



OFCOM CONSULTATION

WHOLEALE BROADBAND ACCESS CHARGE CONTROL

TALKTALK GROUP RESPONSE

NON-CONFIDENTIAL VERSION

March 2011

INTRODUCTION

1. This is TalkTalk Group's (TTG) response to Ofcom's consultation on its proposed charge control for WBA services. TalkTalk Group is one of the UK's largest ISPs and provides broadband to over 4 million residential and business broadband customers under the TalkTalk, AOL and TalkTalk Business brands. TalkTalk welcomes the opportunity to input into this consultation.
2. Ofcom's proposal to impose a severe charge control resulting in a reduction in IPStream prices in market 1 of up to 32% in real terms will have a significant negative impact on a large number of consumers in market 1. We briefly describe these impacts below.
3. TalkTalk is planning to further roll-out its LLU network to [X] exchanges in market 1 covering [X around half] of the households in market 1¹. However, if this large reduction in IPStream prices is confirmed it will reduce the viability of this extra roll-out and mean that TalkTalk will not roll-out to around [X] of the exchanges it was intending to cover (which serve [X several hundred thousand] households). The price reduction will result in the permanent and irreversible preclusion of competition in these exchanges since even if Ofcom changed the charge control in 3 years prices are unlikely to rise back to a level to make this investment viable.
4. The price reduction will also have other negative consequences:
 - Will additionally preclude competitive roll-out in even more exchanges that though not in our current plan would have become viable in future due to availability of additional capital / resource and/or improved unbundling economics
 - Will chill investment in the market 1 exchanges where TalkTalk will build out since the unnecessary regulation will discourage investment by BT and other LLU operators
5. More generally we think the proposals constitute unnecessary and harmful regulatory intervention in a market where almost half of consumers would be served by competition in the next 2 years and possibly even more in the medium term.
6. We consider that there are a number of practical ways for Ofcom to adapt its approach to avoid this impending harm. The most appropriate options are to either re-categorise some of the exchanges in market 1 into market 2 or to differentiate remedies within the existing market 1 (as has been done elsewhere). It is notable that Ofcom's current approach relies on a 'no material change' conclusions to satisfy the requirements of s86(1) of the Comms Act. However, we consider that this conclusion is incorrect since there has been, we believe, a material change since the Market Review. Therefore, the legal basis for Ofcom's approach may not be sound.

¹ and [X] exchanges in markets 2/3

7. Our response is laid out as follows:
- In the first part of this response we explain the impact of the reduction on TalkTalk's build plans and the impact of this on consumers
 - In the second part we outline some possible solutions to overcome this potential detriment
 - In the last part we comment on a number of aspects of the methodology and assumptions that Ofcom has used in its modelling
 - A short annex that discusses the relative merits of using prospective build plans rather than confirmed build plans to categorise exchanges into different markets
8. *If there are any questions regarding this submission please contact Andrew Heaney (andrew.heaney@talktalkplc.com or 07979 657965).*

IMPACT OF WHOLESALE PRICE REDUCTIONS

9. TalkTalk had planned² to extend its LLU network from 2,000 exchanges to cover another [X] exchanges³ bringing its total coverage up to about [X] of homes. This included building out to [X] exchanges in market 1. These [X] exchanges covered [X around half] of all households in market 1. This decision was based on the expectation that in market 1 the charge control would result in IPStream prices remaining flat in nominal terms⁴. Ofcom has now proposed a charge control in market 1 that would result in significant IPStream price reductions of between 24% and 32% in real terms (17% to 26% in nominal terms) over the next 3 years⁵.
10. The commercial justification for investing in these additional exchanges is founded to a large degree⁶ on the cost saving⁷ of using MPF and TalkTalk's own network rather than using IPStream for existing customers⁸. The business justification for these exchanges is, as to be expected with smaller exchanges, marginal and highly sensitive to assumptions.

IMPACT OF PRICE REDUCTION ON EXCHANGE ROLL-OUT

11. [X]. We estimate that based on the proposed mid-case stepped decline in prices over 3 years about [X]⁹ of the [X] market 1 exchanges will become unviable. These exchanges cover around [X several hundred thousand] homes. Obviously if the price decline was immediate the impact would be larger.

² [X]

³ [X]

⁴ Flat in nominal terms i.e. RPI – RPI

⁵ Based on SMPF element (£1.30) increasing at RPI–1% and non-SMPF element (£10.70) increasing at RPI – 10.75% / 12.75% / 14.75%. RPI from lagged October used in RPI-X formula averages 3.6% over 3 years. Nominal impact (mid-case) average a 7.8% reduction each year. Actual RPI averages 3.1% over 3 years

⁶ There are other reasons that effect the roll-out decision including ability to offer improved proposition and higher market share

⁷ It has been suggested that the impact on TalkTalk will be limited since the charge control only applies to IPStream (ADSL2) whereas TalkTalk are rolling out an ADSL2+ network. This difference has limited relevance since obviously ADSL2 prices act as a constraint on ADSL2+ prices and in any case from a commercial perspective the cost saving TalkTalk experience is compared to the amount it was spending on ADSL2

⁸ For new customers (enabled by having a more competitive offering), we have assumed that the IPStream price has no direct bearing on exchange viability. In practice though there will be some indirect effect since a lower IPStream price may result in slightly lower competitor retail prices and thus slightly lower market share. By excluding this effect the modelling underestimates the negative impact that the reduction in IPStream prices will have on exchange viability

⁹ [X]

