A New Pricing Framework for Openreach

Second consultation

TalkTalk Group response

10 March 2008

Introduction

This is TalkTalk Group's (TTG) response to Ofcom's second consultation 'A New Pricing Framework for Openreach'.

TalkTalk Group provides services to over 3 million customers – both residential customers (under the TalkTalk and AOL brands) and business customers (under Opal brand). We operate a broadband only network which uses SMPF and also the UK's largest NGN network which uses MPF. TTG is Openreach's largest external customer for LLU/WLR services. TalkTalk Group is owned by the Carphone Warehouse plc.

This consultation on prices for LLU and WLR services is critical to the future of our business and our ability to provide consumers with attractive services.

IMPORTANT NOTICE

In submitting this response, TalkTalk would like to make it clear that this in no way endorses the transparency or adequacy of the information disclosed during the second consultation period, an issue we have raised with Ofcom on numerous occasions both directly and through our external counsel, Osborne Clarke. While we have prepared a response to the best of our ability on the basis of the available information, TalkTalk maintains that it has not been give adequate access to the underlying cost data and assumptions to be able to comment fully and meaningfully on the consultation.

We had hoped that we would be able to submit a supplementary response once further data had been made available to us, as requested in the recent letters to you from Osborne Clarke. However, we note from your latest response of 6 March that Ofcom appear unwilling to disclose any additional data nor willing to extend the consultation period.

If there are any questions regarding this submission please contact Andrew Heaney (HeaneyA@cpwplc.com)

Summary

This review of LLU/WLR prices is critical to the future success of the UK telecoms market and the benefits consumers enjoy. LLU is the bedrock of competition in the UK today. The prices that are set in the future will have a profound impact on the migration to next generation networks (NGNs), whether there is effective network-based competition and ultimately the prices and services that consumers experience. If Ofcom sets prices within its proposed range BT will make excess profits and there will be reduced competition, higher consumer prices and over 1.5m people being excluded from broadband.

The context for this review is that even according to Ofcom's own inflated cost projections, the SMPF, MPF and WLR rental services (known as core rental service "CRS") currently make a 12% return on capital (08/09) and will make 11% in 2009/10 with no price change – i.e. a return above Ofcom's estimated cost of capital. Given Openreach's scale, time since privatisation, relatively high population density and the mature regulatory regime, MPF prices should be amongst the very lowest in Europe. Yet Openreach's prices languish mid-table compared to other EC countries. This suggests BT is very inefficient or it has exaggerated its costs. Clearly these point to no case for any price increases.

We have examined Ofcom's case for price increases and it is highly flawed – not only have Ofcom failed to present evidence-based case but actually the evidence that is available suggests that the true CRS costs in 2012/13 are around £600m less than Ofcom's 'low cost case'. The main flaws in Ofcom's analysis are:

- They have relied on BT's cost allocation model that systematically over-allocates costs to CRS and MPF – in particular they have not properly adjusted cost allocations to reflect the independent and non-customer facing status of Openreach, Openreach's relatively lower growth, a fairer duct allocation approach or ensured that the model reflects Ofcom previous decisions on allocation. The impact of this is that CRS costs are over-exaggerated by about £200m
- They have greatly underestimated the cost reduction that Openreach could deliver through efficiency improvements. Ofcom's have estimated 1.2% to 2.4% (on all costs) even though all the other indicators (such as KPMG's analysis for Ofcom, historic performance and future commitments to the City) suggest a range of 4% to 5% (on all costs). The impact of this is that CRS costs are over-estimated by £110m
- Ofcom have overestimated BT's WACC by failing to properly account for Openreach's unique utility-like status within the rest of the BT Group. We believe an assumption of 6.3% to 7.4% rather than 9.25% to 10.75% is reasonable particularly given the low average inflation rate (over the next 4 years) which reduces the cost of capital. This change reduces costs by £140m
- Ofcom have under-estimated the potential for reduction in fault rates – the level Ofcom have estimated would leave BT over 50% worse than best practice. Bringing Openreach closer to best practice will reduce costs by £20m
- Ofcom need to update a range of assumptions on inflation, energy and copper prices to reflect the recent economic developments. The impact of these on operating costs will be around £90m

Furthermore, other evidence – such as mark-up levels, 21CN WLR costs – strongly suggests that the current £19 price difference between MPF and WLR needs to increase to £25 or more rather than reduce to £10 as Ofcom has suggested.

We have been extremely disappointed with Ofcom's approach to this consultation in that they have based their pricing proposals on costs that they have clearly not adequately scrutinised. Equally troubling is the lack of transparency that did not allow stakeholders to understand the underlying assumptions used, scrutinise the costs and thus be able to effectively and intelligently respond to the consultation.

Therefore, if Ofcom wishes to change these prices and do so in a manner that is consistent with its statutory duties it must re-consult having more closely scrutinised the costs itself and also having provided far better transparency to stakeholders. Aside of legal considerations, this current lack of scrutiny and transparency is likely to result in higher prices since BT's projections will not have been properly assessed.

The lack of need to change prices (since CRS services will be profitable in 09/10 with no price changes) and the inadequate scrutiny and transparency to date man that the right approach now is for Ofcom to use the coming months to improve the robustness/reliability of the cost model. This will also allow Ofcom to include better predictions on the economic outlook, impact of xMPF and BT's transition to 21CN. There is clearly no case to increase any prices in 09/10.

The rest of the document covers the issues flagged above as well as a number of other issues relating to the rebalancing of prices and how any price changes might be introduced.

- *Lack of scrutiny and transparency* (Section 1) describes the lack of scrutiny by Ofcom and transparency to other stakeholders and why if not corrected by another consultation it will lead to Ofcom failing in its duties
- *Allocation* (2) explains why the allocation model is not fit for purpose since the result allocates an illogically high level of cost to MPF compared to WLR. We also comment on about 10 areas where the allocation approach needs adjusting
- *Efficiency* (3) examines the clear and convincing evidence that points to an efficiency improvement for Openreach that is far higher than Ofcom's baseless estimate of 1.2% to 2.4% (on all costs)
- *Fault rate* (4) explains why Openreach should be able to achieve a greater improvement in fault rate than Ofcom's estimate of 4% to 6% per year
- *WACC* (5) summarises our view that Ofcom's approach to calculating WACC is fundamentally wrong since it depends on an arbitrary and unevidenced assumption to reflect the lower risk of Openreach. We provide a more robust approach and also a more realistic range for the WACC
- *Other assumptions* (6) provides our view of a number of key assumptions including WLR costs under 21CN, volumes and line mix, inflation and energy/copper prices, treatment of pension deficit contribution and working capital. In all these cases it appears that the assumptions used overestimate

MPF costs, overload costs onto MPF and/or underestimates the cost of WLR compared to MPF

- *Cost adjustments* (7) summarises the aggregate of the suggested cost adjustments
- *Rebalancing* (8) explains why Ofcom's suggestion of the need to increase the MPF price relative to WLR is fundamentally flawed since there is no evidence of an imbalance today and even if there was consumer interests are best met through maintaining the imbalance
- *Glidepath* (9) outlines why the glidepath the Ofcom is proposing (which includes MPF price increases for 09/10) is unjustified since it will increase BT's excess profits further and will result in no consumer benefit
- *Advance notification* (10) addresses two issues related to introduction of prices – why Ofcom's proposed 7 day advance notification period is unjustified and also why the starting price should not be increased to reflect the 'delay' in the start of the new regime
- *Non-CRS services* (11) discusses our view of the controls on non-core rental services and suggested improvements to the rather weak proposed regime
- *Subsequent review timing* (12) discusses the need for a review of prices in one to two years

There are 4 appendices to this document:

- Appendix A contains various supporting information
- Appendix B contains a number of reports from Frontier Economics
- Appendix C contains a number of reports from RGL Forensics
- Appendix D contains a report by Dr Chris Doyle

Note: all figures that refer to Ofcom estimates are based on the Ofcom 'mid-case' (i.e. average of high and low) unless otherwise stated.

