbent (even though it has less than 50% of the total market share in the consumer space and far less than that in the business communications market).

3. That BT has a perhaps more modest share of the overall market than many think is itself evidence that regulatory separation has been successful.

4. QoS is on an upward trend. Since Ofcom introduced 60 individual and specific measures of Openreach's performance, Openreach has hit every single measure.

5. Nevertheless there remains room for improvement. BT has, however, recently adopted a significant new consumer Charter – which Prospect strongly supports – and this ought to result in significantly improved QoS. It certainly needs to be given a chance to work.

6. And should it work, should QoS significantly improve, the case for separation is seriously undermined.

7. But the regulatory regime must also take some responsibility for quality of service. In our view, price controls via regulation have resulted in a bargain basement service at bargain basement prices. The average UK consumer has undoubtedly benefited from fierce competition in terms of the price of telecoms services (broadband in particular), but that has been at the cost of QoS.

On the **Structural Separation** of Openreach from the rest of BT: this may be only one of a range of scenarios but it seems to be the one that commentators and, in particular, many of BT's competitors have seized. Separation would be infinitely complex, enormously time-consuming, it would give rise to endless legal and other challenges and it would seriously damage the key objective – which must be to enable the creation of a genuine UK-wide, modern, ultra-fast telecommunications network. Structural separation would:

1. Seriously undermine the likelihood of the necessary investment being made in ultra-fast broadband. BT has been, and is, building the network for UK plc. None of its competitors are ever going to seek to build a UK-wide network. BT has been investing at the rate of about £2.4bn a year, on average. A structurally separate Openreach would simply be unable to keep that level of investment up.

2. Structural separation would create serious uncertainties, not least for BT's employees. This could damage the morale particularly of the over 30,000 employees who work for Openreach, in the process jeopardising the improvements to quality of service we all want to see. That cannot be in the consumer interest.

3. BT, as a single unitary company, can both justify massive R&D expenditure (BT is the UK's third largest corporate spender on R&D) and take a genuinely holistic view of pan-industry technological trends. A separate Openreach could not do that and the rest of BT could hardly justify such broad-based research. Structural separation would harm technological development in the industry and across the industry – and not just in BT, since BT's research and development massively outstrips that of others in the industry and benefits the industry as a whole.

4. Such separation may anyway not be legal or feasible under current EU regulatory rules. As such Ofcom ought to consider the EU regulatory environment very carefully as part of its consideration of the case for or against structural separation.

On **Convergence**:

1. Mobile should no longer be considered pre-eminent. It is the device that is the key (particularly smartphones and tablets) and the major issue is becoming the need for seamless transition from mobile to fixed networks.

2. Voice is just another app. In future, it is highly likely that customers will expect voice to be 'free' and provided via wi-fi.

3. The convergence of fixed and mobile, data and voice, and entertainment will result in more mergers within the industry and fewer players in total as mobile and fixed operators are driven to merge and as entertainment channels and telecoms companies increasingly become synonymous with one another. That does potentially raise some serious issues about the number (fewer) and the sheer power (greater) of the companies that emerge from this process.

We are grateful to Ofcom both for the opportunity to submit our views and for the time its staff have taken during the period of the review to meet with and respond to all stakeholders in the process, including Prospect.

Our vision

The problems facing the review are clear and there is a national consensus about them: the need, compelled both by political, economic and social imperatives, to establish a 'best in class' communications infrastructure in an era in which we have conceded the notion of public investment in public goods to private companies.

This is, in many ways, a frustrating position to be in – and, we suspect, all sides share (perhaps different facets of) the same frustrations. BT is far from immune to criticism and we have lodged our share of complaints about its approaches in the past – but it too is entitled to be upset by some of the press it receives.

We have adopted a pragmatic view in this review, based on the most likely route to achieving the vision for the communications infrastructure we want to see realised.

Like many others, Prospect wants to see a communications infrastructure for the UK in which access and speed are taken as givens, delivering for us all the services that we want, wherever we want them: in the home or on the move; fixed or wireless (or, increasingly, in combination – and then seamlessly); in towns and cities and in the countryside; for residential and business customers; and for vulnerable people alongside everyone else. We want to be able to access these services at a time convenient to us, not to that of the network and the demands placed on it by other users; and we want to be able to do so with as little thought of the network over which those services are being delivered as possible. As consumers, we want our choices to be clear and transparent, effective and informed, and to empower us in our dealings with large, frequently remote companies (whose remoteness has to end, incidentally). And we want services which promote trust between ourselves and the organisation which provides them.

Prospect also wants to see a network capable of dealing with the ever-increasing digitalisation of the economy – and the international economy, at that – and we want to see that, in turn, support the growth of a high-tech, specialist, professional, high-skilled labour market here in the UK – where substantial natural advantages to internet-oriented jobs ought to exist. We also want to see small and medium sized enterprises – consultants, designers and developers, and the whole range of jobs within the cottage industries of the digital 21st century – able to flourish because they have a communications network on which they can rely for the services they provide and which recognises their needs as small enterprises.

Furthermore, we want to see these services delivered with an assurance of quality of the customer experience, both up front, as of expectation, and on those (hopefully rare) occasions when things go wrong, when we want to see things put right with a minimum of fuss and a minimum of transfer from one person in one department to another person in the next.

All too often this is not the case. The industry has a poor reputation for customer service at the retail level and the quality of the customer experience, when things do go wrong, leaves much to be desired. This is as true for BT as it is for all operators. Ofcom is right to focus a considerable amount of time and attention on consumer issues. Prospect is a member of the Consumer Forum for Communications and we are very supportive of the proposals on demand-side issues contained in the Forum's own submission.

That said, we should remind ourselves firstly that many of the frustrations and slow-downs experienced by consumers are not actually caused by poor network connectivity but are due to off-net or within-home issues. Secondly, we should also point out that the 90% of customers for whom things go right[1] evidently have little to say to a media more interested in the 10% for whom things go wrong – but then, on the other hand, there is enough within that 10% to supply a level of ammunition to give BT's most savage critics plenty to draw on. Thirdly, we might also point to Ofcom's requirement for Openreach not to deal directly with customers as a source of particular frustration, for all parties.

It is fair to say that BT itself recognises that its customer service record has been poor and that it needs seriously to address this.

It is part of the life of the 21st century consumer to have to put up with immensely frustrating levels of customer service – and we don't mean just in BT but in the range of privatised businesses, all of whom have sought to respond to the same pressures on their business models wrought by regulation with cost transformation processes of one kind or another. We have a lot to say about that as a trade union heavily involved in the telecoms industry, as we see the pressures that these create on our members – all of whom (to repeat the point we made in the Introduction) are desperate to deliver good service and an excellent customer experience – but our concerns here are more general than just those affecting workers. It is plain to us, as a union, and to our members working for BT that the quality of BT's customer service must improve.

Frustrating, indeed, but – to coin a phrase – it doesn't have to be like this: there is a better way.

The key that turns the lock on both these issues is, of course, investment: Prospect argues very strongly that we need investment to create the networks of the future; and we need investment in customer service if this is to resemble anything like the vision of the future that we have. In our view, it is a lack of investment that is causing the problems – of line speeds that are not matching our ambitions, or a roll-out that is not on the scale or to the coverage requirements that we would want; and of a customer experience that is all too frequently not as excellent as we (or BT) might wish.

We should recognise here that BT faces its own pressures on these points, too – a set of shareholders that are happy to see capital expenditure held back in the name of

[1] i.e. the nine out of ten who are 'very' or 'fairly' satisfied with their overall service.

increasing their returns causes immense problems to the realisation of what many see as BT's social, or public, obligations. It is actually to BT's credit that it has brought its shareholders to the point where they see the case for network investment both in itself and to a level significantly in excess of where a return can be made within a timescale that investors are usually prepared to support. We go on to explain below that BT is a significant investor. But the balance is a delicate one, and can easily be upset.

Prospect has been critical of Ofcom in the past on these points: a regulatory model which is committed to driving end-prices downwards, and which celebrates that achievement as a goal in itself, jeopardises network investment. We can very easily see the impact of enforced price reductions in terms of the demand to strip costs out of the business.

Commercial companies may seek the same level of profits either by revenue maximising or by cost reduction policies: with some justification, a regulator might well see a revenue maximising model as one that encourages (even breeds) built-in efficiencies. But, at the same time, continual cost reduction programmes stemming from continually falling prices have gone way beyond the stripping out of the inefficient provision of services: they have actively undermined decent customer service and the quality of the customer experience. This is a vicious circle – and, moreover, one in which no-one ultimately wins (even if consumers benefit in the short-term by lower prices, this is at the price of lower levels of customer service than they would otherwise be prepared to accept).

In contrast, our vision for the future is of the establishment of a virtuous circle in which excellent customer service drives investment in the network; investment in the network in turn drives a better customer experience via greater resilience and fewer faults; with a better customer experience feeding into a perception of much better service (and also into further and better, more innovative services), in which all customers – other competitive providers, large and small businesses, and residential ones – can be confident.

We also believe that customers need to appreciate more the level of investment that goes into network provision, and that they must be prepared to value that appropriately through the price mechanism: another facet of the problem that the regulatory environment has encouraged, of continually falling prices, is a declining appreciation of what is being bought. Customers taking a good for granted is rarely a good thing – but a virtuous circle of improved customer service and improved access speeds, paid for by an expanded investment programme, is something which they might be prepared to support financially. The signs are currently not good in that residential customers value price much above everything else (although in business the position is a little different). This is a process that can be driven, though we suspect only over time and only where the signals on the relationship between price, investment and service are different than they have been hitherto. But, at least there is a conversation to be had here and that is a welcome start.

We are, therefore, particularly grateful that Ofcom has emphasised investment in this review. That is absolutely in line with our views and we are very encouraged by what Ofcom has to say about its importance, to the point whereby investment is a key criterion for assessing what defines a 'good outcome' of the review and Ofcom's regulatory activity. We are also encouraged by what we believe to be Ofcom's much stronger emphasis on this aspect than hitherto.

How is this vision to be realised?

1. Quality of service

When Ofcom last reviewed the operation of functional separation, in 2009, one of its concerns was 'the quality associated with Openreach's service levels'. Disappointingly, such concerns had not alleviated in the months and years since, to the point where Ofcom's initial documentation on the Strategic Review[2] contained the chart used in the 2014 Fixed Access Market review on fault repair performance on LLU lines and demonstrating not just poor and declining performance, but also an apparent low level of differential between MPF and SMPF products.