12. The price reduction will also have a detrimental impact on future roll-out in market 1 beyond the current plan for [X] exchanges. We expect that more exchanges will become viable/possible in future as a results of a number of factors such as:
- Improved availability of key requirements:
 - capital
 - engineering resources
 - exchange space/power availability
 - improved unbundled economics:
 - higher market share / market size
 - lower capital of operating costs – for example, lower CAPEX due to [X]
13. [X]. If, as is likely, these come to fruition we estimate that an additional [X] may become viable in the future (at current IPStream prices). However, with the severe charge control, many of these will be unviable¹⁰. In total assuming the improved economics materialise (which we think likely) the proposed IPStream price reductions will effectively deprive [X] homes of network based competition.
14. Ofcom argue that the price reduction won't make a difference to investment: "... we do not consider that setting a charge control is likely to dis-incentivise investment"¹¹ (§5.88). We do not think this is the case. Simple business case modelling shows that the viability of exchanges (whether the viability test is a target payback period or rate of return) is highly sensitive to the IPStream price.
15. In fact, it appears that the danger of low IPStream prices deterring competitive build is a risk that Ofcom itself has long recognised. Accordingly Ofcom has consistently in the past avoided setting low IPStream prices (and in one case prevented BT from reducing IPStream prices). For instance:
- In the last market review, in market 2 (where there is some network competition but BT still has SMP) Ofcom imposed no charge control since it would *inter alia* deter investment. Ofcom said:

Our view was that a strict charge control which aimed to reduce BT's prices to LRIC plus an appropriate mark-up for common costs could lead to lower prices but could also stifle any further investment in LLU, thus reducing consumer choice¹²

¹⁰ Note the viability of these is tested on the basis that they start in April 2013 and so their viability will be based on the full 22% IPStream price reduction. The modelling assumes that after FY2013 IPStream prices remain flat

¹¹ Ofcom then go on to say (in §5.88) that the reason they believe that this will not disincentivise LLU investment since TalkTalk have made LLU investment plans in the face of knowing that there will be a charge control. However, we did not consider that the charge control would be that severe - our investment plans were based on a real reduction in prices leading to price flat in nominal terms i.e. RPI – RPI rather than RPI – 12.75%

¹² Wholesale Broadband Access Market Review Dec 2010 §5.51
<http://stakeholders.ofcom.org.uk/binaries/consultations/wba/statement/wbastatement.pdf>

- in the 2008 market review, no charge control was imposed in market 1 (which then covered 16% of households). One of the main reasons for not imposing any charge control or cost orientation obligation was that doing so would limit LLU investment. For example, Ofcom said:

*Ofcom considers that it would be inappropriate, at this point in time, to impose charge controls or cost-orientation obligations in Market 1 or Market 2. This is because in a developing market characterised by growth and innovation, such as broadband, it is difficult for a regulator to predict with sufficient accuracy how the market will develop and thus there is a risk that any price regulation could turn out to be inappropriate and result in reduced levels of investment, which would ultimately be to the detriment of consumers, both residential and business.*¹³

- in 2005 Ofcom went even further than not imposing regulated price reductions – they in fact chose to *prevent* IPStream prices falling (across the whole market) in order to foster the development and investment in LLU¹⁴. Ofcom said at the time:

*There has been significant progress on LLU but LLU operators are understandably concerned by the threat of unpredictable margin erosion by BT which would foreclose fair competition. BT's commitment will remove one of the key obstacles to the development of LLU.*¹⁵

*These measures ... ensure that a stable and sufficient margin is available for LLU operators.*¹⁶

16. Ofcom's proposed price reduction is now set to cause exactly the detrimental impact on investment that they (rightly) have sought to avoid in the past. Importantly, this will not only deter investment in the short term but it will deter and chill any further competitive investment for many years (if not forever).

DETRIMENT FROM PREVENTED ROLL-OUT

17. The implications of the reduced roll-out particularly on those homes who will not be covered is very significant. At the moment the only network provider for these consumers is BT who uses old ADSL2 technology.
18. If TalkTalk rolled out consumers in these areas would also have the option of an additional network provider who uses a more advanced ADSL2+ network. Not only will this network based competition extend the benefits of innovation, choice and competition to consumers who are deprived of these benefits today but it will also transform what is a sterile ISP market (where all the offers are similar) to one where

¹³ WBA Market Review Statement May 2008 §5.30

¹⁴ This was implemented by means of a voluntary undertaking by BT

¹⁵ http://stakeholders.ofcom.org.uk/consultations/telecoms_p2/statement/

¹⁶ <http://www.ofcom.org.uk/consult/condocs/rwlam/bbr/bbr.pdf>

there is real differentiation and choice. This will have a number of significant specific benefits for consumers:

- Higher speeds both due to two factors which will likely increase speeds by about 50%¹⁷:
 - the use of ADSL2+ technology (providing speeds of up to 24Mbps rather than up to 8Mbps that is possible on ADSL2)
 - TalkTalk's ability to improve individual line speeds by using DLM and other techniques that are not possible / available on IPStream. This is illustrated by the fact that TalkTalk achieves higher speeds on its ADSL2+ network than either BT (and Sky) even though, on average, the lines are longer¹⁸
- Greater capacity. Because BT's legacy network uses old ATM technology for backhaul, capacity is much more expensive than on TalkTalk's modern Ethernet backhaul network. This is reflected by the fact that most ISPs who use IPStream offer lower capacity allowances¹⁹
- Improved ability to access YouView/IPTV services. BT's lower speed and lower capacity network (which will not have multicast capability) will be less able to support IPTV. [3<]
- A range of added features that are only available on our LLU network such as the 'Plus' package (which includes Anytime UK calls, antivirus software, unlimited downloads and an n-router) and speed-dial
- Significantly lower prices and savings of over £10 per month. The lower prices flow from the substantially lower cost of operating an MPF/NGN network as well as due to competition (in market 2 and 3) driving lower prices. Where TalkTalk roll-out its LLU network its retail prices are £15²⁰ lower than when it uses IPStream²¹.