1. Lack of sufficient scrutiny and transparency

Transparency and scrutiny of the costs are critical mechanisms for ensuring that BT consumers pay fair prices and that competition is effective. BT has a clear incentive to exaggerate their costs and so set excessive wholesale prices to increase their profits. They have a track record of doing this time and again. Transparency allows Ofcom and other stakeholders access to BT's data so that the methodology and assumptions can be objectively scrutinised (drawing on stakeholders expertise and evidence) to ensure that Ofcom can set price that are fair and reasonable.

The need for transparency and scrutiny is all the more important given the huge importance that these wholesale products have had and will have on the competitive environment in the UK. However, the level of transparency and scrutiny in this consultation has fallen well below the level that is appropriate and necessary.

The key problems are:

- Many of the numbers presented make little or no sense, are illogical and are inconsistent with the evidence
- Based on the information made available to us and from our conversations with Ofcom when we have asked for additional information it appears that Ofcom has not properly scrutinised the projections that BT have provided. This problem is heightened by the lack of any audit of the model used for the cost projections
- We have been provided with a very poor level of transparency which has severely limited our ability to properly scrutinise the numbers and intelligently respond. Though Ofcom have endeavoured to be helpful, where transparency has been provided it is partial, unclear and lacks clear and useful justification/explanation – so for example, a result is provided but none of the underlying logic or assumptions have been disclosed

Together these paint a very worrying picture of a set of cost projections that appear exaggerated and over-inflated, Ofcom having not applied enough scrutiny and insufficient transparency to allow stakeholders to properly scrutinise Ofcom's assumptions. Given BT's incentive to exaggerate costs and prices the most likely result of this lack of scrutiny and transparency is that the costs are higher than a fair and reasonable level. To prevent that outcome and the substantial downsides for competition and consumers Ofcom need to vastly improve the transparency and scrutiny by running another (and proper) consultation.

Furthermore, we believe that by conducting this consultation in this manner Ofcom has failed in its duties – in particular, its obligation to be evidence-based, transparent and consult in an effective manner.

Below we expand on these points.

1.1 Lack of scrutiny by Ofcom

One of Ofcom's primary role in setting prices is to scrutinise the data to ensure that it is properly evidence-based, accurate and of a high level of reliability and integrity. We believe that the scrutiny applied by Ofcom in developing its price proposals has been insufficient given the number of apparent errors, inconsistencies, anomalies and results that contradict simple logic and Ofcom's inability to explain or justify the results. Some examples of these are outlined below.

MPF costs illogically high relative to WLR

Ofcom we believe failed to properly and adequately check that CCA FAC cost allocation result was reasonable.

The allocation approach used in CCA FAC is highly complex and it is difficult to check each individual assumption. It is also highly susceptible to gaming by BT to allocate costs in certain ways that are favourable to itself. Given Ofcom are unable to check each input assumption it is essential that Ofcom at a minimum 'sense-check' the CCA FAC results.

In this case the most obvious and straightforward test to apply to check would be to compare the FAC costs to the incremental costs (LRIC) to calculate the % mark-up for each service. If Ofcom had done this check they would have discovered that the implied mark-up for MPF was 40% higher than that for WLR and over 100% higher than for WLR+SMPF (as shown in Figure 1a). This result *prima facie* suggests an excessive allocation of common costs to MPF.

Figure 1a: Mark-up by product (07/08)[1]

	MPF	WLR	WLR + SMPF
LRIC	64.85	76.40	93.48
FAC	84.10	92.65	106.50
% mark-up	30%	21%	14%
MPF excess mark-up		40%	113%

Whilst we accept that LRIC numbers are not flawless this simple sense-check by Ofcom should have raised concerns and led them to, at a minimum, understanding the reason for this, test whether it was reasonable and provide cogent evidence and reasoning for their approach. It does not appear they did this. Indeed when we provided Ofcom with these numbers they seemed surprised by them.

The relevance of these LRIC number and the use of them to (at a minimum) sense-check costs is demonstrated by the fact that Ofcom uses just this approach in assessing cost orientation compliance. "*In assessing cost orientation, we generally apply a first-order test which requires that the price of each item or service should be between the Long Run Incremental Cost ("LRIC") floor and Stand Alone Cost ("SAC")*

[1] LRIC figures from RFS 07/08. FAC from Consultation 2

ceiling"[2]. Why Ofcom did not carry out this test of assessing the % mark-up in this case beggars belief.

There are further areas of concern in the MPF and WLR costs that Ofcom should have also identified and addressed. For instance if the known differences between MPF and WLR are removed (line cards, directories and longer e-side copper which MPF does not have) MPF costs are 10% higher than WLR (07/08). This is illogical since MPF includes fewer components and activities than WLR – for example, MPF does not require accommodation for equipment, tie cables or backhaul. If an EPMU allocation approach was applied the cost per line would be less for MPF. If an equal £ cost allocation per line was applied one would expect the MPF and WLR costs per line to be similar. This result where the cost per line for MPF was higher than WLR defies logic and furthermore could not be explained by Ofcom. Again this result suggests substantial concerns in the CCA FAC numbers – yet Ofcom did not raise any concerns or apparently scrutinise the numbers.

Ofcom should have been extremely wary of the whole cost allocation approach both to Openreach and between Openreach products, given they found about £100m of over-allocation to CRS services (due to an almost total absence of allocation of any cost to certain enhanced service).

Given these 'alarm bells' suggesting major problems in the allocation method and approach, we believe Ofcom should have much more closely scrutinised the allocation. It appears they did not. This is emphasised by the rather weak assurance they are able to make regarding allocations such as: "*we consider that, in general, Openreach has adopted a reasonable approach to the allocation of its costs to its services*" (§A10.40). Similarly, KPMG gave a very weak assurance from its review e.g. "*The scope of our work is different from an audit and does not provide the same level of assurance as an audit".* This level of assurance is inadequate given BT's incentives to inflate these numbers and the criticality of these wholesale products and prices to the UK telecoms market.

Reconciliations not properly understood

Given there have been a number of models Ofcom sensibly requested BT to provide 'reconciliations' between the cost or EBIT numbers. The three main models were the first consultation, second consultation and regulatory accounts – the reconciliations are shown in Table A9.4 and table after §A9.34. These revealed some massive differences – for instance, 'internal LLU and SMPF' £33m, 'other differences in costs and allocations' £98, '21CN/Churn' £121m.

The adjustments also have odd results. Figure 1b below shows the differences in adjustments per line on WLR and MPF (based on additional information Ofcom provided to us). This shows different adjustments per line which make no sense and for which there is no logical justification. The fact that there is no clear reason for these suggests either there are flaws and errors in one or both of the Regulatory Accounts or the cost model used to derive the CCA FAC costs.

[2] http://www.ofcom.org.uk/consult/condocs/llcc/leasedlines.pdf §3.128

Figure 1b: Adjustments between regulatory accounts and cost model per line

	WLR-res	MPF
RAV	£1.25	£0.79
Pension deficit contribution	£1.93	£2.38
Other	£3.47	£9.52

Irrespective of the direction of the correction Ofcom should have investigated what these changes were and checked whether the difference and direction were reasonable and then provided cogent evidence and explanation to support this. In our discussions with Ofcom they did not appear to have properly investigated these reconciling items and satisfied themselves that the BT's model did indeed reflect the actual costs as per the audited Regulatory Accounts. Given the magnitude of the corrections Ofcom should have, we believe, properly investigated these and certainly should properly investigate these and publish the results prior to concluding these charges.

KPMG efficiency report results not properly applied

Ofcom's main independent source of analysis of BT's potential efficiency gains was a report by KPMG. One would have thought that Ofcom would have, at a minimum, compared and applied KPMG's estimate to the one it used – it did not. If they had they would have noticed that Ofcom was projected a figure (1.2% to 2.4%) that was about half the equivalent rate that actual amount KPMG derived of 3.2% to 3.5%[3]. Furthermore, in considering the KPMG report Ofcom should also have recognised that the KPMG report (by KPMG's own admission) underestimated the potential improvement since it didn't take account of certain types of efficiencies improvements such as more automation and reduced task times.

Ofcom provided no cogent reasoning or evidence as to why it in effect ignored and/or dismissed KPMG's analysis.