We do not see this as reflective of BT exercising its incentive to discriminate against other competitive providers – all providers, including BT's own retail operations, were affected by the low quality of service in this period;[3] and there are technical reasons – including a rise in early life faults for MPF lines – which explain at least some of the service differences between MPF and SMPF.

To be fair to Openreach, the inclusion of this chart in the early parts of the Strategic Review was somewhat unfortunate since it helped set the tone for a debate for an issue on which, following earlier consultation, Ofcom had already instigated its proposal for minimum service quality standards, plus a series of KPIs to apply to Openreach. The period covered by the data had ended in 2012, and was strongly influenced by a run of particularly poor weather; furthermore, the position seems subsequently to have improved to a position of stability, above the minimum quality of service standards, and also prior to the launch of this Strategic Review. The chart below is taken from the most recent update of the Office of the Telecoms Adjudicator and shows the current position.

In our view, poor customer service is a reflection of staffing levels being sub-optimal as a result of the relationship between price, investment and cost.

Furthermore, responsibility for the failure of commercial agreements to deliver improved quality of service ought not to fall on the shoulders of Openreach alone – failing to secure service levels that are acceptable to all is an industry-level failure and the alternative providers need to accept that they also share some of the responsibility for that.

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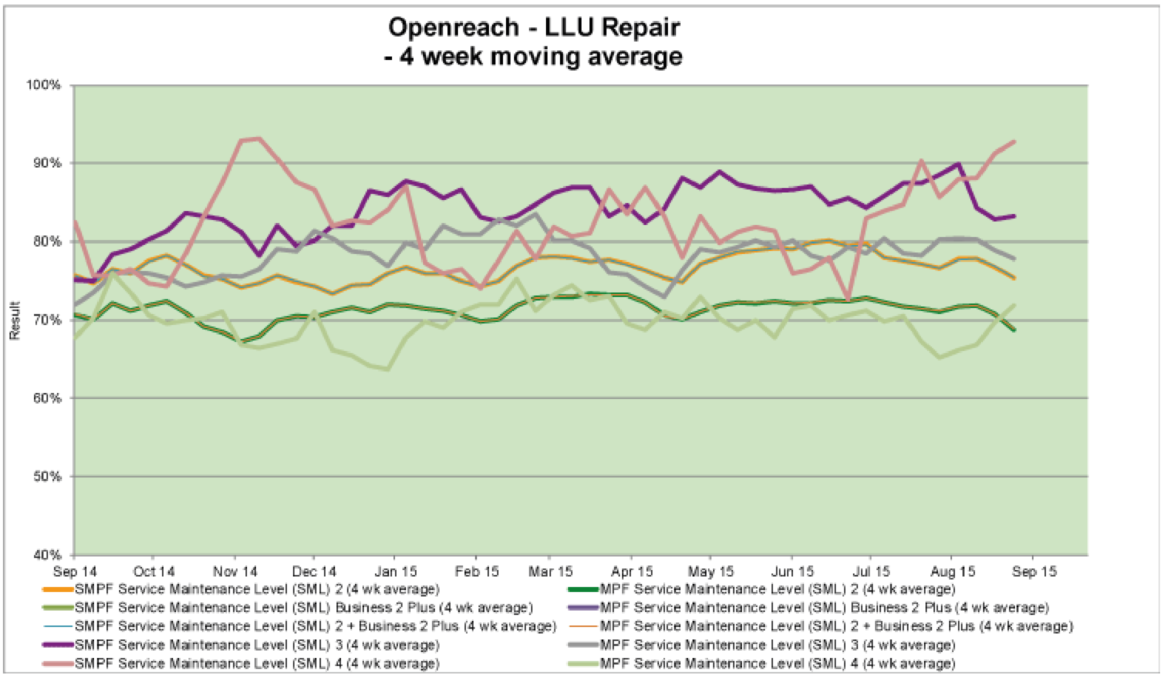
[2] Interestingly, the Review Discussion Document itself does not contain this chart, although it does include a discussion in Chapter 13 of Openreach's performance during 2009-2012 as an example.

[3] BT Retail said as much in its evidence to the Openreach quality of service consultation as part of the 2013 Fixed Access Market Review, cited in: http://stakeholders.ofcom.org.uk/binaries/consultations/fixed-access-market-llu-wlr-charge-controls/summary/famr-2013.pdf, paras. 3.56 and 3.57.



Last updated: 06|10|15

Source: Openreach

Nevertheless, as we have said, we share the view of the Consumer Forum for Communications that the quality of experience for BT and Openreach customers – at retail and wholesale level, respectively – could be significantly better and needs continually to improve. Openreach needs – as we have set out in our vision for the industry – to shift its position from providing an 'equally poor'[4] customer service to one that is not just equally good, but uniformly excellent. Further, we recognise that, as Sharon White said to the Culture, Media and Sport Committee in July, 'no regulator likes to be in the position of setting performance standards on a company that you regulate'.[5] An Ofcom moving towards deregulation wherever possible should have little interest in undertaking and then supervising this sort of micro-regulation.

We believe that the Openreach Charter[6] launched in September 2015 provides a very clear and dynamic way forward and we are excited by the possibilities that it represents to give effect to our vision for a permanent increase in quality of service: in conjunction with a revitalised industry-level process, against the backdrop of the existing Ofcom-backed standards, it certainly needs to be given the chance to work.

Looking at the issue of separation, the current evidence – of an improvement in service standards, to a point well above the level at which Ofcom took action on them – would mean that Ofcom would actually find it hard to sustain any case for separation on these grounds. Indeed, such is the potential for the issue of structural separation to become a serious drag on investment and on the debate on the network infrastructure, we firmly believe that Ofcom should rule out structural separation at an early point.

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[4] Strategic Review Discussion Document, para 11.45.

[5] http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/culture-media-and-sport-committee/priorities-for-new-chief-executive-of-ofcom/oral/18802.html.

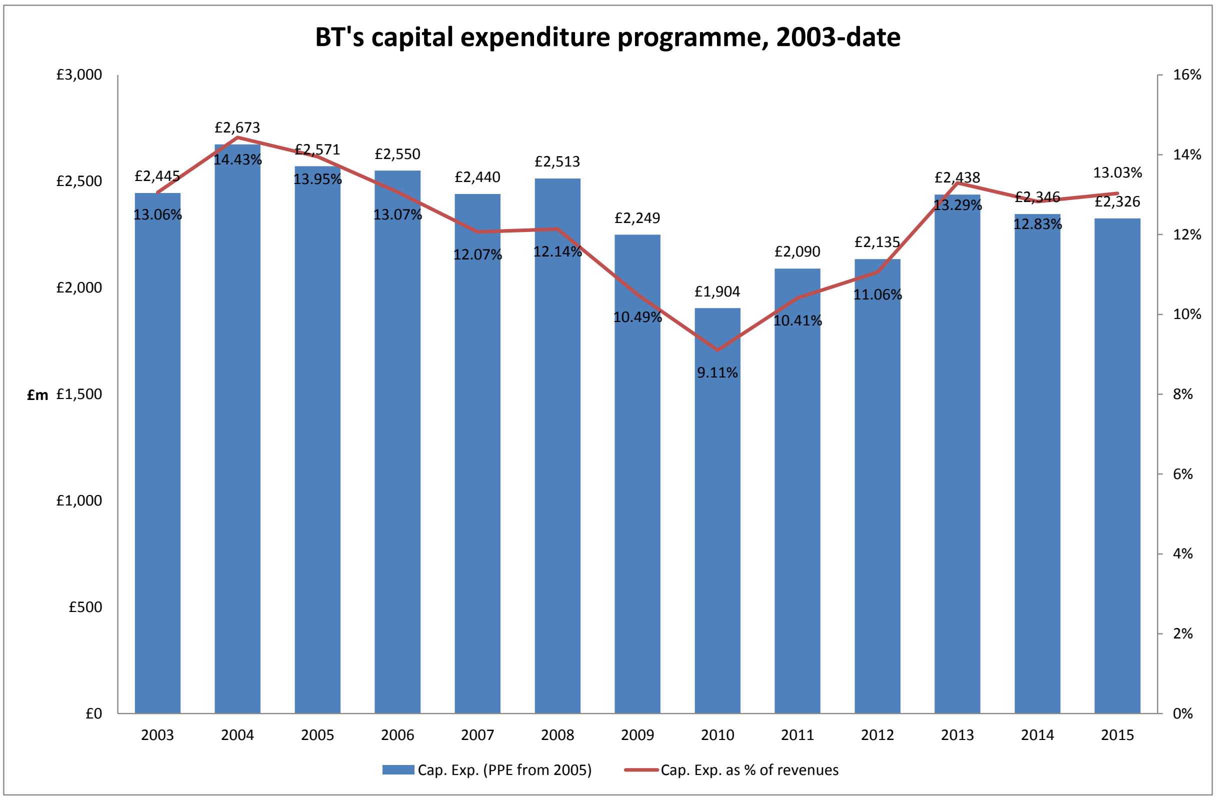
[6] http://www.homeandwork.openreach.co.uk/Our-responsibilities/.

Even so, we acknowledge that parts of the industry clearly have strong issues with Openreach's performance.[7] Given Sky's consistently excellent record in customer service,[8] we do understand these frustrations. Leaving aside the call for a 'market investigation', which appears to be Sky's port of first resort these days, both the existence of the Charter and industry frustrations with Openreach's customer service record nevertheless do provide a strong challenge to all sides (as well as an opportunity) to get together in a cohesive way to ensure that performance and the quality of customer service overall is driven firmly upwards. We look forward to further developments on this score; we have indicated already that we see a virtuous circle of investment and quality as key to the future of the industry – and, indeed, to the UK's digital future.

2. Investment and the future structure of the industry

It is clear that realising this vision will take investment – a potentially huge investment. We should make it clear here that nothing we have said above should convey any view that BT's investment record is poor. Far from it – BT and Openreach both invest a significant amount of resources, both in total and comparative to revenues and operating profit, not just over a period of a few years but consistently and over time.

BT first:



Source: BT's Annual Accounts, various years (figures for each year as subsequently re-stated).