¹⁷ Over the last 3 years TalkTalk's speeds on its LLU network have increased from [3<] to [3<] (+57%) due to the combination of lifting the 8Mbps cap on its ADSL2+ service and by implementing DLM

¹⁸ Based on Ofcom broadband speed results Mar 2011. These results are even though TalkTalk's network is more extensive (85%) than BT's (55% - see condoc §3.34) or Sky's (~75%) and would therefore expect lower speeds since average line lengths are longer. Ofcom may have controlled for this in its results.
<http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/bbspeeds2011/bb-speeds-nov-2010.pdf>

¹⁹ For example, comparing ISPs' entry packages. ISPs who use IPStream typically offer 10Gb of monthly capacity (BT Retail - 10Gb, Plusnet - 10Gb, Orange - unlimited, Virgin off-net - 10Gb) whereas ISPs who use their own LLU / NGN networks are much higher (TalkTalk - 40Gb, Sky - unlimited)

²⁰ For Sky, their on-net price is about £12 less than off-net (Sky Connect)

²¹ This means that the bundle cost is about £12 less than BT. For Essentials package TalkTalk about £12 per month lower than equivalent BT package (£220 over 18 months). See: <https://sales.talktalk.co.uk/products/broadband/competitor.html>. This excludes impact of lower call charges

19. More generally consumers will enjoy a range of other benefits:
- More choice of truly differentiated products
 - More pressure on BT to innovate and improve its IPStream service and efficiency and/or roll-out its 21CN/ADSL2+ network
 - More pressure on ISPs (who rely on IPStream) to improve their proposition
 - Higher broadband uptake
 - Reduced digital divide (i.e. a lower number of digitally less well off)
20. Just the benefit of lower prices to the group of consumers that chose TalkTalk will be over [X] a year²². This ignores the other service benefits these customers enjoy as and the benefit that non-TalkTalk customers gain through the competitive impact of TalkTalk.
21. Therefore, we believe that the benefits the competition that would be precluded by the price reduction are very significant.

LONG TERM IMPACT OF PRICE REDUCTION

22. As we described above we consider that Ofcom's proposed reduction is set to cause significant detriment to competition and consumer harm by deterring TalkTalk's current roll-out plans. Importantly, it will not only deter this investment in the short term but it will deter investment for many years.
23. By setting a severe charge control in market 1, Ofcom is likely to prevent further LLU roll-out into market 1 and 'bake in' the extent of LLU competition. This will happen due to a simple feedback loop or self-fulfilling prophecy:
- If an exchange has no competition it is categorised into market 1
 - Because the exchange is in market 1 a severe charge control is imposed that results in low IPStream prices (based on BT having a very high market share)
 - Low IPStream prices deter any LLU investment and competition
 - The lack of competition means that BT will be the only network and so it will remain in market 1
 - and so on ... and so on
24. Thus imposing a severe charge control in market 1 will trigger a vicious circle. The possibility of competition in these areas will be killed off forever. Notably it is only now that this vicious circle effect arises because a charge control is being imposed for the first time²³.

²² Based on following assumptions: [X]

²³ Previously though there were sub-national markets, how an exchange was categorised made little difference since there was no significant difference in remedies as between those

25. In the market review, Ofcom suggested that they could overcome the detriment resulting from discouraging investment by adjusting the categorisation / treatment of exchanges (e.g. lifting charge control) in the next market review (in 2014). For example, Ofcom said:

*In the next review, when Talk Talk's deployment has been confirmed, the effect of this deployment can be taken into account.*²⁴

26. Though the intent is a good one reviewing the categorisation of exchanges (and putting the exchanges into market 2) in the next review in 2014 will not, in practice, mitigate the detriment.
- Firstly (and obviously) waiting until 2014 to change the categorisation of the affected exchanges will (at best) delay any build to these exchanges to 2014 (at the earliest)
 - Second, lifting the charge control in 2014 will not in reality provide the conditions for the investment to be made then. For the investment to become viable again the IPStream price would have to rise back to its 2010/11 level (i.e. increase by between 20% and 35%²⁵). It is unlikely / implausible for IPStream prices to rise or be allowed to rise by this much. Ofcom would be unlikely to require it (or even allow it).
27. Thus in reality a price reduction made now cannot be reversed and so investment that is lost cannot be regained. Thus the impact is far greater than merely a delay in roll-out. In essence, once Ofcom makes the decision to reduce IPStream prices the damage will be done and it cannot be undone.
28. Ofcom also said that they could adjust the charge control to reflect roll-out by TalkTalk in market 1 by altering the market share assumption (from the current level of 100% to about 90%). For example, Ofcom said:

In considering the impact of TalkTalk's announcement on the WBA we said [in the market review] that it would not be appropriate to review the market definition, but that we would take into account the impact of the rollout of LLU on volumes in the Market 1 charge control (WBA Charge Control consultation §A7.13)

29. However, in reality this change in assumption has a small impact and is wholly insufficient to raise the price enough to not deter investment. The impact of the lower market share (90% rather than 100%) is relatively small – it reduces the X by about 1.25%²⁶ (i.e. a 4% cumulative impact on prices by 2013/14).

in market 1 and those in market 2. In the Annex we describe the impact of using committed plans combined with severe charge controls.