Northern Ireland treated incorrectly

The access network and operation in Northern Ireland is organisationally not part of Openreach. It has been excluded from the model used to calculate operating costs, depreciation and MCE for CRS. The fact that is was excluded is obvious from the data available to Ofcom. Yet this treatment is plainly incorrect. No evidence or cogent reasoning was provided as to why this incorrect approach was adopted by Ofcom.

Inability to properly explain apparent inconsistencies

We have found many apparent inconsistencies in the data provided – some examples are below. If Ofcom had properly scrutinised the model it would have been able to explain these. For example:

[3] Another related concern that further indicates that Ofcom had not properly assessed the KPPMG report is that the number in the report itself (section §3.1.2) implied a efficiency improvement range of 4.2% to 4.4%. Though we pointed this out to Ofcom for over 10 weeks they were unable to explain the discrepancy.

- CCA FAC cost per line for MPF rising faster than WLR even though MPF volumes are increasing and WLR falling (3.3% versus 2.9%)
- CCA FAC numbers year-on-year in the different cost categories rise and fall in a wholly unexplained manner – see Appendix A5
- The implicit CVR that comes from the modelling is between 0.2 and 0.25. However, the LRIC data in the RFS suggests the CVR is 0.55. The inconsistency has not been explained

We believe that it is reasonable to expect that Ofcom should have at a minimum sought to understand and, if appropriate, correct these to ensure more accurate cost estimates and forecasts. When we asked Ofcom to explain these inconsistencies they were unable to explain why suggesting that they did not properly understand the number prior to making their proposals.

Failure to audit BT's model

We understand from Ofcom that the cost model and projections that has been used is derived from Openreach's internal model[4]. This model has not been audited by an external firm[5]. It is worthy of note in this respect that the European Commission recently suggested to AGCOM in Italy that it should not reset LLU charges until it had audited cost data available[6].

We note that in the current leased line consultation, Ofcom engaged consultants to provide an 'independent review' of Ofcom's model and also provide a strong assurance opinion. No such review was undertaken in this consultation.

In our view, where costs used to set prices are the output of a complex model which has been subjected to numerous revisions, it should be subjected to an audit to ensure it is fair and reliable. Furthermore, the terms of reference and report of the model auditors should be provided in the consultation process (along with a copy of the model).

Ofcom did commission KPMG to review one part of the model or assumptions – the allocation of costs to Openreach products (which is an important aspect).

Though useful, the KPMG review is not an audit – in KPMG's own words "*The scope of our work is different from an audit and does not provide the same level of assurance as an audit*"[7]. Furthermore, the report had serious inadequacies as highlighted by a number of KPMG's comments such as

[4] http://www.ofcom.org.uk/consult/condocs/openreachframework/off.pdf §5.23. This model is sometimes referred to as the Oak model

[5] Ofcom have presented a comparison of the Regulatory Accounts (which are audited) and the Cost Model for 07/08. However, the differences (which are significant) between the Regulatory Accounts and the Cost Model have not been accurately explained by Ofcom, are not, we believe, properly understood by Ofcom and have in no way been audited by an independent auditor. Thus this comparison cannot infer any form of assurance or audit on the cost model.

[6] http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/136&format=HTML&aged=0&language=EN&guiLanguage=en

[7] http://www.ofcom.org.uk/consult/condocs/openreachframework/reports/allocation.pdf §1.1

Comments made by KPMG reflecting quality of data

- *We have not however sought to establish the reliability of the sources by reference to other evidence*
- *We note that there is inconsistency in the categories in Table 2 and Table 3 above. We did not receive consistent tables from Openreach to address this.*
- *We have not had access to the calculation used by BT Group to allocate accommodation costs to LOBs*
- *This conclusion is made without oversight of the calculation undertaken by BT Group*
- *While we do not have access to the calculation performed by BT Group to allocate Cumulo Rates on the basis of use of exchange buildings and public lands by its LOBs, we assume that the allocation is done on a causal basis*
- *And as they said in a meeting with us they did not complete some analysis since BT simply did not in sufficient time provide them with the data that would allow the analysis*

Together these examples demonstrate a worrying situation where the numbers that are being relied upon to set the charges have had a wholly inadequate level of scrutiny by Ofcom. We recognise that it is a complex subject and it may have been difficult gaining information from BT. However, this can be no reason for not properly scrutinising the numbers. The future of competition and consumers benefits depends on this decision. It is too important to be based on substandard information.

1.2 Lack of transparency

As we highlighted above transparency is critical to allow stakeholders to scrutinise the assumptions used and effectively and intelligently respond.

We have pressed Ofcom and BT/Openreach at many points over the last nine months for greater transparency, i.e. to be able to see and understand and then scrutinise the underlying assumptions. The level of transparency improved in the second consultation document. However the information provided was still severely limited and was insufficient.

During the second consultation period, Ofcom and TalkTalk Group have put a lot of time and effort into providing additional information. Some of the information has been useful and we have used it. However, generally we had problems with much of the information: we found that some of the information was inconsistent with other information we were provided with; the responses were not comparable with other information; questions were answered in a way that did not provide the necessary transparency or did not provide the granularity we hoped for. In effect we had pieces of the jigsaw but nothing to hold the pieces together. Furthermore, some of the main questions remained unanswered. For instance, after many times of asking there is still no explanation of what the individual costs are that make up the CCA FAC costs for WLR and MPF and the basis for deriving them including the differences between the costs for WLR and MPF and the reasoning for them.

It is also worth noting in this respect that much of the information that was provided in response to questions during the consultation period was provided in the last 3-4 weeks of the consultation period (some is being provided after the consultation period has closed). This has limited our ability to go back and ask follow up questions.[8]

Furthermore, BT have not provided additional transparency – for instance, their responses to the first consultation was almost totally devoid of evidence and their second response to the first consultation they kept confidential[9].

Overall though better than the first consultation there remains woefully inadequate amount of information available that would allow us to make an effective and intelligent response to the consultation.

We have offered on several occasions to participate in a confidentiality ring in order to address BT's confidentiality concerns. This offer has not been taken up.

Our view of the lack of transparency is reinforced by RGL Forensics who provide forensic analysis of financial information and have been providing TalkTalk with advice. They said (letter attached in Appendix C)

> "*our report concludes that we have been unable to conclude whether or not Ofcom's calculations provide a sufficiently robust basis on which to set future prices … we were not given access to a number of key documents during our review which … without access to the outstanding information and queries, it is not possible to come to a conclusion as to the reasonableness or otherwise of the estimated unit costs set out in the consultation document*"

Below, we describe some examples of the lack of transparency.

Allocation of costs between products

The allocation of costs to WLR and MPF is critical. Not only does it set the absolute level of costs for each product but also the relative level between the products. This drives the margin which is critical to NGNs that effectively use MPF to compete with WLR. However, there is an almost total absence of any useful data to explain how the CCA FAC numbers are derived. The allocation method itself is contained in the 1,200 page detailed attribution methodology ("DAM") which is of very limited use without knowing the exact numbers that are allocated in each group.

The only breakdown is by the following categorisation: Pay, Linecards, Accommodation, Stores/contractors/misc, Corporate overheads, IT, Fleet, Other, depreciation/holding gains. However, what this does not allow us to do is 'get under the bonnet' and to understand the individual costs are that make up the CCA FAC costs for WLR and MPF and the basis for deriving them including the differences between the costs for WLR and MPF and the reasoning for it. This is critical given

[8] As a general lesson we see from this experience that the primary point where information must be provided is at the outset. Well thought out information at the beginning can save all parties considerable effort down the line. The approach used in the Leased Line Charge Control might be a useful model in this respect

[9] We find it rather ironic that Openreach recognised the need for transparency when they suggested one principle should be "*to provide confidence to CPs that prices are not excessive …*" (§3 page 11). We can however, categorically state that we are <u>not</u> confident that the proposed prices are not excessive.

the apparently perverse outcome where MPF costs are illogically higher than WLR costs in most cost categories and the difference in total WLR and MPF costs does not reflect the known differences in costs between these products. Without this detail we cannot effectively and intelligently respond to the consultation.