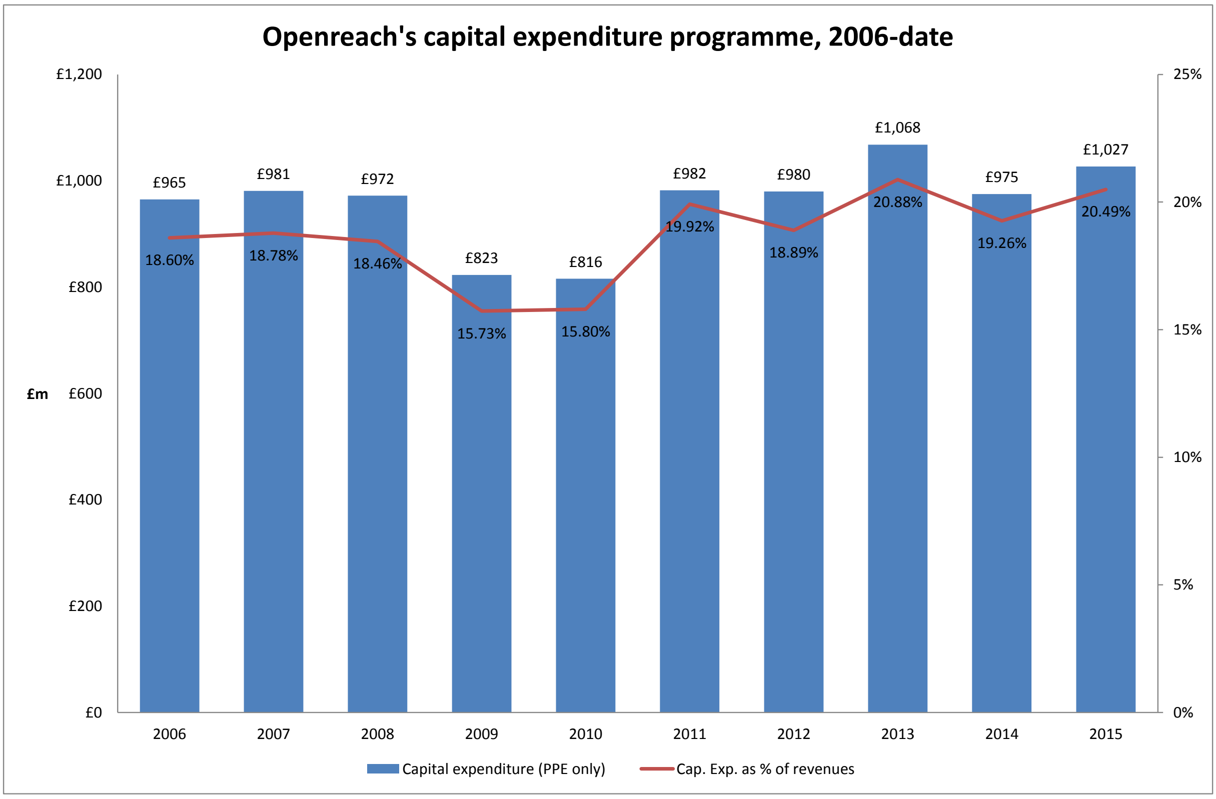
[7] https://corporate.sky.com/media-centre/news-page/2015/sky-reveals-evidence-of-openreach-service-failure-and-calls-for-market-investigation.

[8] http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/complaints/Q2-2015/.

In the thirteen years since 2003 – a year we have picked deliberately as these were the results (i.e. for the year ended March 2003) which were in place immediately prior to the establishment of Ofcom and also to the launch of the strategic review which created Openreach – BT has invested an annual figure of between £1.9bn and £2.7bn in property, plant and equipment,[9] at an annual average of £2.36bn. Over this period as a whole, it has invested a total of nearly £31bn. Clearly, not all of this goes in the network, although recent data seems to suggest that investment in broadband, the network and fibre takes up about 40% of BT's total capital expenditure.[10] In terms of the relationship to its revenues, BT has invested a minimum of 9.1% and up to 14.4% of revenues each year, at an annual average of 12.2%. (These are figures which, in the most recent years, are net of grant income – i.e. they cover BT's own investments made out of its own resources).

These years of course encompass a recession and accompanying economic crisis unprecedented in terms both of its length and of its social, economic and political magnitude – but even in the four years between 2009-2012 (capital expenditure plans already being committed when the crisis hit in 2007/08), BT still invested a total £8.4bn.

And secondly Openreach:



Source: As above (drawn from the Note in the Accounts on Segment information).

Openreach has invested at least £816m and up to £1.1bn in property, plant and equipment every year in the ten years since it was established (15.7% to 20.9% of revenues), and a total of £9.6bn over the period as a whole (annual average: 18.7% of

[9] We have omitted investment in intangible assets here – and below in the case of Openreach – although investment in internally-developed software is also part of BT's capital expenditure programme.

[10] BT 2015 Annual Report: http://www.btplc.com/Sharesandperformance/Annualreportandreview/index.cfm, p. 88.

revenues). Clearly, Openreach invests, in relation to revenues, quite substantially more than BT does – although it does, of course, take the lion's share of all that BT does invest: it accounts for around 42% of BT's capital expenditure in an average year. Additionally, it is clear that Openreach's post-recession investment is higher than it was prior to the crisis and is also on an upwards trend, and that Openreach is thus becoming an increasingly important focus for BT's capital expenditure effort.

Furthermore, both BT and Openreach invest a ten-year average of just short of 80% of their operating profits in their respective capital expenditure programmes.

These are clearly substantial sums and we do need to pay tribute both to that level of expenditure by itself and the developments in the network infrastructure that it has facilitated. Over the next few years, as the UK's digital future is built, the investment requirements will not lessen and it is likely that capital expenditure programmes – both by BT and by Openreach – will continue at least at the same level.

Complaints over the pace of the roll-out of high-speed broadband[11] and the areas of the country not yet covered clearly indicate that more could have been done, and more quickly. In defence of BT, we might point to the intervention of the recession as well as to the constraints which any private company experiences in its capital expenditure programmes.

Nevertheless – we do wonder whether more could have been done. More, and more quickly, does seem possible had the operational or regulatory model been less focused on driving consumer end-prices downwards, although this is necessarily unquantifiable; it is a belief rather than a provable fact. However, it does seem likely that falling revenues explain some of the gaps to which critics have pointed: in 2015, BT had revenues which are 5% lower than they were in 2003, while they are now 17% lower than they were in 2009, the peak year for revenues in this period.

Clearly, much has happened since 2009, both inside and outside BT – the continued switch away from fixed lines and the continuing problems in the company's Global Services division being two of them. Regulated prices only cover a small part of the company's total revenues, so the decline in these is not the fault of regulation alone – although intense competition (the introduction of intense competition as deep into the network as possible has been the aim of regulatory policy) has seen prices outside of the regulated ones fall substantially as operators seek to build market share. We cannot sensibly establish a fair relationship between falling prices and falling revenues on the one hand and what the company's capital expenditure might now have been on the other hand, had those prices not been falling.

However, we can point to falling prices and advance the argument that these make the investment case more difficult. We know, from Ofcom's own *Communications Market Reports*, the reality of falling prices in the UK telecoms market. The 2014 report, published in August, reports on the six years since 2009, in which time £3.9bn has disappeared from total telecoms revenues (a drop of 9.5%);[12] while average monthly retail revenues per fixed line are £6.45 lower than they were in 2004 (a drop of 23% in

[11] We use 'high-speed broadband' as a generic term to cover all broadband above modern basic connection speeds.

[12] Figure 4.27.

this period).[13] Furthermore, Ofcom's own Discussion Document produced for this review highlights that the average price of a residential fixed broadband package fell by 40% in real terms between 2004 and 2014;[14] and that the UK has the lowest prices in the EU for fixed broadband.

Additionally, and something that is of particular importance to the central question posed by Ofcom's strategic review – whether or not Openreach should continue to be a part of BT – operator-reported wholesale revenues have plummeted to £6.2bn (a fall of 41.5%).[15]

Set against this is the immense requirement for investment to deliver the (fibre) networks of the future. Ofcom rightly recognises that communications is an investment-intensive industry – and it follows from this that regulatory action must prioritise the ability of network players to deliver the required levels of investment.

Back in 2008, Analysys Mason, for the Broadband Stakeholder Group, posited that the costs of rolling out fibre to the premises could rise to £29bn.[16] This was an influential figure (and one which never appears to have been updated, although it has been surpassed, in some senses, by the BDUK programme as well as by the arrival of G.fast technology).[17] BT's current roll-out programme of fibre to the cabinet, taking its coverage to 95% by 2017, is for an investment of £2.5bn, on top of which it is likely to be investing substantially more in G.fast. One study suggests that the deployment of G.fast in urban areas is likely to be about half the costs of fibre to the premises. On the presumption of the Analysys Mason costings, rolling out ultra-fast broadband to two-thirds of the country would cost £10bn so investment in G.fast could well reach £5bn.

Whatever investment is being considered, it has to be made against a market price for broadband of between £0 and £15 per month.

We welcome investment in fibre from whichever source it comes, and we know that there are some other, small projects which assist in filling out the picture (several of which at the community level are also being assisted by BT). There is nothing in principle which exists to stop any investor coming forward to build their own network infrastructure and, indeed, there are several examples, as Section 9 of the Discussion Document points out.

B4RN is one of these, as is Cybermoor and also CityFibre Holdings' fibre to the home trial (in conjunction with TalkTalk and Sky) taking place in York. But we should emphasise that the latter – one of the biggest such alternative projects – is for a total investment of £30m.[18] The same company's recent contract with Edinburgh City Council for a 100km network extension has a contract value of £5.6m. CityFibre's 2014 Annual Report

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[13] Figure 4.24. It is particularly helpful here that the *CMR* reports data going back as far as 2004.

[14] Para. 1.3.

[15] Figure 4.27. This encompasses both fixed and mobile, with a lot of the recent fall being in mobile call termination revenue. Nevertheless, against wholesale revenues now worth just £6.2bn, Openreach (whose external revenues in 2015 were £1.95bn) represents one-third of it.

[16] http://www.broadbanduk.org/2008/09/05/bsg-publishes-costs-of-deploying-fibre-based-superfast-broadband/.

[17] The original chart was used in Ofcom's slide pack for its initial stakeholder engagement meeting launching this Strategic Review, on 11 May.