²⁴ WBA Market Review Statement Dec 2010 §3.189

²⁵ Charge control results in a 17% to 26% reduction in nominal terms. Thus to rise back to previous levels price would need to increase by between 21% and 35%

²⁶ According to Table 5.10 a 4% reduction (1.88m rather than 1.96m) in volume reduces the X by 0.5%. Thus a 10% reduction would reduce the X by 1.25%

OTHER IMPACTS OF PRICE REDUCTION

30. The price regulation will also have negative effects in the [X] exchanges where, despite the price reduction, it is still viable for TalkTalk to roll-out. The significant reduction in IPStream prices will result in:

- Reduced investment by other LLU operators
- Reduced investment by TalkTalk in upgrading their services in the exchanges (e.g. CDNs) and/or investing and promoting the service to build customers
- Reduced investment by BT in 21CN / ADSL2+ due to reduced price they can achieve (due to indirect price constraint from IPStream)

31. As Ofcom have accepted before, imposing price regulation where there is competition is unnecessary regulatory intervention that can deter investment and customer choice. For example in respect of market 2 exchanges (where there are 1 or 2 competitors to BT) Ofcom said in the recent market review:

Our view was that a strict charge control which aimed to reduce BT's prices to LRIC plus an appropriate mark-up for common costs could lead to lower prices but could also stifle any further investment in LLU, thus reducing consumer choice²⁷

32. We accept that there will be some counteracting benefits from reduced IPStream prices for those customers who never had any prospect of LLU based competition since the IPStream prices charged in their areas will be lower than they otherwise would have been. However, we think that the consumer benefits from this will be small for a number of reasons:

- Only [X about a half] of market 1 will benefit from the price reduction. The other [X] would have had coverage by TalkTalk would get the benefits of competition which effectively negate and overwhelm the benefits of a regulated price reduction. In fact, if one assumed the plausible improvement in the economics of unbundling the size of this group where there is no prospect of competition would be as little as [X] of all homes
- The benefit for this group is limited
 - For BT Retail/Plusnet customers the price reduction will have limited real impact since the price charge is merely a transfer of funds between divisions within a single company and so will have limited direct impact on retail pricing behaviour.
 - Because BT Retail (and Plusnet) have a particularly high retail share in market 1²⁸ reduced IPStream prices to non-BT players are unlikely to be

²⁷ Wholesale Broadband Access Market Review Dec 2010 §5.51

<http://stakeholders.ofcom.org.uk/binaries/consultations/wba/statement/wbastatement.pdf>

²⁸ This higher share results from other ISPs not being able to compete as effectively since they do not operate their own network

quickly competed away through intense competition to reduce retail prices

- Because many ISPs (particularly BT Retail) operate national pricing at the retail level any reduction in wholesale prices in market 1 will have a limited impact on retail prices in market 1

IMPACT SUMMARY

33. The overall impact of the price reduction is summarised in the table below. The current economics column represents the number of exchanges that are viable at current level of costs. The 'next tranche' column shows the additional exchanges that would be rolled out under improved yet very plausible economics e.g. lower CAPEX²⁹. The total column shows the combination of the two³⁰.

²⁹ This scenario is calculated assuming [X]

³⁰ In effect the prevented exchanges [X] from the first tranche are 'retired' in the second tranche and some become viable

Area	Impact	Size of area (exchanges / homes / % homes)		
		Current economics	Next tranche	Total
<i>TT roll-out planned</i>	<i>... assuming no change in IPStream prices</i>	[X]	[X]	[X]
A. TT roll-out still viable	TT roll-out despite IPStream price reductions. However other LLU roll-out slowed / precluded as is further investment by TT in marketing and technology and investment by BT in ADLS2+	[X]		[X]
B. TT roll-out prevented	TT do not roll-out as price reduction precludes competition. Significant detriment from less choice, lower speed / capacity, fewer features, higher prices (+£15)	[X]		[X]
C. No planned roll-out	No impact on level of competition. IPStream price reductions result in very slightly lower retail prices	[X]		[X]
Total		3,389 3.08m		3,389 3.08m

34. We think that on balance the net impact of the proposed large price reduction is negative – in other words the detrimental impact to consumers in areas A and B is greater than the beneficial impact to consumers in area C.
35. As we highlighted above we think Ofcom both recognises the negative impact of regulated price reductions and also that on balance it is appropriate to avoid regulated price reductions in cases where there is prospective competition and investment. For example, Ofcom has said:

Our view was that a strict charge control which aimed to reduce BT's prices to LRIC plus an appropriate mark-up for common costs could lead to lower prices but could also stifle any further investment in LLU, thus reducing consumer choice³¹. (Comment made in Dec 2010 market review in respect of whether to regulate prices in market 2 exchanges)

it is difficult for a regulator to predict with sufficient accuracy how the market will develop and thus there is a risk that any price regulation could turn out to be inappropriate and result in reduced levels of investment, which would ultimately be to the detriment of consumers (Comment made in 2008 market review in respect of whether to regulate prices in market 1 exchanges)

³¹ Wholesale Broadband Access Market Review Dec 2010 §5.51
<http://stakeholders.ofcom.org.uk/binaries/consultations/wba/statement/wbastatement.pdf>

36. Ofcom's proposed reduction is set to cause significant detriment to competition. Importantly, it will not only deter investment in the short term but it will deter investment for many years. Ofcom must take into account this harm in setting IPStream prices in market 1 exchanges.