Instead we are left with a bland statement from Ofcom they "*consider that, in general, Openreach has adopted a reasonable approach to the allocation of its costs".* This is not transparency by any standard and certainly wholly inadequate for this consultation.

Asset charges – depreciation and capital employed

Assets charges (i.e. depreciation plus return on capital employed[10]) account for about half of the total costs and are forecast to rise by 36% on a per line basis from 08/09 to 2012/13. Depreciation on MPF per line is forecast to increase by 130% from £10 to £23 per year.

The consultation document fails to explain the basis for these increases. Given that this depreciation represent the amortisation of an asset base most of which should last between 18 (copper) and 40 years (duct), we do not believe that this increase represents an increase in BT's actual costs.

Clearly, these are very important cost items and cost movements. We have requested on many occasions information that would enable us to build up these figures bottom up so that the underlying assumptions are transparent and can be scrutinised. Instead Ofcom have only provided a patchy set of wordy descriptions (e.g. §A10.102-105 and §A10.109-114) and a CAPEX breakdown that cannot be reconciled to movements in Mean Capital Employed ("MCE"). Some more data has been recently made available though (as discussed in Section 6) it is still insufficient.

Ancillary services

These services account for an alleged £450m of cost, a substantial amount of cost. Yet the sum total of the transparency that has been provided in the Consultation document on these costs is as follows:

Information provided on Ancillary Costs

> 7.24 As for the Core Rental Services, we consider that the regulated charges for the Ancillary Services should be informed to a significant extent by our assessment of the efficiently incurred costs or providing those services. Our review of the costs of providing the Ancillary Services is set out in Annex 10. (*note: there is <u>nothing</u> in Annex 10 on Ancillary services*)
>
> 7.25 Taking a mid case view from Annex 10 and the basket definitions set out above, we estimate that returns made across the MPF and SMPF baskets would be as follows
>
> This is followed by three tables that provide the mid-case operating cost, depreciation and MCE for each of the three baskets in each year. (*subsequently Ofcom have provided the high cost case and low cost case too*)

[10] return on capital employed is calculated by multiplying the mean capital employed by the WACC

[sic – yes, there is no more]

By comparison, in the Leased line Charge Control AISBO services which has a lower total cost base (£300m versus £450m for ancillary services) there are around 30 pages of description of the assumptions, cost drivers, volumes and adjustments made by Ofcom (section 5 and Annex 8).

We contend that he level of transparency provided for ancillary service is wholly inadequate.

Non-regulated services

Ofcom have (rightly) identified the risk that certain un-regulated services are under-allocated costs with the consequence that there is an excess allocation of costs to regulated services (such as MPF). Ofcom identified in their analysis one area where this had happened in the case of certain non-regulated services including enhanced care and time related charges. If properly treated Ofcom have estimated that this would result in a reduction in CRS cost of up to £100m[11].

We believe there may be other areas where this has occurred. For example, Openreach have an other operating income item (OOI) of £91m[12] which we understand includes items such as sale of scrap metal[13]. We also believe that Openreach raises charges for certain services that are not within the price list or regulated services such as ESS upgrades, grid boxes and certain system testing. Furthermore, we understand that 21CN transfer engineering is not included in regulated services and will probably account for £100s millions in the next several years.

However, no information has been provided to be able to identify to us what other non-regulated revenues exist or whether a fair level of costs have been allocated to them.

Ofcom's reasoning for limited transparency

In our various communications with Ofcom, Ofcom have suggested a number of reasons for the limited transparency and/or why disclosure is unnecessary. We think these reasons are not valid and/or are not relevant. We describe what these reasons are and our view on them below

- Materiality: Ofcom say that they have provided transparency on the material assumptions such as efficiency, volume, mix, copper/energy/general inflation and WACC. This is plainly untrue in two ways
    - Firstly, Ofcom have not provided any transparency on some very material issues such as the basis for the CCA FAC numbers and the differences between WLR and MPF. This alone can have a £10 to £20 impact on the absolute and relative WLR and MPF prices
    - Secondly, there are other assumptions that whilst relatively less material individually are certainly material cumulatively. In Section 7 we have

[11] §A10.40
[12] from KPMG report
[13] http://www.btplc.com/News/ResultsPDF/q309release.pdf

identified over £200m of cost changes resulting from changes to several on assumptions that have not been made transparent on e.g. efficiency improvement, WACC but many of the are on other issues. For example, we have identified around £200m of cost reductions that could/should be made due to erroneous allocations which Ofcom provided very little data on. This is clearly very material

- Complexity: Ofcom have also suggested that some areas are very complex and subjective and transparency is not simple to provide. We accept that some assumptions such as appropriate allocation basis are complex but we do not see this is any reason to not make these transparent in a meaningful and understandable manner
- Confidentiality: Ofcom have flagged that some of the information is confidential to BT. We fully accept that certain data cannot be publicly disclosed on confidentiality grounds. However, this should not act as a barrier to transparency
    - Firstly, little of the data we have requested will truly be confidential. Since Openreach is dominant and little of Openreach's information would be useful to Virgin Media (its only competitor) there is probably little information that could be used against Openreach's interests
    - Secondly, much of the information being requested relates to forecast costs for activities the historic costs for which are available in the published Regulatory Accounts. BT's claim that its estimates of future costs, for which they are required to publish actual data, are confidential is clearly wrong
    - Thirdly, in the situation where there is a legitimate confidentiality concern a 'confidentiality ring' would overcome this concern. Ofcom have said they "*do not consider it an appropriate way of proceeding …*"

Overall Ofcom's reasoning for not providing the transparency we have requested does not stand up to inspection.

This is a consultation predominantly about costs – there must be transparency that allows stakeholders the ability to understand the underlying assumptions and logic used, scrutinise the costs and make effective and intelligent responses is critical to a robust outcome particularly given the poor level of scrutiny that appears to have been applied by Ofcom. Clearly, in this case the transparency has been wholly inadequate.

1.3 Ofcom failing in its duty

We have outlined above where we think Ofcom has made proposals that are based on cost projections that are illogical, unevidenced and based on exaggerations. We have also described why we believe Ofcom have not sufficiently scrutinised the costs and how Ofcom has not provided sufficient transparency to allow stakeholders to scrutinise the costs.

Together we think these factors mean that Ofcom has failed in its duties and obligations to be evidence-based, transparent and consult openly with stakeholders.

- We do not think Ofcom has met its statutory obligations: "*In performing their duties under subsection (1), OFCOM must have regard, in all cases, to … the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed*"[14]
- Ofcom has in our view breached its own regulatory principles: "*Ofcom will strive to ensure its interventions will be evidence-based, proportionate, consistent, accountable and transparent in both deliberation and outcome*"[15]
- Ofcom's approach is inconsistent with the recent CAT judgement[16] which reinforced the need for Ofcom to conduct rigorous analysis in part through allowing sufficient transparency to external stakeholders to allow them to respond to a consultation in depth. For example:
    - "*… it is still incumbent on OFCOM … to conduct their assessment with appropriate care, attention and accuracy so that their results are soundly based and can withstand the profound and rigorous scrutiny …*" (§46)
    - "*The essential question for the Tribunal is whether OFCOM equipped itself with a sufficiently cogent and accurate set of inputs to enable it to perform a reliable and soundly based CBA.*" (§47)
    - "*It is the duty of a responsible regulator to ensure that the important decisions it takes, with potentially wide ranging impact on industry, should be sufficiently convincing to withstand industry, public and judicial scrutiny*." (§47)
    - "*… mere consultation and transparency alone are not sufficient grounds to save a decision … the purpose of consultation is to seek the informed views of, and best available information from, industry …*" (§94)
    - "*To be proper, consultation must … include sufficient reasons for particular proposals and allow those consulted to give intelligent consideration and an intelligent response …*"[17]

More generally on transparency we believe that it must not just be seen merely as a procedural requirement. Transparency can fundamentally improve the quality and accuracy of decision. By drawing on the range of information, experience and perspectives from outside Ofcom can complement its own expertise. However, for these skills to be fully used they must be provided with a good level of detailed information to work with.