[18] http://www.cityfibre.com/news/2012/11/16/ork-to-become-the-digital-infrastructure-capital-of-the-north?rq=York Slide 6 (press release dated 27 March 2012).

reported that its network capital expenditure in 2014 was £4.7m, on top of £0.7m in 2013 – i.e. a total of £5.4m over two years.

Gigaclear has recently secured £30m in new equity to build fibre to the premises networks in rural areas: it has already 23 fibre networks in place and a pipeline of a further 31, the completion of which will see its footprint extend to 200,000+ homes. In 2014, its capital investment programme totalled £4.4m. Furthermore, it requires a minimum level of customer pre-orders in the community (varying between 20% and 40%) and will only build once it has sufficient to guarantee a return to investors of 10% *in the first year*, and to offer total project returns above 20% with a five-year payback period and double-payback within eight.[19]

KCOM – where Prospect also has members – also has its own high-speed broadband plans, although this is in a slightly different category stemming from its position as an operator with SMP in the Hull area.

These are – to emphasise the point – all worthwhile initiatives and there is likely to be a continuing role for them. But their role is largely as niche operators meeting specific requirements and they are simply not in a position to respond to the level of demand for high-speed broadband (at a low and falling price) right across the nations and regions of the UK. And it is well worth noting that, under the BDUK contracts where fibre is installed in partnership between BT and public sector authorities, BT hands back grant money under contractual clawback clauses when customer orders rise above a certain percentage of the community being served[20] – commonly, this figure is 20%. BT has already handed back £130 million under this agreement (a far larger figure than most of these niche operators could possibly afford to invest).

Of perhaps greater interest in the larger scheme of things when it comes to high-speed broadband is Virgin Media's plan to invest £3bn over five years in its Project Lightning. This will take its network from 44% of households to about 60% – this still leaves considerable gaps in terms of where 'the market' is prepared to extend high-speed broadband – but it is notable that such an expansion has been possible since Virgin Media has acquired the financial backing of the international Liberty Global business. Previously, its network had stayed at under 50% coverage ever since cable businesses were merged into Virgin Media in the middle of the last decade. The Discussion Document makes quite a bit of the competitive prompt given to BT by Virgin Media's cable network – actually, since BT's broadband network has always had a much deeper coverage than Virgin Media's, even if not necessarily at the same very high speeds, it is a worthwhile debate as to how far such a competitive prompt actually runs in practice – and whether it might even run in the opposite direction to that which Ofcom supposes.

Fujitsu – a company also with international resources – was, famously, bidding against BT for the BDUK contracts (in conjunction with Virgin Media and TalkTalk) until it pulled out in 2013 but it was always clear that it would need to win the large majority if the

[19] http://www.londonstockexchange.com/exchange/news/market-news/market-news-detail/12082810.html (in respect of an aborted AIM listing), together with (in the context of the double-payback period of eight years), the company's own 2014 Annual Accounts.

[20] Money which BT is now proposing to use to extend fibre installations into the final 5%.

investment resources it had available were to be sustainable.[21] Interestingly, it is now assisting the CityFibre project in York.

There are two major points we would wish to make here.

Firstly, investors with ambitions to supply a fibre network infrastructure need to have deep pockets – and, importantly, large or even international company backing.

The second point needs to be read in close association with the first. BT – as an operator with Significant Market Power – must clearly offer open access to its networks on a wholesale basis, and do so on terms that do not unfairly provide an advantage to its own retail business. For this reason, we reject very strongly any notion that BT is a monopoly. It is not a monopoly; there is no conflict of interest between ownership of the local loops and the provision of services. BT owns the local links, but it must offer these to all service operators on an equal terms basis; and, as we have said, there is nothing to stop other companies from coming forward to establish their own alternative fibre networks. Such operators which do not have SMP would not face the same open access requirement as BT – yet still we see investment from such sources only around the fringes. One major reason is likely to be the backdrop of falling prices for telecom services, which both lower the return and extend the period over which it may be achieved.

Indeed, we strongly suspect that the open access requirements for networks built with public money – such as the BDUK projects – were a substantial reason why the range of initially interested bidders melted away one-by-one. Such a requirement is, we believe, the right way to proceed. However, a falling price for telecoms is one thing – but a requirement to offer open access to all, including BT Retail – does represent a different matter entirely.

Ofcom makes much in its discussion document of the returns that BT has made from regulated wholesale products in comparison with its cost of capital, these being around £4bn more than BT's cost of capital over the nine years to March 2014.[22] We would point out here that returns which exceed the cost of capital are not necessarily 'excess' or 'supranormal' in any way; they simply mean that returns have bettered what could have been earned from an investment in an alternative project elsewhere which carried similar risk. Ofcom accepts that, where demand is high, a firm would be allowed the opportunity to enjoy returns higher than the cost of capital[23] – this, we would strongly suggest, is the case here.

It is clear that BT can make money from its investments – but, in many cases, this is only over a period of double-digit years: 12-13 being frequently cited (a period which compares particularly dramatically to that of Gigaclear, which we have cited above). Furthermore, we might expect, if there was excess profit to be made from network provision, a strong level of interest in network provision from alternative investors. This is clearly not the case, apart from the relatively small projects to which we have already referred.

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[21] http://www.thinkbroadband.com/news/5340-is-fujitsu-leaving-cumbria-going-to-repeat-across-the-uk.html.

[22] Strategic Review Discussion Document, para 4.51ff. Two-thirds of this figure is accounted for by policy choices made by Ofcom when setting charges, with the remaining one-third due to BT's performance against the charge controls – i.e. its cost-cutting programme.

[23] ibid. para. 10.13.

BT's operating profit expressed as a percentage of revenues looks about the same as is the case in Sky (higher in some years in the last five, lower in others); and is slightly higher than TalkTalk's EBITDA margin.[24] It is substantially higher than Virgin Media's current operating margin, but its recent takeover by Liberty Media makes accounting comparisons somewhat difficult to sustain.[25] In short, BT's operating margin does not look out of line with margins elsewhere.

So, investors not only need deep pockets but the result of broadband being low-priced (certainly in comparison to other European countries) is that they also need to be able to accept a very long period before they might start to earn a return. These are particularly important points when it comes to the criticisms that have been made of BT's record of investment in fibre.

It is our submission that companies who meet both requirements (having deep pockets and prepared to accept a very long payback period) are in extremely short supply. There is no queue of alternative fixed line investors whose aims are being thwarted by the 'BT monopoly'; no line of investors seeking to exploit the opportunities of passive infrastructure access; there is, in our view, no 'next wave' of investment in broadband from alternative fixed network providers just waiting to be 'unlocked'.[26] Consequently, the debate remains a theoretical one – and one which damages the UK's high-speed broadband future where it undermines the investment case.

It is not necessarily the case that BT is the only game in town when it comes to serious investment in fixed fibre (leaving aside cable). Nevertheless, starting from where we now are, BT is the only likely source of that investment finance, given the resources that it has at its disposal, especially when set against the scale of the targets and the public pressure to deliver on those and, indeed, the need to step up the investment programme to attain the virtuous circle to which Prospect aspires.

Additionally, while we welcome investment in fibre broadband from whatever source, we cannot (apart from a handful of small, largely self-organised initiatives) see companies rushing to supply fibre broadband to remote or rural areas where the payback period is substantially higher than the time period that BT is already prepared to accept. There are clear economies of scale arguments here. If we wish to invest in fibre across the UK as a whole, so as to deliver a truly universal high-speed broadband service – and there are all manner of reasons why we should, from the social to the economic to the political – then it is clear that this investment on such a cohesive basis is much more likely to be achieved from BT than any other source. We would argue that next to none of the 500,000 households who are unable to access 2 Mbit/s access speeds will see their position improved as a result of structural separation; conversely, the overwhelming majority would see their prospects substantially damaged by such a move.

We should also emphasise the view – which we know Ofcom accepts – that investment in communications is risky and that those operators that are prepared to take the risks should be able to earn the returns. As it says in its Discussion Document, highlighting the difficult choices facing regulators:

[24] A different measure, of course.

[25] Depreciation allowances have, for example, significantly increased in the period since the takeover.

[26] https://corporate.sky.com/media-centre/news-page/2015/letter-to-financial-times-reform-market-to-deliver-fast-broadband-in-the-uk?e=email-alerts.

… [T]he regulator, in order to incentivise investment… may want to ensure that investors are not only exposed to the downside risk of investment, but equally enjoy some of the upside (the 'fair bet' principle).

It goes on to suggest that:

… [T]hey need to ensure that consumers are not unduly harmed either by excessive pricing by an unregulated dominant firm, or because of a loss of competition at the retail level if a dominant firm upstream can distort downstream competition.[27]

There is no evidence of either scenario in the UK – prices that are the lowest in Europe for speeds that are, on average, among the fastest suggests that there is no excessive pricing going on (especially against the weight of the investment requirement); while the existence of substantial competition at the retail level, both in terms of the number of competitors and the volume of their business, suggests that there is no distortion of downstream competition.

Ofcom is right to concern itself with the future development of the network over the next ten years – but we fail to see how the essential questions underpinning that evolution can be satisfactorily answered by turning the review to address the question of network ownership. BT has recently announced[28] a number of further investments – a new universal minimum broadband obligation of 5 or10 Mbit/s; fibre broadband into the final 5% by the end of 2017, if given the opportunity; speeds of 300-500 Mbit/s by the end of 2020 to 10m premises; and improvements to customer service via a new Charter. These announcements, and the significant amount of investment they imply stretching substantially into the next decade, are, quite clearly, predicated on BT remaining a vertically-integrated company. Some might interpret the carrots being dangled here as a threat to withhold investment if Ofcom does not do what BT wants: we see it, instead, as a sign of the potential damage were the Strategic Review to proceed on such a path. It is not a threat, but the inevitable result of structural separation continuing to form part of the regulatory landscape would be that progress towards our high-speed broadband future would become slower and targets would be missed. That is the reality.

Jeopardising such developments is, therefore, a highly risky strategy. We are highly concerned that decisions could be taken which are reliant on other investors stepping forward only to find – as we have found before – that their commitment has melted away in the meantime. In these circumstances, the question of 'If not BT – then who?' remains a pertinent one which some in the industry need to answer if they continue to press for structural separation.