OPTIONS TO ADDRESS DETRIMENT

37. We see a number of options to address or reduce the detrimental impact that is inherent in Ofcom's proposals. We discuss these below.
38. (Re)categorise the exchanges where LLU is viable³² into market 2 so that the charge control will not apply. This could be done by means of a 'mini market review' on the grounds that there has been a 'material' change in the market³³.
39. In fact we consider that Ofcom may be required to review the market. Since the proposed price control condition will not be set at the same time as the relevant market power determination, Ofcom is required by s86 of the Comms Act to take a view as to whether the market have changed materially since the SMP determination was made. It may only proceed if it is satisfied there has been no material change. In Annex 5, Ofcom says:
- "In accordance with section 86(1) of the Act, OFCOM is satisfied that there has been no material change in the markets referred to in paragraph 2 since the market power determinations referred to in the same paragraph were made."*
40. Ofcom does not provide any justification or analysis to support its conclusion. We consider that the 'no material change' conclusion is incorrect. TalkTalk has an immediate plan to build to 594 exchanges in market 1 in the next 1 to 2 years. Therefore, if the market review was conducted today then at least [X] exchanges in market 1 would be properly categorised in market 2 according to Ofcom's own approach which categorises exchanges into market 1 where only BT is / will be present. These exchanges represent [X] (or even more³⁴) of all homes in market 1.
41. It appears clear to us the change since the Market Review is material since the change affects around half of consumers in market 1 (who are wrongly categorised)

³² This should include all exchanges where build is possible in the next (say) 5 years including at a minimum the [X] exchanges that have been precluded already. The period over which prospective build should be considered should not be dependent on the length of the market review

³³ For instance, Ofcom say in the WBA Statement (§3.190) "... the option exists to commence the next review before the end of the forward look period we have taken in the event that material changes in the market occur." Also in WBA Charge Control consultation (§4.46) "Should there be a material change within the wholesale markets that underpin the WBA CCs, Ofcom would consider whether it would be appropriate for a review of a market, and remedies imposed, to be undertaken."

³⁴ Would be more than [X] if future economics were taken into account. We have shown that up to [X] of consumers could be covered.

and the impact of the incorrect categorisation is severe (it not just a few per cent at the margin). Accordingly we consider that Ofcom may not be able to take the view that there has been 'no material change' in the relevant markets. This means that the notification may not be made in the form in which it appears in draft in the consultation and Ofcom would need to seek another legal basis for setting the proposed charge control. As we describe below, differentiated remedies may be able to achieve the same effect as re-categorising exchanges.

42. In general we consider that it is better to categorise exchanges on the basis of whether they have a prospect of competitive roll-out rather than on basis that there is committed roll-out – we discuss this in Annex A.
43. Apply differentiated remedies within market 1 – for example, no charge control in exchanges where build is possible and a charge control in other areas³⁵ (i.e. where there is no prospect of build). This would effectively tailor the remedy to the particular circumstances in the different exchange areas in the relevant market. We think that there is a clear benefit to this, in particular that remedies are better tailored to the particular circumstances of each geographic area / exchange. Indeed the ability to adapt remedies to the particular circumstances is the central rationale behind the use of geographic markets within the WBA market.
44. Though there is a clear benefit from differentiated remedies there is a separate question as to whether Ofcom have the powers to impose different remedies within a single economic market. It appears to us that there are clear precedents and support for imposing different remedies in a single market. For example:
 - Ofcom itself have previously imposed differentiated remedies within a single market for example³⁶:
 - the mobile termination rate (MTR) charge did not apply to termination on 3G networks³⁷;
 - different products in WLA have different cost orientation / charge controls³⁸; and,
 - different technologies have different remedies in WBA³⁹

³⁵ In this case where the charge control will only apply to the exchanges where there is no prospect of competition the charge control will result in a higher price since the exchanges are smaller so the unit costs will be higher than for the average in market 1

³⁶ albeit that Ofcom have not previously differentiated remedies between different geographic areas within a single market

³⁷ In MTR charge control in 2005, no MTR was applied to termination on 3G networks

³⁸ For example, certain products had charge controls and cost orientation applied (e.g. SMPF) whereas other products in the market had no charge control and/or no cost orientation obligation as is clear from Conditions which describes: "Ancillary Services", which include the related services in the markets where SMP has been found. These can be further divided into three sub- categories, as follows: (a) SMP services that are subject to price controls; (b) SMP services that are subject to cost orientation obligations; and (c) SMP services that are not subject to cost orientation obligations. (Openreach price review 2009, Annex §A1.4)

- The Austrian regulator RTR imposed differentiated remedies in the national WBA market in its 2008 Market Review. One set of remedies was applied to exchange / MDFs where there were 3 or more large operators and another in other exchanges. The Commission (when it commented pursuant to the Article 7(3) procedure) noted:

On the latter point, the Commission notes that the regulatory framework does not preclude the imposition of different remedies in the same relevant market. Based on the general principle that remedies should be tailored and proportionate to the identified competition problem, it can be appropriate for NRAs to impose remedies which take account of locally/regionally differentiated competitive conditions while retaining a national geographic market definition. The geographic differentiation of remedies may be appropriate in those situations where, for example, the boundary between areas where there are different competitive pressures is variable and likely to change over time, or where significant differences in competitive conditions are observed but the evidence may not be such as to justify the definition of sub-national markets.⁴⁰