Lastly, we believe that Ofcom has not properly enforced BT's obligation to "*[BT] … shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by Condition FA1 and/or Condition FA9 is reasonably derived from the costs of provision*" [18] It seems clear to us that BT has not demonstrated to Ofcom to any reasonable level of satisfaction that

[14] Section 3 of the Communications Act 2003
[15] http://www.ofcom.org.uk/about/sdrp/
[16] http://www.catribunal.org.uk/documents/Judgment_1094_180908.pdf
[17] Lord Woolf M.R., giving the judgment of the Court of Appeal in *ex p Coughlan* (albeit in a judicial review context), at paragraph 108
[18] http://www.ofcom.org.uk/consult/condocs/rwlam/statement/rwlam161204.pdf §FA3.1

its charges are properly derived. If it had then Ofcom would have been to explain the assumptions to us.

2. Allocation

The way in which costs are allocated to products is critical to the calculation of CCA FAC costs and thus the charges that are set. Whilst some costs are reasonably easy to allocate on a causal basis (e.g. the cost of a dropwire can be reasonably allocated to a particular service) there are many other costs for which the appropriate allocation methodology is less or not obvious.

There are two main steps in the allocation process that is used in this case that is are particularly critical in setting these charges.

- Firstly the allocation of certain Group costs to Openreach. For instance, Group provides Treasury services, accommodation and pays the cumulo rates charge and these need to be allocated to individual business units. These costs account for over 30% of all CRS operating costs[19] (in addition another 25% of Openreach's costs are allocated from BT Operate)
- Secondly, the allocation of costs within Openreach to different products such as WLR, MPF and leased lines

We believe that the allocation methodology is substantially flawed with the effect that the allocation of costs to CRS in aggregate is excessive by around £200m.Also we believe that the allocation method has resulted in an excessive allocation to MPF (from WLR). Below we provide both some indicators which suggests that the overall result is wrong as well as where the allocation methodology is flawed. We have not been able to calculate these adjustments with the accuracy we would have liked since with the transparency allowed to us we are unable to see few or any of the underlying assumptions that have been used.

2.1 Overall result of MPF allocation vs WLR allocation illogical

The allocation approach used in CCA FAC is highly complex and it is difficult to check each individual assumption. It is also highly susceptible to gaming by BT to allocate costs in certain ways that are favourable to itself since BT effectively decide the allocation bases. Given Ofcom are unable to check each input assumption it is essential that Ofcom at a minimum 'sense-checks' the result.

The most obvious test to apply to check the overall reasonableness of the allocation would be to compare the CCA FAC allocated costs to the incremental costs (LRIC) to calculate a % mark-up The % mark-up on MPF is 40% higher than that for WLR and over 110% more than the level for WLR+SMPF (see Figure 2a). In other words, MPF is proportionally attracting a far higher share of common costs than other services.

[19] Ofcom should be worried that over one third of cost of Openreach is not incurred or controlled by Openreach. This might suggest that Openreach does not have sufficient independence and control over its activities. It also increases the potential for inappropriate allocations

Figure 2a: Mark-up by product (07/08)

	MPF	WLR	WLR + SMPF
LRIC	64.85	76.40	93.48
FAC	84.10	92.65	106.50
% mark-up	30%	21%	14%
MPF excess mark-up		40%	113%

Absent other economic considerations such as taking into account demand considerations, equal % mark-ups or EPMU, is the efficient way to recover common costs. Therefore, the higher mark-up on MPF is wrong and inappropriate.

It is worthy of note here that Openreach itself argues that there should be the same level of % mark-ups (which is the implicit assumption in EPMU)

> "*Openreach is [… suggesting …] that all access services contribute the same level of contribution to fixed and common costs as other services. This is the basis of an equal proportion mark-up regime, known as Long Run Incremental Cost ("LRIC") plus Equi-Proportional Mark-Up ("EPMU"), which Ofcom has widely used in the past.*"[20]

Absent any cogent reasoning and evidence as to why there should be a higher % mark-up to MPF indicates a substantial flaw in the CCA FAC methodology and/or assumptions and/or model. Ofcom has provided no cogent reasoning or justification to explain these anomalies. If this anomaly was corrected and each product has a similar % level of mark-up on LRIC the cost of MPF would be reduced by about £8 (whilst allowing BT to fully recover all its costs).

We are unable to provide the same calculation in 2012/13 since no LRIC numbers are available. However, we can see that there is also a similarly illogical result when we look at cost per line by the categories provided. Figure 2b below shows the cost per line for MPF compared to WLR

Figure 2b: Operating costs per line (2012/13)

	MPF	WLR	MPF vs WLR
Pay	£19.06	£17.60	8%
Linecards	£0.00	£11.87	-100%
Accommodation	£13.01	£11.46	14%
Stores, contractors, misc	£4.79	£4.65	3%
Corporate overheads	£3.89	£3.65	7%
IT	£5.14	£4.76	8%
Fleet	£3.30	£3.24	2%
Other	-£0.86	£0.91	-194%
Total (ex linecards)	£48.33	£46.27	4%

[20] http://www.ofcom.org.uk/consult/condocs/openreach/responses/openreach.pdf p54

If other known differences between MPF and WLR are removed (line cards, directories and longer e-side copper which MPF does not have) MPF costs are 7% higher than WLR. This is illogical since MPF includes fewer components and activities than WLR – for example, MPF does not require accommodation for equipment, tie cables or backhaul. If an EPMU allocation approach was applied the cost per line would be less for MPF. If an equal £ cost allocation per line was applied one would expect the MPF and WLR costs per line to be similar. This result where the cost per line for MPF was higher than WLR defies logic.

Prima facie it appears that the CCA FAC costs does not, or does not properly, take account of these extra costs for WLR.

We think the inaccuracy is even greater when one starts to consider the roll-out of 21CN. As BT move to transition to 21CN it will incur new (and often higher costs) and there will also be more equivalence (as implied by BT's use of MPF and, hopefully, xMPF). This new environment would imply that the gap between MPF and WLR should be over £35. The table below shows the cost differences that there should be between MPF and WLR as WLR is increasingly provided on 21CN

Figure 2c: Cost difference between MPF and WLR (2012/13)

cost element	£ pa	Description
d-side	3.25	line length adjustment (6% of d-side)
migration/transfer	5.70	annualised cost of transfer from 20CN
tie cables	1.97	cost of '21CN tie cable'
frames	0.00	no difference if MPF / xMPF use evoTAM and single jumper
line card	16.56	cost of only voice provided on MSAN
backhaul	5.00	Estimate
directories	1.83	no directory cost in MPF
service, sales, systems	4.00	estimate: since WLR more complex
TOTAL	38.31	

Though the cost difference should be over £35 Ofcom's CCA FAC numbers suggest the difference should be only £10 – about the same as the amount in 08/09 which again is illogical.

This suggests that not only do the CCA FAC numbers not properly reflect the current situation, they do not in the future either.

2.2 Excessive and/or flawed allocation of Group costs

Over 30%[21] of the total cost base of Openreach is accounted for by costs allocated into Openreach from other parts of the BT Group. This includes costs such as accommodation, cumulo rates, corporate overhead (e.g. Treasury, HR, finance)[22].

[21] £1.2bn allocated form Group and Openreach opex £3.6bn
[22] Generally the allocation approach used is based on the regulatory accounts (which is based on the DAM)

There are many several reasons why we think the allocation from Group is excessive:

- Openreach's greater level of independence from Group ignored
- Non-customer facing status of Openreach overlooked
- Allocation bases used are unreasonable and over-allocate cost to Openreach
- Allocation of central costs to overseas assets not made
- Relatively lower growth of Openreach in future ignored
- Previous policy decisions for allocation not followed
- Allocation to internal services not clear / incorrect
- Divergence from the DAM without reason
- Duct cost allocation basis not revised
- Cumulo rates allocation incorrect
- Under-allocation of costs to non-price regulated services
- Allocation of Openreach costs to other parts of BT not made

It is difficult to identify the exact impact of all of these issues given the poor level of transparency provided – for instance, we do not know the how much of the allocation to Openreach is for CRS. However, we believe that it is plausible that if corrected that these could reduce the cost per line per year by about £200m.

We discuss each of these below.