We would, furthermore, point Ofcom to a key introductory statement in its own Discussion Document:

Consumers are best served by widely available, high quality networks capable of supporting a range of services. A key objective of our strategic framework is therefore to secure the widespread availability of high speed fixed and mobile services.[29]

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[27] Both quotes from Strategic Review Discussion Document, para. 10.6.

[28] At its *Delivering Britain's Digital Future* in London on 22 September.

[29] Para. 6.1.

If that objective is to be secured, structural separation must not be the outcome of this review. We are, as a nation, at a very clear crossroads and we urge Ofcom not to take the wrong path.

Could Openreach deliver if it was structurally separate from BT?

Perhaps the most fundamental question posed by the review concerns the future of Openreach and the issue of whether it should be structurally separated from BT.

Prospect is firmly of the view that Openreach should not be separated from BT. We believe that it would be a particularly disastrous move for the UK as a whole, both in absolute terms and in terms of the timing. We also believe that this would be bad for our members in Openreach and in the rest of BT, and also those employed more widely across the industry, not only because it would create uncertainty and undermine morale, neither of which are in consumers' interests; but also because it would inhibit the continued growth and resilience of the industry.

We accept that there is a case for reform; we are not arguing that the *status quo* should continue. We recognise, and have already explored, the need for the quality of BT's customer experience to improve. Nevertheless, structural separation would be an extreme move and we cannot see any rationale for undertaking it. Let us explain why.

It would jeopardise investment

We have suggested above that investment in – for example – G.fast and in Britain's digital future would be jeopardised by the period of uncertainty that would result from a move towards structural separation. This remains an important factor to take into account; separation would, we are convinced, chill investment.

The specific point we want to make here, however, concerns the more practical questions of investment financing. We have highlighted above that BT and Openreach spend significant amounts of money on their capital expenditure programmes – for both, the 10-year record is that capital expenditure in each year accounts for 80% of operating profits. Openreach remains a profitable business: its operating profit margin is, at a 10-year average of 23.6%, higher than BT; while the narrow range within which it has fluctuated in this period (21.4% to 25.5%) means that its margin is also predictable.

These are important points to note: the impact of continuously falling prices is being borne not by declining profit margins (or by cutting back on capital investment) but by stripping costs out of the business. This produces the impact on our members' experience of their work – the significantly higher mental pressures and significantly higher workloads caused by seeking to do more with less – that we have previously reported to Ofcom.[30] At the same time, as we have suggested above, cost transformation programmes, which have to be maintained if capital expenditure is to be maintained, have squeezed the quality of the customer experience below what is desirable. It is no surprise to us that driving cost out of the business results in Openreach staffing levels

[30] Prospect response to *FAMR Consultation: Openreach quality of service and approach to setting LLU and WLR Charge Controls* (2014).

being sub-optimal, with a knock-on effect on customer service levels. This Ofcom seems to have recognised in agreeing a resource uplift as part of the charge control in its Fixed Access Market Review – which has resulted in BT recruiting more engineers.

These issues apart, we need absolutely to recognise that Openreach re-invests four in five of the pounds that it makes in its margin. But on top of that, it is able to make such investment because it has the support of wider BT.

At the same time, the need – as we have argued – for an expansion in investment, both in the network infrastructure and in customer service, can be satisfied much more reliably in the context of its location within a bigger group. Openreach can maintain its capital expenditure programme because it has the sustaining resources of a wider group on which it can call should it need to do so. We should also bear in mind here that, while Openreach revenues have been reasonably stable above £5bn throughout its life, they are around £200m per year lower now than they were in 2007; and that they have declined in each of the last three years. Yet, its capital expenditure has been stable – and has even been stepped up. An end to the real-terms decline in prices would, in a situation in which Ofcom maintains strict supervision on margins, provide greater resources for investment.

Critics here might point to the existence of a diversity of investment resources on which a separate Openreach could draw to replace its reliance on the support of BT. That may be so, in principle, but a structurally separate Openreach would find it very hard to justify to its City shareholders a capital expenditure programme which took an even higher proportion of operating profits than is currently the case. Shareholders are unlikely to receive well a proposal to put an even higher level of operating profits into capital expenditure than now; furthermore, Openreach's recent decline in revenues and the natural corollary of separation – the creation of a smaller, more vulnerable company – is likely to see shareholders move to cut back capital expenditure on the grounds that the risks posed by such a level of investment are unacceptably high.

The same points are likely to apply to an Openreach-less BT, too, which also puts 80% of its operating profits into capital expenditure. Take away the 28% of BT's revenues that Openreach represents, and the one-third of its operating profits, and BT is a much smaller, more vulnerable company too, around which shareholders are likely to be uncomfortable about the risks posed by such a high level of capital expenditure.

With Ofcom quoting an industry average annual capital expenditure figure of £3.7bn (for BT, Sky, TalkTalk and Virgin Media combined),[31] it is clear that BT accounts for getting on for two-thirds of it (64%, based on annual average capital expenditure over the last three years of £2.37bn). That is a substantial contribution not just to investment in high-speed broadband but also to the UK's overall investment programme. Putting that at risk may well damage the UK's economic recovery as well as the establishment of its digital future.

Additionally, structural separation would take very significant amounts of money out of the industry simply to pay the bill. There was a substantial cost involved in establishing Openreach as a functionally separate business, providing the required equivalence and separation, and enhancing hundreds of IT systems. Implementing structural separation would, likewise, carry a large price tag which would clearly have an impact on the resources available for wider investment.

[31] Strategic Review Discussion Document, para 4.35.

It represents a high-risk diversion

We are thinking here firstly of Prospect members working for BT and Openreach and whose employment futures, and pensions, are attuned to the health of the companies for which they work. It would be strange for us, as one of the trade unions representing such workers, not to highlight such a point, but it needs to be recognised that the uncertainty of separation would do an immense amount of damage to employees' morale, motivation and engagement. Prospect members use their motivation to strive to do an excellent job for BT and for their customers, frequently battling systems and procedures which appear actively to work against their best efforts. We will accept nothing less than excellent customer service as our aspiration for BT; but neither should we accept a diversion which undermines those efforts and, in turn, the consumer interest, for no clear reason or gain.

Separation would be the wrong change in this regard; in undermining our members' best efforts, the uncertainty that it would create would run the severe risk of making things actually much worse. In our view, that's an unaffordable, and an unnecessary, risk and it is, quite simply, not in the interests of consumers.

Our point here is also a much broader one: separation would be wrong for the UK. Immense strides have been made in the roll-out of fibre and more are coming, not least with G.fast. The uncertainty that structural separation would induce jeopardises technical and practical investment in these developments and threatens the political ambitions – with which we agree, by the way – of the UK having a world-class network infrastructure capable of delivering not only the benefits of increasing economic digitalisation but of establishing the UK as a source of internationally-renowned expertise in a digital labour market. That is a significant goal for the UK and the benefits are immense. Such uncertainties risk giving leadership to other countries which will, quite possibly, never be reversed. For the UK as a nation, the price is too high.

Furthermore, WIK-Consult's report for Ofcom highlights the following conclusion, with particular reference to the Australian experience where NGA coverage and take-up is 'substantially worse' than in the UK:

> *… our analysis suggests that, to date, the creation of a structurally separated National Broadband Network (NBN Co) has not by itself delivered positive outcomes for NGA in Australia, either for NGA coverage, take-up or other factors such as pricing. A particular concern is that uncertainties and delays, as well as plans to remove the existing infrastructure-based competition, may have chilled investment incentives.*[32]

It is clear to us that separation would be a very high-risk strategy, given that there is so little international experience and the relevant country situations where steps have been taken are so different to those of the UK. Most appositely, in Europe, given the context this provides to the legislative framework for communications, the only other EU member states which have embarked on a degree of functional separation are Italy and Sweden

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32 http://stakeholders.ofcom.org.uk/binaries/consultations/dcr_discussion/annexes/Competition_and_investment_fixed.pdf, p. IX.

(in the latter case, Telia formed its own network division in response to powers being granted to the regulator to impose functional separation). Functional separation has also been discussed in Poland, although this was eventually dropped in favour of TPSA, the incumbent, agreeing to improve its level of co-operation with alternative operators.

There is, quite evidently, no European experience on which to draw as regards structural separation which would, in turn, be a remedy significantly out of step with the solutions that other regulators around the rest of the continent have thought appropriate.

It would undermine improvements in quality of service

We have spoken above at length of our vision for improved quality of service.

The point we wish to make here in the context of separation is two-fold. Firstly, it is not obvious in itself how separation would improve the quality of service to customers. Industry commentators and BT's competitors have advanced the argument that a fully separate Openreach, established as a networks-only business, would thereby have a direct interest in delivering a quality service to its customers. Yet, delivering a network to customers is Openreach's business now. We do not see the change that separation would achieve in this regard.

Secondly, as we go on to talk about below, separation is likely to be a lengthy process. Consequently, this will further put back the improvements in quality of service that we all want to see. Consumers want improved service quality now; a long drawn-out process before separation could be achieved simply acts to postpone that process; that is clearly not in the consumer interest and it is likely to cause further frustration.

It would have a deleterious impact on the financing of research and development

Openreach and BT without each other would be much smaller, more vulnerable concerns in terms of sustaining the current very high level of capital expenditure; maintaining that is more possible in the context of a larger enterprise. However, BT is also a highly-integrated company, encompassing Openreach as one of its lines of business but subject to the rules of the Equality of Access Board and the BT Undertakings, and breaking it up would do immense damage in some much less visible ways.

We are particularly concerned here about BT's Adastral Park research and development community, although the examples we quote here are intended to be illustrative of the benefits of integration more widely. TSO – one of BT's lines of business – accounts for a substantial part of BT's overall workforce in the UK and many of its people are based at Adastral Park. A very large number of people here are Prospect members – and this means that we are able to gain a depth of insight into what it is that TSO does, and where the benefits are to BT as a whole, including Openreach. All BT's other lines of business contribute to the financing of TSO's activity. This is because what Adastral Park does underpins the operation of BT as an integrated operation.