- The Polish regulator UKE⁴¹ has proposed different remedies within a single WBA sub-market which were aimed at addressing different competitive conditions across that market
45. Particularly given the comments of the Commission in respect of the RTR case, it appears both that Ofcom has the ability to differentiate remedies in the relevant market and that, in the Commission's opinion, doing so would be more proportionate.
46. Apply less severe price reductions through adjustment to the modelling assumptions to reflect the desirability of encouraging competition. We articulate below where we think the assumptions are unrealistic or inaccurate. In addition to these adjustments we think there is scope for Ofcom to explicitly use its regulatory discretion to set higher prices to meet the interests of consumers (to allow competition) by adjusting certain assumptions, for instance:
- Using a lower market share⁴² when setting the charge control to provide 'headroom' for competitive entry as is effectively done in setting margins using

³⁹ For instance, the VULA product in WBA does not have any charge control or cost orientation applied whereas non-NGA products (e.g. IPStream) have charge control and/or cost orientation (in WBA markets 1 and 2)

⁴⁰ Letter from Commission to RTR is attached in Annex B to this submission

⁴¹ Within the market excluding the 20 municipalities UKE defined three groups ('grupa') distinguished by differing level of competition. Within these different remedies were applied (including a cost orientation obligation in the least competitive area but not in the other two areas. See: http://circa.europa.eu/Public/irc/infso/ecctf/library?l=/poland/registered_notifications/pl20111184&vm=detailed&sb=Title

⁴² [8<]

a reasonably efficient operator model. For instance, if a 30% market share was assumed in the modelling, the control would be about RPI –4.5%⁴³ and so ensure (alone) that most of the planned exchanges would remain viable

- Adjusting the price upwards to reflect the ‘asymmetry of detriment’ in that the harm resulting from setting a price too low (irreversible preclusion of competition) is greater than setting the price too high (excessive wholesale prices which can be reduced later). Asymmetry of detriment has been discussed in the context of WACC⁴⁴
 - Calculating the charge control on the basis of aligning price with costs over a longer than 3 year period (say for instance 4 years as has been used in the past).
47. Set prices according to ‘retail minus’ as outlined in the consultation at §4.13 onwards. Though this may be a means to allowing higher IPStream prices it is not clear whether it would have the desired effect and may result in IPStream prices that are set too high or too low and in any case IPStream prices would be unpredictable. It is notable that this remedy is aimed at ensuring downstream competition particularly in emerging markets rather than encouraging competition in the market itself (which is the particular issue at hand in this case).
48. The first two options are, we consider, preferable since they tailor remedies to each area rather than applying a single remedy that is a compromise to suit two very different areas – those that will or could have competitive entry and those that will not. However, we recognise that will also be other considerations in regards of the approach that Ofcom should take such as practicality.

COMMENTS ON MODELLING METHOD AND ASSUMPTIONS

49. In this section we comment on a number of methodological and other assumptions that Ofcom have used in the modelling to derive the charge control.

⁴³ According to Table 5.10 a 4% reduction (1.88m rather than 1.96m) in volume reduces the X by 0.5%. Thus a 67% reduction (30% market share rather than 90%) would reduce the about 8% to RPI –4.5%

⁴⁴ For instance see A New Pricing Framework for Openreach May 2009 §§A8.134 et seq about using a higher than mid-point WACC
<http://stakeholders.ofcom.org.uk/binaries/consultations/openreachframework/statement/statement.pdf>

50. We have laid out our comments in the following sections:

- overall approach / method
- projections for number of customers
- bandwidth per customer forecasts
- exchange costs
- other costs

OVERALL APPROACH

51. Ofcom have proposed to only apply a charge control (in market 1) to IPStream Connect and not to IPStream (downstream variant of IPStream Connect) and not to 21CN versions of IPStream (i.e. WBC) (§3.83 *et seq*). We agree with this approach.
52. We agree with the approach whereby the charge control applies only to cost elements excluding SMPF and SMPF costs are effectively recovered by means of a pass-through based on the SMPF cost/charge (the 'Upstream Input Approach – see §4.29, Qu 4.2). We note that one option that could be used to derive the SMPF cost/charge to include in the IPStream cost/charge may be to use the cost of SMPF in market 1 areas rather than the SMPF charge which is effectively a national average.
53. In respect of SMPF charges, we note that Ofcom is inaccurate when it says that BT (Wholesale) pays Openreach for SMPF (§4.28). The charge is simply a notional internal charge and there is no evidence that it affects IPStream pricing behaviour. The fact that the SMPF charge has little meaning is demonstrated by the fact that the internal SMPF charge/price (£151m⁴⁵) is less than the external SMPF charge/price (£199m). No reason is given for this anomaly since surely the external SMPF price should be close to the internal SMPF cost particularly since there is equivalence.
54. We agree with the proposed single basket structure (§5.15 *et seq*) and the inclusion of ancillary charges in that basket (Qu 5.1).
55. We disagree with the proposal to make the charges for (the mark-up on) IPStream ceases zero (Qu 5.2) with the cost recovered elsewhere (e.g. in rental charge). We fully agree with the intent to reduce unnecessary barriers to switching to ensure that competition is effective (which is why TalkTalk supports the wider use of gaining provider led switching processes and is notably the only major operator to take this position). However, charges should at least recover incremental cost else it will incentivise (allocatively) inefficient behaviour. Further, whatever approach is adopted (e.g. FAC, LRIC), it should be applied consistently across all cease (and similar) charges including SMPF, MPF, WLR and IPStream.
56. We agree with the safeguard caps in principle and in substance (Qu 5.4, 5.5).