Openreach's greater level of independence from Group ignored

As a result of BT's Undertakings, Openreach has a higher degree of independence than any other part of the BT Group. In Openreach's own words "*While Openreach remains part of the BT Group, we are a separate business with our own headquarters, identity, financial reporting and commercial principles*"[23]. The logical consequence of this is that Openreach relies on the 'Centre' for fewer of its activities than other parts of the Group.

Yet the allocation methodology used does not in anyway reflect this fact. Costs are allocated to different business units within BT on the basis of, for example, salary expense or net assets. In no way is any account taken of Openreach's unique status by reducing the level of allocation. Indeed, since Openreach was created we can see no changes to the DAM that have been made to reflect the status of Openreach.

The allocation approach used creates a 'double whammy' effect. For services they self-provide the extra staff/cost they have for providing these services themselves draws in additional allocation.

Thus the approach that is taken of not recognising the unique and separate status of Openreach has resulted in an excessive allocation of cost – in effect the DAM is not fit for purpose. This must be corrected by Ofcom.

[23] http://www.openreach.co.uk/orpg/aboutus/Downloads/web_corp_brochure.pdf

Non-customer facing status of Openreach overlooked

We believe that some of the costs that are incurred by Group are much less relevant to Openreach since it is not a customer facing business. For instance, one of the prime benefits of BT's sponsorship of the Olympics is to build its customer facing and particularly global brand – thus much of this cost should not be allocated to Openreach. Similarly hospitality and market research is (or should be) much more focussed on customer-facing business that ones providing wholesale products (such as Openreach and BT Wholesale).

There may be other costs that have limited relevance to Openreach though because we have not been provided much transparency it is impossible for us to be able to identify or quantify these.

Allocation bases used are unreasonable and over-allocate cost to Openreach

In allocating certain costs, particularly Corporate Overheads, BT appear to have used two metrics (or bases) – share of total assets plus salary expense. This allocation is biased against Openreach since of all the potential allocation bases that could be used total assets and salary expense both imply the largest allocation of cost to Openreach.

This allocation of this cost should reasonably reflect the management time likely to be associated with all parts of the business. This should not just include assets and salary expense but also other business activities such as that associated with revenue and that associated with liabilities. Therefore, a better basis should combine these four metrics. In that case the % of cost allocated to Openreach would fall by 60% (from 38% of the total cost to 23% of the total cost) and the allocation of corporate overhead to CRS by over £50m.

Figure 2d: Impact of different allocation bases on % cost attributed to Openreach

2007/8	**Openreach**	**Rest of BT**
Allocation Base		
Total assets	38%	62%
Salary expense	38%	62%
Total assets + salary expense	**38%**	**62%**
Total assets	38%	62%
Total liabilities	11%	89%
Total revenue	20%	80%
Total costs	17%	83%
Assets + costs + revenue + liabilities	**23%**	**77%**

What this table more clearly shows is how BT have chosen the two allocation bases (assets and salary expense) least favourable to Openreach as the basis for allocating many Group costs.

Allocation of central costs to overseas assets not made

It is not clear why corporate overheads should not be allocated to overseas services on the basis that they are 'Non-Core' products. Inclusion of overseas activities would decrease the amount of corporate overheads allocated to 'core' activities in the UK by 30%.[24] We recommend that Ofcom investigates whether or not corporate overheads are only allocated to UK activities and, if so, what is the justification for this.

Also Ofcom should determine whether or not there are any other costs not allocated to non-UK activities. For example, it appears that all costs allocated on the basis of pay use the 'base' FTQ which:

- "*is compiled from the previously allocated Capital and Current pay F8 codes (excluding non-core pay and exceptional OUC pay)*".[25]

This exclusion of 'non-core' activities in at least part of the cost allocation process suggests a systematic over-allocation to the UK parts of the business, including Openreach.

Relatively lower growth of Openreach in future ignored

Openreach is forecast to grow at a slower rate than other parts of the BT Group. This should result in a lower % cost allocation of Group costs. However, we understand that in the model the % allocation of Group to Openreach costs is the same in every year. This will result in an excessive allocation of cost to Openreach.

We have taken a range of analyst forecasts for revenue growth which shows that the average forecast growth rate for Openreach is 1% less than the Rest of BT (RoBT)[26] (see Figure 2e).

Figure 2e: Annual Revenue Growth Forecasts (Openreach vs Rest of BT)

	JPM	Investec	Nomura	MS	Avg
Openreach	-0.7%	-1.6%	-0.1%	-0.8%	
Rest of BT	-0.5%	1.5%	0.3%	-0.5%	
OR vs RoBT	-0.2%	-3.1%	-0.5%	-0.2%	-1.0%

This would imply that the proportion of the group cost that should be allocated to Openreach should reduce by 1% each year. It is unclear exactly which categories of cost this adjustment would apply to but we think it should include corporate overhead, the activities in BT design which are about desktop support, some accommodation, supply chain, insurance, fleet and other. Together these account for about £400m of allocation to Openreach implying by 2012/13 that the cost allocation to Openreach should be £20m less[27].

[24] Assuming allocation is based on assets only. Based on segmental analysis in BT's 2008 annual report page 103
[25] 2008 DAM page 36
[26] This was based on growth for 3 to 5 years (longest available) from 07/08 when the allocation was assessed by KPMG.
[27] £20m = 5 years (from 07/08) x 1% x £400m

Similarly a check should be made on other Openreach revenues such as leased lines to see whether they are growing in cost/revenue and should be allocated a greater share of the allocation of the central cost within Openreach.

Previous policy decisions for allocation not followed

Ofcom have made a number of adjustments to bring the cost model in line with previous regulatory decisions – for instance, in relation to RAV and dropwire treatment. However, it seems that not all the adjustments have been made in the cost model.

For example, Ofcom's Statement setting LLU prices in 2004[28] concluded that the appropriate basis for allocating LLU system set-up costs was to spread them across all DSL lines (i.e. including use of SMPF by BT itself for IPStream/DataStream). However, analysis of the RFS show that the full £13m (actually £13.85m) has been recovered from external MPF and SMPF and none from internal use.

Further, in 2004 Statement, Ofcom stated that "*where LLU per service costs differ from those incurred by BT for equivalent DSL activities, it may be appropriate to intervene in order to guarantee competitive neutrality by pooling LLU costs and equivalent DSL costs and recovering them across all DSL lines*".[29] This appears to have not been done since it appears that the costs for internal SMPF and external SMPF are different. This issue might also apply to differences between MPF and SMPF though we do not have enough information to identify whether this is the case or not.

It is unclear whether there are other examples. However, we believe that it is Ofcom's duty to check whether the allocation is correct versus the policy it has set.

Internal service allocation not clear/ incorrect

RGL's review of BT's Regulatory Accounts found that BT's treatment of internal MPF and SMPF cost is different to that of external MPF and SMPF services, and one entire category of costs was not allocated to internal services (see Appendix C). It is not clear from the accounts whether all other costs are treated equally. Ofcom must properly scrutinise this to ensure that the cost allocation treatment is non-discriminatory and reasonable.

Divergence from the DAM without reason

It appears that some of the bases used in cost model are different to those used in DAM (which is used to prepare the regulatory accounts). Whilst we feel that the DAM is flawed we believe that Ofcom should focus on deviations to understand what they are, articulate them clearly, decide on whether they are justified and, if appropriate make corrections? Some comments from KPMG that highlight this type of issue are:

- "*we are unable to determine whether the allocation of corporate overheads is consistent with the regulatory accounts*"

[28] http://www.ofcom.org.uk/consult/condocs/rwlam/statement/rwlam161204.pdf §8.25
[29] Review of the wholesale local access market , Ofcom, 16 December 2004 Para 8.29

- "*changes to the Oak model have diminished the transparency of the allocation process in that some of the allocation methodologies used do not reflect the actual allocation that occurs*"

Duct allocation basis not reviewed

There is some duct used by the copper access network (i.e. LLU and WLR services) that is also used by other services such as leased lines (both access and backhaul). Obviously, an allocation of this total cost needs to be made between different services.