BT has a historic role engaging in research science in data transmission and in network transformation, as well as a strong track record of practical innovation in, for example, optical fibre, blown fibre, digital exchanges and the digital home. It was putting fibre into its network as far back as 1982 (i.e. before privatisation). We are concerned that this would be lost if short-term marketisation replaces long-term return on investment. To name just a few aspects of what BT is currently doing here:

- improving customer service through network fault recognition and rectification is, these days, a software-driven activity with high-performance diagnostics helping to address the 90% of faults which are not on the network but in the home
- research and development into hardware improvements in in-home wiring and networking; the home being these days the biggest bottleneck in the network
- the G.fast lab is pioneering the stretching of the boundaries of what a copper pair can do, in ways that are not just confined to the lab but which offer real possibilities to improve access speeds in an affordable way (which will be of interest not least to the UK's SME sector) and which are currently being trialled in 4,000 customer premises and by eight CPs
- software applications are developed which efficiently and reliably optimise the use of the field workforce so as to improve customer service at the front end
- modelling line speeds and customer usage patterns which help predict traffic growth and movements.

The result of this is that economies of scale arise, so – firstly – the financing comes more cheaply to each one. A structurally-separate Openreach could, quite clearly, establish its own R&D facility, or it could contract such services from Adastral Park. Any move towards structural separation would need to recognise that this would not entail a neat and simple parcelling up and dividing out of Openreach (and parts of BT's Wholesale line of business), but also parts of TSO, too. The reality – probably too little recognised by a public which sees Openreach as a simple, stand-alone business – would be both complex and messy. A trade union representing workers in such a position sees all too easily the impact of such a messy break-up on their morale and motivation – as well as on, for example, their occupational pension provision (about which members would have real concerns). But, more than that, we believe that the break-up of an integrated, cohesive research team would be a retrograde step and a potentially disastrous one not only for BT but also for the UK's R&D effort more broadly.

Even assuming that such a process was implemented, a separated Openreach would need to provide ongoing finance for such activity independently and, consequently, this would raise its costs. Financing such a leading facility, or paying for the type of development work done at Adastral Park on a contract basis, including for payments in respect of such work that is already in place and from which Openreach already benefits (e.g. where the patent is held by BT) is unlikely to come cheap to a stand-alone enterprise. Consequently, this would raise consumer prices – but it would represent dead money since Openreach already has access to such services within its current cost framework. We should point quite clearly to the inefficiencies associated with such a level of inflation, especially in the context of our view of moderately higher prices being necessary but with the specific intention of these being used to support further and deeper investment in the network. Seeing higher prices as a result of needing to finance greater costs represents not only a waste, but a wasted opportunity.

The second result is that an integrated research facility brings opportunities for research benefits to arise in sometimes unexpected ways. To an Openreach engineer, rain (getting into ducts) is the biggest problem; to a TSO researcher, it is heat (generated by electronics). Bringing these two approaches together, as Adastral Park does, means that solutions can be found to both at one and the same time. That is not only more efficient; it is also more cost-effective. It also means that Openreach's customers – such as Sky and TalkTalk – benefit from research and development initiatives targeted at BT as an integrated company but which may not have been thought of, or solutions identified as quickly, by a structurally-separate Openreach.

Thirdly, as we have said above, most of the problems experienced by customers are not faults on the network but in the home, as a result of home-wiring or building technologies which have knock-on effects on the attenuation of wi-fi signals. Fixing such faults currently falls back on a BT where network provision is integrated with the rest of the company. It would no longer do so were that integration to be broken. Faults that are non-network (and not the responsibility of Openreach) will fall to customers to resolve and unless Sky and TalkTalk (for example) take on the responsibility for that, the quality of the customer experience there is likely to be lowered. Currently, they receive the benefits of BT's research into off-network problems while having a suitable scapegoat for the existence of these faults. That would clearly stop were Openreach to be structurally separated.

Summary

In these sub-sections, we have sought to highlight some of the problems that structural separation would entail as regards a BT in which Openreach is, notwithstanding the Undertakings, an integrated business. What we have sought to do is to highlight that separation could chill investment; that it would be messy; that it would jeopardise the pan-BT research effort; and that it would raise Openreach's costs (and those of its customers).

Above all, however, a move to structural separation would represent an enormous and untimely distraction from the essential task at hand – which is to roll-out high-speed broadband as widely as possible and to increase access speeds via further investment in the network. That is the absolute priority – and it is one which is of fundamental economic and societal importance.

Here, we would point Ofcom to the Discussion Document:

> *Investors value predictable and stable policy interventions: significant and poorly signalled changes of policy can damage investor confidence, and may increase the risk associated with new investments.*[33]

It is indeed a question of investor trust in the regulator. We would strongly question the value of any initiative which undermined that – especially in the context that there are serious question marks over whether structural separation is achievable in practice, which we go on to explore in the next section.

[33] Para. 10.12.

Could separation be done?

We understand Ofcom's preference for this Strategic Review to be a 'pure' theoretical activity, and that it should be free to consider what is the right path to take outside of the mechanics of how such a path could be implemented: a move which, we think, stems from not wanting the review to be dominated by the question of the future of Openreach. We appreciate the rigour behind such attempts.

However, given the distraction that the debate over the future of Openreach is causing already, and which will certainly be the case should structural separation be the outcome of the review, it is only right that we consider some of the mechanics of how that could be achieved were that to be the result. Furthermore, in our view it is impossible to divorce a proper consideration of what is theoretically possible, or desirable, from a consideration of whether it can be done in practice – not least given the serious potential ramifications of any move towards structural separation.

We should say openly at the start that we have serious doubts over whether separation can be enforced on BT.

Not from a narrow, UK-only perspective, of course: any UK company could be broken up following a reference to the Competition and Markets Authority and in pursuit of its findings. Evidently, BT itself faced such a prospect at the time of Ofcom's Telecoms Strategic Review in 2004-05 before agreeing to the Undertakings and to the functional separation of Openreach.

Our concern is the EU telecoms framework, in particular Articles 13a and 13b of the revised Access Directive.[34] Article 13a provides that functional separation is a possible remedy within regulators' toolkits to tackle competition problems within the communications industry; while Article 13b allows for voluntary separation, i.e. where the operator itself requests its split into separate business or legal entities. The difference is that, whereas Article 13a focuses on imposing an obligation to 'place activities related to the wholesale provision of relevant access products in an independently operating business entity', Article 13b refers to operators seeking to 'transfer their local access network assets to a separate legal entity under different ownership.' The difference to us between these two envisaged scenarios is quite clear – functional separation may be imposed and structural separation may happen: but structural separation cannot be imposed.

Back in 2005, functional separation was not envisaged as a competition remedy either – but the position is different now because the framework does address the possibility of separation. Where there was a lacuna then, because the legislation did not envisage separation to this level, such a gap does not now exist: the legislation has considered the issue (indeed, structural separation was the subject of exhaustive consultation while the legislation was being drafted) but has turned away from it.

Consequently, we do not think that the EU framework provides sufficient scope for structural separation where this is not in line with the wishes of the operator.

This may change, of course – we are aware of the Commission's review of the telecoms rules under Pillar II of its Digital Single Market initiative. Ofcom's own discussion

[34] http://ec.europa.eu/digital-agenda/sites/digital-agenda/files/140access_1.pdf.

document here raises the question of whether the outcome of the review might result in pressing for a change in the EU framework legislation. However, we do not think it particularly likely, at this stage, that the EU's review will result in structural separation becoming a potential remedy for regulators; and – even if it does – it will, of course, only emerge after a period of time and lengthy battles.

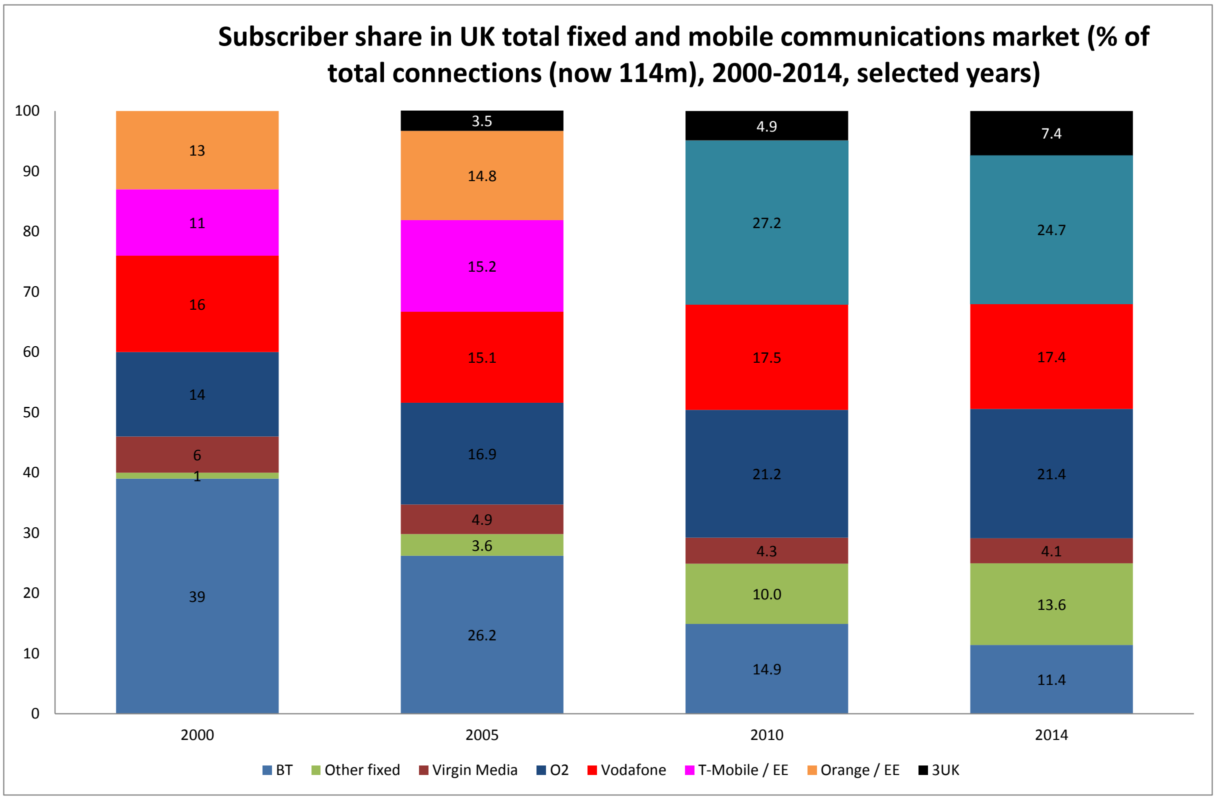
Should Ofcom's review result in a move towards structural separation, there is thus a serious problem. There is no evidence that BT will agree to structural separation – indeed, there is, in contrast, plenty of evidence to suggest the reverse and that BT will fight such a move very hard. BT was also originally opposed back in 2004/05 to functional separation but although it did eventually agree, when faced with a markets reference to the then Competition Commission, there is no sign that it is just blustering this time and that it will again back down. Consequently, there is the threat of extended legal action not only should the review emerge with a recommendation, based on structural separation, for a reference to the UK's CMA; there is also the added layer on top of legal complexity based on whether or not the EU framework allows the imposition of such a move.