⁴⁵ See consultation Table 5.2

57. We disagree with Ofcom's approach on discounts (Qu 5.6). In this case, discounts should count towards compliance with the charge control provided they are cost reflective and applied on a non-discriminatory basis.
58. With regard to the base year adjustments (Qu 5.8) it is not clear that the base year charge control basket revenues have been consistently adjusted in line with the base year charge control basket costs. For instance, Openreach's SFI costs have been excluded from base year costs but it is not clear that the (notional) pass-through Openreach SFI revenues also been excluded from base year revenues.
59. We note that the 3 year charge control period matches the 3 year length of the market review (Qu 4.3). However, we would note that this is shorter than previous charge control periods (normally 4 years) and therefore results in relatively weaker productive efficiency incentives and causes more rapid changes in prices. In effect, the shorter the period the closer the charge control becomes to a 'cost-plus' form of price control which has a number of weaknesses (see §§4.8-4.12). In light of this Ofcom must be wary of rapidly aligning prices with costs. In particular, it should not make any one-off adjustment to charges and use a glidepath as it has proposed (Qu 5.11).

NUMBER OF CUSTOMERS

60. In respect of the projections of customer numbers we have two comments.
61. First, [X]
62. Second, the projections do not seem to take account of the NGA roll-out in the final third (supported by BDUK funds) which will reduce the number of 'current generation' IPStream subscribers.
63. Thus taking into account BDUK, we think that the appropriate BT market share is about 85% (not 90%) which will lead to the charge control (mid-case) being RPI –12% rather than RPI – 12.75%.

BANDWIDTH PER LINE ASSUMPTIONS

64. We consider that the assumptions for starting bandwidth and growth in bandwidth used by Ofcom (§§3.77, 3.82) are overestimated for a number of reasons. Our reasoning is explained below.
65. First, we would expect that the starting 2010/11 bandwidth (kbps) per subscriber in market 1 will be lower than the average national figure that Ofcom appeared to have used. We understand that the estimate Ofcom has used in its model (48kbps) is equal to the average allocated bandwidth per subscriber for IPStream Connect across the UK (which rightly excludes the impact of ADSL2+ / 21CN exchanges).

66. However, IPStream Connect is extensively used for customers in market 2 and market 3 (though ADSL2+/21CN is rolled out in some of these areas it is not fully adopted). Table A6.3 shows that 75% of IPStream Connect customers are in market 2/3. The average line length in markets 2/3 will be shorter and speeds higher than in market 1. This is clearly evidenced by Ofcom's latest broadband speed research that shows that
- the average line speed in market 2/3 is 120% more than that in market 1 (though this reflects in part the use of ADSL2+ and FTTC in markets 2/3)⁴⁶
 - the average line speed for ADSL2 in urban areas is 50% higher in urban areas than in rural areas⁴⁷. Given market 1 areas are more rural than markets 2/3 it follows that the line speed will be higher in market 2/3
67. It appears that Ofcom have sufficient data to be able to identify from their research a precise figure for ADSL2 speeds in market 1 versus market 2/3.
68. In general the lower the line speed the lower the amount of bandwidth required (for a given level of service) – in fact for a given contention rate the allocated bandwidth will be proportional to the line speed. If it were assumed that the line speed and capacity for IPStream customers in market 1 was 50% less than in market 2/3, then given that 75% of IPStream customers are in market 2/3 it would imply that the bandwidth per customer in market 1 would be about 27kbps⁴⁸.
69. Second, the hypothesis that the starting bandwidth is too high is supported by [X]
70. Third, we consider that bandwidth growth will be lower in market 1 than elsewhere for a number of reasons including:
- Growth in IPStream line speeds in market 1 will be limited compared to the level of growth elsewhere in the UK which will be driven ever higher by deployment of new better technologies such as ADSL2+/21CN, higher cable speeds and FTTC. Therefore, any national figures for bandwidth allocation growth are a poor proxy for and will significantly overestimate bandwidth growth in market 1
 - In particular, bandwidth growth across the UK will be driven by increasing use of video and IPTV in part but this won't be possible in these areas given relatively low line speed
 - Higher usage customers in market 1 (who will tend to use higher speed and want or use more capacity) are likely to migrate to TalkTalk since TalkTalk offers higher speeds (since use ADSL2+ technology) and higher usage limits

⁴⁶ See UK fixed broadband speeds, Nov/Dec 2010: Research report. Fig 5.6 shows market 1 at 3.1Mbps and market 2/3 at 6.9Mbps (weighted average of 4.9Mbps and 7.1Mbps)

⁴⁷ See UK fixed broadband speeds, Nov/Dec 2010: Research report. Fig 5.5 shows average speed in urban areas at 4.1Mbps and rural at 2.7Mbps for ADSL up to 8Mbps (i.e. ADSL2)

⁴⁸ And 54kbps in market 2/3

(40G per month versus for instance BT Retail of 10Gb⁴⁹) and/or migrate to any FTTC / FTTH rolled out using BDUK funds. Thus BT's IPStream product will be left with relatively lower than average usage customers.