Currently this allocation is made on the basis of cross-sectional area. This results in a very high proportion of the cost being allocated to LLU/WLR since they use copper which takes up a far larger proportion of the duct than fibre. However, this allocation on the basis of cross-sectional areas is not the only allocation basis that could be used.

Ofcom said in 2005 "*BT's current proposals to establish an Access Services Division (ASD) will require it to re-examine the treatment of the costs of shared duct and should this indicate a more appropriate method can be implemented as part of this process Ofcom will consider at that time what alternatives are available*".

Ofcom should review this issue, to ensure that costs are allocated in the most appropriate manner. Using a 'value based' allocation method could reduce, we estimate, the cost allocated to WLR and MPF lines by around £1.60 per year (see Appendix C for details).

Cumulo rates allocation incorrect

The projections shows that the cumulo rates charge to Openreach rises at 3% pa from 08/09 (i.e. equal to the underlying RPI inflation rate). We understand there are two factors that in reality change the cumulo rate cost. Firstly an indexation (to inflation) and secondly an adjustment to account for volume changes. This second factor would imply that as volume of lines reduces so should the cumulo rates cost. However, this does not appear to have been properly reflected. Whether this is a problem in the calculation of the total cumulo rate cost for BT or the allocation to Openreach is unclear. What is clear is that the charge to Openreach is wrong and overstated. Furthermore, as Openreach contracts in size relative to the rest of BT this may have an additional downward impact. Separately, it is also clear that a lower inflation rate will reduce the cumulo rates charge.

We noted in BT's response to the first consultation their suggestion that MPF lines should attract a higher share of the cumulo rates charge than WLR lines[30] since, they claimed, MPF loops are more valuable than other loops. We think this idea is flawed for several reasons:

- BT's assertion that MPF loops are more profitable is certainly unproven and probably untrue. In addition even if they were, on average, more profitable than other loops, this may not translate into higher market rents
- Even if found to be appropriate it would be almost unworkable to implement since it is impossible to allocate cumulo rates on the basis of causality as BT are suggesting and also would create require added pricing complexities

We explain our reasoning below.

It is unclear what the open market value of local loops would be, indeed this was one of the arguments put forwards by the UK authorities for not using LLU tariffs as evidence to set the rateable value of BT's network in the recent state aid case. Furthermore, it is not clear that MPF loops would have a higher rental value compared to other loops on an open market if one existed. For example:

- Some non-MPF loops, such as those used for ISDN and business WLR services used by business customers, may generate higher profits
- TalkTalk's MPF based service provides broadband for free even though the broadband elements results in added cost. Thus in this respect an MPF loop is less profitable

BT is suggesting that it is appropriate to disaggregate rateable value at the level of individual copper loops in order to determine the appropriate cost allocation. However in the submission to the state aid case the UK authorities said:

> "*note that according to British case-law on the application of business rates , contiguous property in the same occupation, such as BT's and Kingston's networks, must be valued as a single hereditament. Disaggregating property in single occupation would introduce valuation distortions, since the sum of the value of the parts of a property rarely equates to the value of the whole*."

This indicates that the rateable value as a whole is a fixed and common cost and cannot be attributed on the basis of causality either to the access network or to individual loops. Given this lack of an attribution method the only method of recovering the costs is through methods that are unrelated to cost causality such as EPMU or Ramsey pricing.

Another difficulty that would arise would be the need to re-price wholesale products depending on their use. For example, SMPF would have to include a 'cumulo rate premium' reflecting that it could be used for broadband and related services. It is very unclear how such a system could work in practice especially since it would also have to cover leased lines and other services.

[30] http://www.ofcom.org.uk/consult/condocs/openreach/responses/openreach.pdf p44

Allocation of Openreach costs to other parts of BT not made

In the same way it is sometimes appropriate to allocate Group costs to the business units, there are cases where a cost incurred by one business unit should be allocated to Group for onward allocation to other business units. It does not appear to us that there are any cases of this happening in the allocation which seems to be an oversight.

We think there are some circumstances where such allocation is appropriate such as

- advertising on Openreach vans where BT Group clearly enjoys an advertising benefit from the presence of the BT logo on Openreach vans. This might be worth as much as £30m to the BT group and should be deducted from the costs of Openreach[31]
- Where Openreach provide the lead and resources on a Group-wide initiative For example, we understand that Openreach provide the lead on Group security issues (of course Openreach would then 'receive-back' some of the allocation)

Under-allocation of costs to non-price regulated services

Ofcom have identified some areas where non-price regulated services have attracted an insufficient cost allocation with the result that the costs allocation to CRS were excessive. This was the case for certain WLR/LLU related services such as enhanced care and time related charges. If properly treated Ofcom have estimated that this would result in a reduction in CRS cost of up to £100m[32].

In respect of the particular assumptions relating to these services we have three main comments:

- Firstly, a 20% EBIT figure (used to calculate costs) is probably to high. These services are of low capital intensity so do not justify a high EBIT level to recover investment
- Ofcom has suggested that the amount the costs allocated to these services that should come from CRS should be between 30% and 60%. We do not understand the reasoning for these estimates. To derive the appropriate reduction in CRS costs it is necessary to understand what type of activities and resources would be involved in providing these services and where these type of activities and resources are currently allocated. Given these services are variants of LLU/WLR this would suggest that much of the cost should come from CRS services – possibly as much as 80%
- In making the assumption Ofcom must also consider growth in the revenue of these services and therefore growth in the cost allocation away from CRS since the use of many of these services is likely to increase (or are already increasing as pointed out by BSkyB in its response). Furthermore, the current 'service harmonisation' development by Openreach will introduce (hopefully) a better

[31] If BT Retail were to buy a fully covered advertising space on a London taxi it would cost around £4,000 per annum (e.g. http://www.marketingminefield.co.uk/outdoor-advertising/vehicle-advertising/costs.html). Assuming 15,000 vans (Openreach have 21,000 field staff), and a figure of £2,000 per van (given the BT logo is only part of the image) this implies a benefit to Group of some £30m of free advertising

[32] §A10.40

and wider range of service levels which will increase use and revenues from enhanced services

We believe that there are probably other cases of under-allocation that exist today possibly within the Other Operating Income category of £91m which includes the sale of scrap copper. Furthermore, with the prospect of some LLU services being outwith price regulation and the advent of NGA there may be an increasing level of services that are not price regulated and need to be checked for fair cost allocation. It is difficult for us to comment specifically on the right level of allocation. Further, we understand that the services involved in the transfer engineering to 21CN are non-regulated and therefore need to be checked for an appropriate level of allocation. We would expect Ofcom to fully scrutinise all of these non-regulated services and the cost allocation to them and make the results transparent for scrutiny by others.

More generally, the inappropriate treatment of these other services by Openreach raises a more fundamental concern. Ofcom needs to understand how such as material error in Openreach's costs has arisen. Was it deliberate? Did it happen out of negligence or an oversight? How can such errors be systematically prevented in the future?

TPON costs

RGL's review for TalkTalk Group identified one entire category of costs – a plant group – that appears erroneously allocated to MPF: Plant Group PG119A Telephony Over Passive Optical Network (TPON). BT describes TPON as "*a technology which uses fibre from the exchange to the street cabinet and copper from the cabinet to the customer. It is now in the process of being removed as it does not support broadband*." Despite "*not supporting broadband*", this plant group appears to be allocated to the copper loop which is then allocated to MPF services. In its review of relevant costs to be allocated to MPF services we would have expected Ofcom to have removed this plant group in its entirety.

Whilst this individual item may be small it demonstrates the need for the allocation approach to be more closely scrutinised.