All this introduces a considerable amount of uncertainty – legal, in the first case, but also investment-based thereafter. Any drawn-out process – which a legal fight is destined to be – risks damaging the case for investment in the UK's network infrastructure.

Were the market situation serious enough to warrant taking such a risk, the position might be different – but we do not think that it is. The EU framework is quite clear that a regulatory authority can only even propose a functional separation remedy 'as an exceptional measure', where the imposition of other obligations have failed to address 'important and persisting competition problems and/or market failures', and where the authority has detailed a series of accompanying measures in its proposal to accompany its view that there is 'no or little prospect of effective and sustainable infrastructure-based competition within a reasonable time-frame.'

It is clear that the UK market is probably the most competitive in Europe: BT has a lower market share than its rivals in terms of access and calls volumes and revenues; and, most particularly, it has fewer local loops under its control than do its rivals: Ofcom's quarterly Telecoms Market Data Update for Q1 2015[35] reports that BT has 12.8m of the UK's 33.3m exchange lines, whereas its rivals have 15.8m (Virgin Media has the remaining 4.7m). Even excluding the cable network, BT has 45% of even the fixed-line market – falling to 38% if we include the Virgin Media network. Building on top the very real alternatives presented by mobile, within an increasingly homogenised communications industry in which the ever-thinning walls between 'fixed' and 'mobile' have been almost completely broken down by the reality of convergence, BT's market share falls even further, as the following chart emphasises:

[35]http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/tables/q1-2015/.



It is very hard to see how Ofcom could sustain a case for separation on the basis of market failure even if Article 13a allowed for structural separation; it is equally hard to see how the Commission could agree to any such proposal, not least given the impact of functional separation in the UK on creating such a competitive market – and encompassing competition at the level of the infrastructure. Ofcom would also need to provide evidence as to why the conclusion that it had reached back in 2005 – that an Enterprise Act reference to the Competition Commission would be 'long, fraught and uncertain' and that 'structural separation carries more inefficiencies associated with the loss of vertical integration'[36] no longer applied.

We should also observe the retrospective focus of the text of the EU framework: separation as a remedy is designed to address continuing market failures stemming from a lack of competition and in a situation where other obligations imposed on the operator have failed to achieve effective market competition. We have an extremely competitive infrastructure market as a result of the unbundling of local loops; high-speed broadband represents a different set of prospects, but we do have evidence that VULA is working well: Ofcom has recently concluded that, even though the potential for an insufficient margin to distort competition was present in the market, the VULA margin being maintained by BT was sufficient.[37] This seems indicative to us of a new market in which, nevertheless, competition is already capable of performing its disciplinary tasks. Certainly, there is no evidence that it is not.

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[36] A slide pack produced in October 2013 by Andrea Coscelli, then Director of Competition Economics at Ofcom and currently Executive Director of Markets and Mergers at the Competition and Markets Authority: http://www.unibocconi.it/wps/wcm/connect/4bb42eb9-539c-478c-96c5-1537e88401ee/slides+coscelli.pdf?MOD=AJPERES.

[37] http://stakeholders.ofcom.org.uk/consultations/VULA-margin/statement/.

In this respect, we are a little disappointed that the review concerns itself with the largely theoretical problem of BT's supposed 'underlying incentive to discriminate' against its competitors. Regulation exists precisely to prevent that occurrence in practice, based on active remedies for BT to supply fully-functional wholesale products – and there is little evidence that discrimination is actually happening. In fact, the evidence points to the reverse: prices are continuing their long-term decline; and there is a vibrant and sustainable level of competition at the retail level. Whatever the continued existence of that incentive, it seems to be quite markedly absent from the marketplace. Without formal evidence, or even well-founded suspicion – and broadly theoretical concerns about what BT 'could' do are insufficient here – that BT is exercising that incentive in practice, there can surely be nothing for the review to address in this respect. There is of course a continuing role in principle for targeted *ex ante* regulation but, in the context of a market – even a fluid and evolving one – that is perceived to be working well as a result of *ex post* activity, regulatory action must be based firmly on evidence rather than supposition.

Ofcom's last review of the Undertakings, in 2009, concluded that:

> *[We] continue to remain of the view that the Undertakings are an appropriate comprehensive solution to the competition concerns that we set out in the TSR.*[38]

It would be fair to observe that Ofcom had some outstanding concerns, despite its overall view, but the continued advance of competition in the meantime would make it harder to sustain a case, as Ofcom would now need to do, that its 2009 view was misplaced and that the Undertakings were no longer a 'comprehensive solution' to concerns over the market.

The future of mobile in a converged world

Much of our submission has focused on the future of Openreach and BT as a vertically integrated company because that it is the predominant substantive issue raised in the Discussion Document.

However, Ofcom is right to discuss communications networks more broadly. Networks are subject to immense change as a result of the currently extremely fluid nature of the industry – one major reason why regulation needs to be especially careful of engaging in precipitate action.

This is particularly noticeable in the mobile industry, which is itself currently in turmoil and in which two merger proposals, involving BT and EE in the first place and O_2 and 3 in the second, both of which have now been submitted to the appropriate authorities for regulatory scrutiny, are likely to turn the industry upside down.

We want to make some points in connection with the mobile industry and communications networks generally which might help Ofcom in its understanding of the issues raised in the Discussion Document.[39]

The central issue affecting the mobile industry is clearly convergence and here we are referring not so much to platform convergence but to network interchangeability. We

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[38] http://stakeholders.ofcom.org.uk/telecoms/policy/bt-undertakings/impact-strategic-review/.

[39] Para. 9.76ff.

have gone, and in a rather small number of years, from a situation in which mobile was thought to be king to a realisation that it is not mobile that rules, but the handset: the device which allows us to communicate, to entertain (and to be entertained) and to keep in touch with our friends and colleagues. What has happened is that, as services have grown, so have the loads on the networks; and it has been the case that services have outstripped the ability of networks to deliver, perhaps not least as a result of the 3G auctions (both here in the UK and elsewhere in Europe) which, while raising enormous sums for the Treasury, sapped the ability of mobile operators to deliver. The significantly greater investment required came at a time when price competition – encouraged not least by the arrival on the scene of a disruptive fifth operator (3) – has been bringing prices down with the same outcomes as we have referred to elsewhere in this submission.

More than that, however, those loads on the network have occurred at a time when technology has advanced to provide greater possibilities for servicing them which do not necessarily entail the involvement of spectrum within the bands purchased (at such huge cost) by the mobile network operators. Here, we mean femtocells – small, low-power cellular base stations – and other similar advances in small cell technology which provide for fixed-mobile convergence both within a residence and over highly localised areas. The huge change wrought by this lies in the delivery of much improved in-building signal and in encouraging the offload of mobile data traffic from the network of the mobile network operator, where capacity is frequently limited and, sometimes, of low quality[40] to that of the fixed-line operator where capacity is much greater and where network reliability offers significant improvements.

In the process, what has become important to the user is connectivity, not the network; the mobile handset, but not the mobile network. What was the mobile industry's greatest asset – the ability to deliver communications on the hoof, something that was incredibly attractive in its own right – has been to some extent met by the ability of other networks to match that mobile connectivity. In a fixed-mobile converged world, the network over which those desirable communications services are carried matters barely a jot to the user – what does matter is reliability and the seamlessness of the service.

For the mobile network operators, the arrival on the scene of these developments is, evidently, immensely significant. Having never successfully managed to exploit the massive growth in data traffic, they are now facing a future in which revenue streams from data are being cut-off and in which what they offer – mobile network connectivity – is seen as less essential. 4G offers greater capacity, improved spectrum efficiency and higher speeds, and 5G may, in the future, improve the position still further in all three. So, it is not all doom and gloom for mobile networks. However, small-cell technology is already here and it demonstrably works; by the time that future has arrived, mobile network operators may well be struggling significantly to stay in the game.

This background helps to explain the turmoil in which the mobile industry now finds itself, as well as the merger proposals that have been made. What asset the mobile industry still has is its spectrum holdings, both at sub-1GHz frequencies and at the 2.1GHz and 2.6GHz frequency. These are, currently, attractive because they offer greater capacity and, particularly at the sub-1GHz level, greater network coverage. In a fixed-mobile world, they offer alternative ways to carry mobile data traffic; this is attractive in filling out (and

[40] Via network drop-outs and dropped calls.

improving) the network offer for the modern, broadly-based communications industry. But mobile no longer represents the sole route to the future.

Consequently, a merged O_2 and 3 will have, between them, a broadly comparable level of spectrum to that of Vodafone and EE (and with spectrum holdings that are quite complementary, being held both at sub-1 GHz and 2.1GHz and 2.6GHz frequencies). This would provide a merged entity with the ability to offer deals to network carriers which is therefore equal to that of EE and Vodafone. For EE and BT, the spectrum is largely all high frequency (at 2.1 and 2.6 GHz) but this offers the potential for the short-range communications which mark the fixed-mobile converged world.

For BT, additionally, owning mobile spectrum also puts it on a par with its European counterparts, where owning a mobile operator alongside fixed voice and broadband operations is routine. In a world in which the European Commission has openly been raising the prospect of cross-border consolidation, to deal with the fragmentation of the industry, owning mobile as well as fixed assets will allow BT to play its part in any of that from a position of strength, which will also benefit the UK.

We don't want to comment on the merger proposals here at length, because this is not a matter for this Strategic Review. What we can say, from the perspective of the issues raised by the Review, is that we do see the logic in both mergers, in an industrial sense as well as in a consumer one. Neither do we see them as inimical to the striving for competition which has marked the regulator's approach in mobile as much as in fixed. What fixed-mobile convergence implies for the regulator is the need to come to terms with the breaking down of the traditionally-segmented approach it has had to the communications industry, between 'fixed' on the one hand and 'mobile' on the other, and seeing communications network operators as a much more homogeneous group than has been the case hitherto.