71. Fourth, we would expect that as capacity increases the necessary level of % overhead required will decrease (for any given level of quality). This is similar to the concept of Erlang engineering whereby the required number of voice lines per user for a given quality level decreases with an increasing number of users. This will also reduce the bandwidth allocation required.
72. The impact of correcting this assumption has a large impact. If it is reasonably assumed that the correct bandwidth assumptions are 30kbps in 10/11 growing at 15% per year (rather than 48kbps growing at 23% per year) then the X would be lower by about 3.5%.

EXCHANGE COSTS

73. It is not clear how exchange costs are included in the model though we suspect that the base year costs are based on BT's incurred costs rather than the wholesale charges for these products such as co-mingling, power and tie cables. We think that using incurred costs would be the incorrect approach and costs should be based on the charge made to LLU operators in the same way that SMPF cost elements are based on the SMPF charge rather than the actual / internal costs.
74. Unfortunately as a result of the design of the Undertakings equivalence does not apply to exchange products such as co-mingling. Therefore, BT does not use co-mingling and other exchange products. Consequently, the design of the exchange products is poor⁵⁰ and so the charges/costs that LLU operators incur are higher than the efficient cost. If the IPStream charges are based on the cost that BT incurs rather than the costs LLU operators experience (which are higher) it will create a margin squeeze and an (even more) unlevel playing field. These costs are significant (around [X] per line per month for LLU operators).
75. Using the charge LLU operators pay will also be consistent with the approach used on SMPF where the external charges are used rather than the cost incurred. The fact that EOI does not apply to these exchange services should not prevent this approach being used.

⁴⁹ Other providers offer in market 1: BT Retail - 10Gb, Plusnet – 10Gb, Orange – unlimited, Virgin off-net – 10Gb, TalkTalk – 40Gb, Sky – 40Gb

⁵⁰ For example, inability to use whole of MCU2 space or all tie cables

OTHER COST ASSUMPTIONS

76. It appears that the costs for ATM in market 1 is based on the continuing use of ATM in market 2/3 which results in the ATM cost in market 1 recovering a similar share of the fixed cost of running at ATM network. However, in reality the use of ATM in market 2/3 will diminish rapidly with the roll-out of 21CN and the increasing share of LLU operators. In this realistic case the share of the fixed ATM cost born in market 1 would increase. Ofcom have suggested that its approach is consistent with the 'hypothetical ongoing network' (HON) method (linked to anchor pricing). However, whilst we recognise that Ofcom uses this HON approach for the purposes of deciding what technology to use in market 1 it should not use this HON approach to reflect developments in market 2/3.
77. We agree with setting the AVEs to equal 1 given the forecast/modelling method that is being used (Qu 5.9).
78. We agree with using the 'rest of BT' WACC (Qu 6.4). This operation has a higher demand and competitor risk profile than LLU or Openreach activities. TalkTalk will provide its comments on the overall WACC assumptions in a subsequent paper.

ANNEX A: BASIS TO DECIDE ON MARKET 1 EXCHANGES

79. In the market review (Dec 2010), Ofcom was aware of TalkTalk's intention to roll-out to around 700 more exchanges though it was not aware of which particular exchanges TalkTalk planned to unbundle. However, it chose not to reflect this plan in the way that it categorised exchanges into the sub-markets this since it felt that the plans were not 'firm' or 'committed'⁵¹. Consequently the [X] exchanges that TalkTalk intend to unbundle are categorised as being market 1 exchanges.
80. We think that the combination of using only committed exchanges (in categorising exchanges) and applying a severe charge control⁵² means that competition will be permanently precluded from some exchanges where it is viable. This includes exchanges that TalkTalk have already identified as being viable as well as further exchanges that are likely to become viable in future as a result of, for instance, additional capital availability, resource availability, exchange space availability, higher market share / market size, or lower costs.
81. Ofcom recognised this risk in the 2008 WBA market review:
- Ofcom considers that it would be inappropriate, at this point in time, to impose charge controls or cost-orientation obligations in Market 1 or Market 2. This is because in a developing market characterised by growth and innovation, such as broadband, it is difficult for a regulator to predict with sufficient accuracy how the market will develop and thus there is a risk that any price regulation could turn out to be inappropriate and result in reduced levels of investment, which would ultimately be to the detriment of consumers, both residential and business.*
82. Although Ofcom previously used firm forecasts to categorise exchanges, it is only now that it matters since previously no charge control was imposed in market 1.
83. We consider that the appropriate test for deciding whether an exchange should have a charge control imposed (and by implication is in market 1) should be based on whether there is a likelihood or prospect of roll-out in the next few years. It should not simply depend on whether there is a committed build plan. This is particularly important if a severe charge control is applied (as is the case here).
84. Another reason given by Ofcom (in the Dec 2010 market review) for excluding TalkTalk's planned exchanges was that they felt that they would have limited impact since they would be rolled out over three years⁵³. As we describe above the speed

⁵¹ For example "Although operators have provided forecast rollout plans beyond December 2010, these plans are not committed. We therefore considered that it would be inappropriate to use these when defining the geographic markets" WBA Statement Dec 2010 §A3.35

⁵² Incidentally, it was not apparent at the time of the market review that a severe charge control would be imposed

⁵³ For example see WBA Market Review Dec 2010 §5.91 "... we remain of the view that a charge control is required in Market 1 because the deployment is as yet uncertain on an exchange level basis and the effects of deployment as a competitive constraint may only become apparent towards the end of the review period."

of roll-out should not determine how exchanges are categorised. In any case, TalkTalk's plans are for about [X] of the [X] exchanges to be deployed in the first year (2011/12).

ANNEX B: LETTER FROM COMMISSION TO RTR