There are evident challenges in that, but we don't think that it signals the death of competition. There will still be network competition, delivering outcomes for consumers, but this will take place on a different basis than before. Perhaps this will present a different set of issues for the regulator, influenced by the operators being much more powerful. However, we do see them as competing equally fiercely as they do now, but across the traditional network barriers rather than solely within them.

Conclusion

In brief conclusion, we are glad of the opportunities provided by this Strategic Review to set out our case for how our vision of a virtuous circle might be established, in which heightened investment in the industry feeds into substantially improved quality of service and customer experience which, in turn, drives greater investment. Achieving that is, Prospect believes, critical to the future of high-speed broadband in the UK and, indeed, to a future UK in which digitalisation drives the economy, greater productivity and improved skills and wage levels.

We do regret that the discussion over the future of Openreach has become a dominant feature of a much more wide-ranging consultation on networks generally, and that we have had to spend the major part of our submission dismantling the case for structural separation; we feel that this is a distraction to the work which needs to be done – and which is being done – to drive substantial investment in high-speed broadband to secure the UK's digital future. We have observed in many places, and reiterate here, that a vertically-integrated BT is key to the delivery of that investment and that future. Our evidence demonstrates that, not only does the case not exist on which structural separation might conceivably take place but also that this would jeopardise the UK's digital future. Prospect cannot stand by and watch that happen. The UK is at a critical juncture in this respect and we call on Ofcom quickly to rule out any move in this Strategic Review towards structural separation.

At the same time, however, we are of the view that poor quality customer service cannot continue. BT seems to be realising the need to address this and, as we have outlined above, there is a regulatory dimension to this, too. The industry does need the chance to get together to work out a plan to drive quality higher and we believe that it needs a breathing space in which to do so. The conversations that the industry needs to have in this direction urgently need to take place. Nevertheless, we do see a need for a strengthened functional separation model, oriented towards incentivising improved quality of service, to be developed in parallel with those discussions and seeking to underpin them. Were the industry to be unable to agree viable improvements to quality of service, that strengthened model would come into play.

Prospect is, therefore, happy to support a strengthened functional separation model as an outcome of this Strategic Review as far as incentivising BT to improve its quality of service is concerned.

A part of this support is, however, that there needs to be recognition at the regulatory level that driving prices lower is only in the short-term interests of consumers; and that their long-term interests are achieved by securing substantial investment in the industry, and improved service quality. Considerable levels of capital expenditure investment have been made over the last ten years, and including through a major recession and its aftermath, but this programme now needs to be stepped up. To achieve that, BT needs the confidence that the regulatory model will no longer be oriented towards continually lower prices. This will give it the space in which to invest confidently and securely in the UK's digital future, and to drive the speed and coverage of the communications networks of tomorrow that we all want to see put in place.

Ofcom's specific consultation questions

We would like to respond in this section briefly to a number of the specific consultation questions posed by Ofcom, specifically with regard to Section 11 of the Discussion Document. Our analysis and conclusions stand as authoritative comment as far as we are concerned on the overall themes of the Strategic Review and the general questions raised.

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)?

Ofcom is referring here substantially to fixed rather than mobile communications although, as we set out below, this actually misses one key development.

We believe that development of full end-to-end communication in the fixed market is unlikely. There are welcome niche initiatives that exist, but the only major rival to BT (Virgin Media) will – after the completion of its first substantial investment programme in well over a decade – cover only 60% of households. It is very unlikely ever to go much beyond that as the commercial case for doing so cannot be made. BT's network already goes substantially further, not only into the final one-third but, potentially, into the final 5%. Consequently, this means that regulated access will continue to be required in the fixed market, given the market conditions that apply at the present time.

At the same time, the analysis behind the question seems to miss the potential of converged networks to emerge in the future, in which some elements are fixed and some are mobile, based on femtocells, picocells and heterogeneous networks in which voice is just another app, but where ownership does not conform to the traditional fixed/mobile market segmentation. Such a blurring of segment lines actually does facilitate the potential for the end-to-end competition which marks the approach to mobile to be extended into what has traditionally been seen as the fixed market. In this situation, access regulation may well no longer continue to be appropriate and, indeed, there may well be a case for deregulation.

However, there are many uncertainties in this – and the market is, in any case, young and needs to be allowed to develop. Ofcom should continue to review the market and to assess regulation (and the possibility for de-regulation) on a case-by-case basis as developments continue. To do anything else in the current fluid environment looks to us like too early intervention in an incipient market, and also runs the risk of the regulator picking winners.

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?

This is a somewhat nebulous question – of course any such competition issues *could* arise, although clearly we don't yet know what they might be.

The substantive concern for the mobile industry, and the one which is occupying it heavily right now, is fixed-mobile convergence: dealing with this is taking up a considerable amount of the time of its strategists and deal-makers.

That is not in itself really a concern for Ofcom – what does matter here to the regulator is the consumer outcomes of such network integration moves as are afoot. Consumers are not interested in networks, they are only interested in services, coverage and reliability. In the sense that strengthened operators are likely to be able to offer, via improved investment potential, better networks, they are likely to be good for the consumer. The challenge for Ofcom, we suspect, lies in accepting the breaking down of the barriers between traditional 'fixed' and 'mobile' communications networks and seeing that substantial levels of competition still exist between network operators of scale and which are comparable in size, but in a much less segmented fashion.

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?

Q14: Are there wider concerns relating to good consumer outcomes that may suggest the need for a new regulatory approach to Openreach?

Q15: Are there specific areas of the current Undertakings and functional separation that require amending in light of market developments since 2005?

These are clearly the key central questions to the Strategic Review. We have argued above that a functioning market (continually falling prices; and vibrant and substantial competition) implies that there is no objective evidence of BT discriminating in the market place; and indeed we have none to submit.

Unless there is such objective evidence – and the Discussion Document being silent on the specifics does point to there being none at hand – then there is nothing for structural separation to provide a remedy for. Even were any real evidence to emerge as a result of the debate launched by this process, we do not feel that structural separation is likely to provide an appropriate remedy; we would argue alternatively – for example in dealing with any under-investment as a result of capital rationing – that BT needs to be incentivised to perform better and that, frequently, has a clear price dimension.

Others might argue that providing Ofcom with the ability to levy fines would provide a more flexible approach to the operation of the rules governing functional separation, as well as provide an in-principle incentive against any bad behaviour. This is a bit of a blunt instrument and, in our view, competition and the existing model of functional separation and equivalence already provides sufficient incentive for BT not to engage in bad behaviour. Furthermore, such would need to be subject to an appropriate appeal system and it may be that the time and the resources involved could be better spent. The only recent experience where the possibility of a fine may have come in useful in recent years was over Openreach's quality of service – an issue in which recent experience is evidence of Ofcom using its power to levy fines for poor quality complaints handling processes in EE, 3 and Vodafone. Even then, however, as we have said above, any finding of discrimination so as to trigger the possibility of a fine would have been contestable on technical grounds; while, ultimately, Ofcom recognised at the time that at least some aspect of this reflected a sub-optimal staffing level which, we would argue, was influenced by the impact of regulatory activity.

We would also wish to make a specific point here about Northern Ireland, since Ofcom raises the issue of whether functional separation should be extended to Northern Ireland given that it currently does not apply there.[41] Ofcom's reading of the evidence of the Equality of Access Office is that 'No significant issues have been found to date' which, we believe, is a clear sign that there is no evidence of market failure sufficient to prompt regulatory intervention.

We are aware that the facility does exist for other competitive providers to deal directly with Openreach if they wish but, to the best of our knowledge, only one actually does so, the remainder preferring to be account managed locally. Consequently, it is our view that there is no evidence of any requirement to remove the current local exemption.

Q16: Could structural separation address any concerns identified more effectively than functional separation? What are the advantages and challenges associated with such an approach?

We do not think so, for reason of the many substantial disadvantages to structural separation that we have set out above. We reiterate our call for Ofcom to rule out structural separation at an early stage.

Ultimately, we do recognise that things may change in the future – Ofcom will continue to have a role in monitoring performance and to make proposals to reflect regulatory shortcomings. That things may change in the future, however, provides no argument that the

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[41] Strategic Review Discussion Document, para 11.59.

separation issue has to be addressed now; instead, our view is that the regulatory approach needs quietly to evolve in line with the evolving networks that it governs and with any competition issues they reveal as they do so.

Q21: What further options, if any, should Ofcom consider to secure better quality of service in the digital communications sectors?

We appreciate that a regulator does not want to have intervene to improve quality of service, and we share the disappointment that it has had to. Having intervened to establish quality standards, Ofcom needs to ensure that these are continually met to the same standard as they currently are. As we have suggested, driving these higher is important: we believe that the standards are minima and need not just to be met but surpassed in the context of establishing a virtuous circle of investment and quality. This needs to be done by and within the industry itself; given the strong signs that Openreach is likely to prove responsive, this process needs to be given a chance to work. In the future, it may be that regulation can be withdrawn where a quality of service code has been established.

However, we would also repeat our observations here that an obsession with driving prices lower is going to have an adverse impact on the customer experience – perhaps especially where customers' main focus is price and where, outside of the business sector, customers are rather unwilling to pay extra for quality of service. That may be because their expectations are for quality to be built-in to what they pay for – and that's fair enough, up to a point – but the perception that price is the be all and end all does need to change and, for that to happen, the regulatory signals must be different. That has started to shift as a result of the resource uplift agreed as part of the Openreach quality of service review. We are glad that this conversation is starting to come about.

Q23: Where might future network evolutions, including network retirement, offer opportunities for deregulation whilst still supporting good consumer outcomes?

For us, the key question here is not 'Where?' but 'When?' The section has provided a good introduction to the broad themes of the retirement of legacy assets and the issues this raises, to which we have little to add at this stage. We are aware that BT intends to migrate all customers to its IP network by 2025; and that AT&T in the US is seeking to make similar plans. If those plans become a reality, then the question arises as to when, and under what circumstances, the PSTN can be switched off; however, that is at the very end of the lifetime envisaged, if informally, by this Strategic Review. It is good to be aware that such issues exist – and those plans may well be speeded up, in which case the questions they raise about the PSTN may become pertinent more quickly. For now, they remain somewhat beyond the lifecycle of this Review and the concerns that we have about the direction of our industry.