Other

We have a number of other concerns on allocations

- The allocations must be recalculated after all adjustments are made. For instance, the corporate overhead allocation may be driven in part by duct assets associated with CRS. If the duct assets allocated to CRS reduce (due to a change in allocation methodology) then the corporate overhead allocation should also reduce. The same will probably apply to many other adjustments – for instance efficiency improvement and fault rate reductions will reduce the cost base and so allocation.
- It is unclear as to the exact mechanics of the model. However, if forecasts are based driven from CCA FAC per line then as the CCA FAC are properly changed it may change the total cost

3. Efficiency

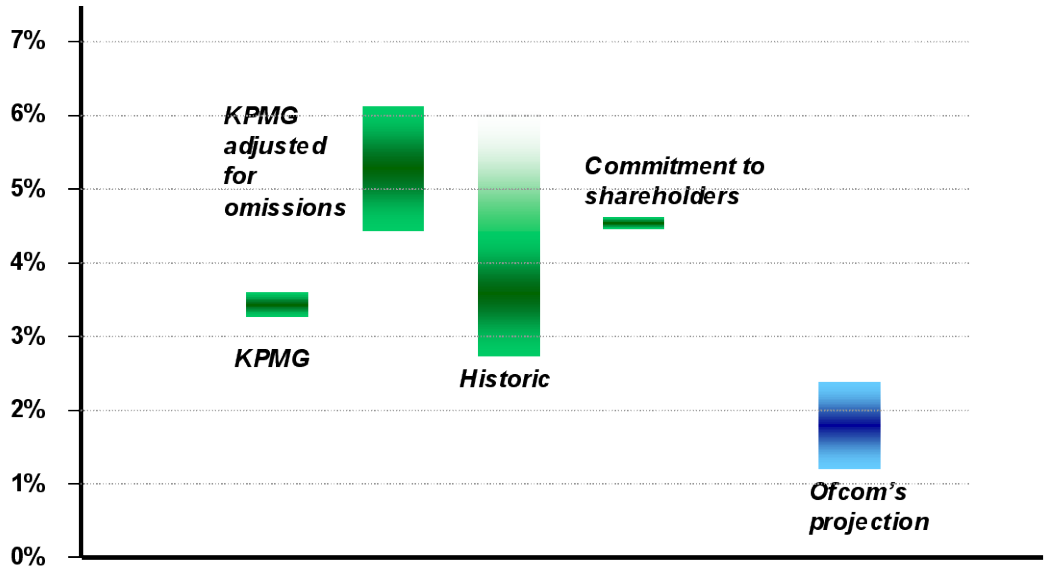
Regulation rightly requires that the regulated charges must be based on efficiently and necessarily incurred costs[33] else UK consumers will in effect to be forced to pay inefficient and inflated prices. In other words, BT has a responsibility to 'run a tight ship' in markets where it is dominant.

Ofcom has included an efficiency improvement in the cost projections of 2% to 4% on compressible costs (which equates to 1.2% to 2.4% on all operating costs assuming that 60% of costs are compressible[34]). However, this level of the efficiency gain significantly underestimates the efficiency improvement Openreach could achieve and so, if this estimate is used as the basis to project costs and set prices, it would result in consumers being penalised by paying significantly inflated prices in order for BT to enjoy excess profits.

Of particular concern is Ofcom's projected efficiency improvements are significantly less than the projections that Ofcom's own consultant's KPMG provided. The actual efficiency improvement they estimate is at least 3.2% to 3.5%. Ofcom estimates of 1.2% to 2.4% are around half of this.

Yet, more concerning is that the KPMG report (by their own admission) did not include all forms of efficiency improvements – including these omitted improvements (and an adjustment on speed of improvement) the efficiency gain would be between 4.5% and 6.1%. Other bases for projections are also shown on the diagram below (Figure 3a). By any reasonable measure it is clear that Ofcom has significantly underestimated the potential efficiency improvement. How Ofcom can claim there projection is evidence-based beggars belief.

Figure 3a: Comparison of efficiency projections (% annual improvement on <u>all</u> costs)



[33] http://www.ofcom.org.uk/consult/condocs/rwlam/statement/rwlam161204.pdf §6.62
[34] note: Ofcom use 60% of costs are compressible. We have confirmed this figure with Ofcom. BT in various places say the number is 70%

We estimate that over the next four years Openreach should be able to achieve a 5% to 6% efficiency improvement each year over all its costs.

The factors that lead us to this conclusion are discussed below.

3.1 KPMG analysis incomplete

Whilst we see the KPMG review of Openreach's efficiency as useful we have identified a number of areas where it has, we think, underestimated the potential gains. These are described below.

In our discussion with KPMG they accepted that their report and projected efficiency improvements did not include certain types of potential efficiency improvements. In the 'catch-up' part of their analysis they did not include the efficiency improvements that would result from:

- fewer tasks and/or reduced task times resulting from smarter working, better information, improved diagnostics, fewer repeat faults and more automation (i.e. the core of BT's Right First Time programme). These opportunities are discussed in more detail below and we explain why we believe there will likely be 10% to 20% reduction in costs.
- more flexible working practices allowing more effective use of time
- less overhead resulting from de-layering the organisation and removing 'middle management'

Together this implies that the catch-up could be greater than KPMG have assumed. In our analysis above we have very very conservatively assumed an extra 4% to 8% catch-up from these activities over 4 years (i.e. 1% to 2% extra per year).

Secondly, KPMG's analysis assumed that the catch-up to reach the efficiency frontier would be achieved over a six year period. We think this is too long particularly as Openreach is an separate (and therefore more nimble) entity – we think it should be able to achieve these gains in 4 to 5 years.

KPMG rightly included a movement in the 'efficiency frontier' within their modelling. We think this is correct both in terms of methodology and quantum. We think the appropriate figure is 2.3% (on all costs) reflecting the current situation of being in the early stages of an economic recession.

Making the adjustments above we can rebuild a more accurate picture of the KPMG estimates (see Figure 3b below).

Figure 3b: Adjusted KPMG efficiency improvements

	Low	High
Catch-up KPMG assessed (7.0% total[35])	1.4% *(over 5 years)*	1.8% *(over 4 years)*
Additional efficiency from unassessed factors	1.0% *(very low case)*	2.0% *(low case)*
Efficiency frontier movement	2.1% *(low est.)*	2.3% *(high est.)*
Total efficiency improvement	**4.5%**	**6.1%**

Another area of underestimate results from the way in which KPMG benchmarked separately the overhead activities 'allocated' to Openreach from BT Group, and those overhead activities incurred by Openreach. Whilst this is understandable from a practical perspective, as the cost data is provided based on this breakdown, it does not provide an overall view as to whether Openreach's total overheads are reasonable. The overall effect of this approach would be to under-estimate the potential efficiency gain. We describe below a simple benchmarking approach of overall overheads, which indicates that Openreach should be able to achieve very significant overhead cost savings.

3.2 Historic performance

Historically BT has achieved efficiency improvements well above the Ofcom range:

- according to Ofcom, BT has achieved about a 2.8% to 4.2% efficiency gains per year in operating costs on CRS (across all costs)[36] in 07/08 and 08/09.
- in the last year across its whole portfolio Openreach has averaged an efficiency improvement of around 7% (once the impact of inflation is taken into account)[37]
- BT Wholesale achieved 29% reduction in SG&A over one year on flat revenue[38]

We think historic performance should set a starting presumption for projecting future efficiency gains. We think that looking forward over the next 4 years the efficiency improvements should be able to increase since the recent cost levels were driven in part by establishing Openreach – now the organisation and EMP is more fully up and running the real efficiency gains should start to kick in. Furthermore, the previous price regulation approach did not strongly incentivise efficiency since it was unclear what the future regime would be. This would suggest future efficiency gains should be able to outstrip the 3% to 7% that has been achieved recently.

[35] Based on 7% improvement from current cost base of £3.69bn to frontier at £3.43bn
[36] § Chart A14.1 07/08 6% on compressible, 4.2% on all costs; 08/09 2.8% to 4.0% (on all costs)
[37] Costs fell 4% in 12 months on slightly rising revenues (source: http://www.btplc.com/News/ResultsPDF/q309release.pdf). Assuming unit costs rise at RPI (say 3%) then average efficiency improvement must have been 7% = 4% + 3%
[38] http://www.btplc.com/News/ResultsPDF/q309release.pdf

It is worth noting in this respect the frequent 'pleas' from BT that it has driven efficiency very hard and there is nothing more left that can be achieved. BT in their response to the first consultation said "*an assumption of a 1% reduction on the broad "compressible" costs [i.e. 0.6% overall] would be a very challenging target. Anything above this level would be unreasonable*"[39]. Ofcom should ignore such comments. They are 'crying wolf'. Time and again in charge setting situations BT have pleaded that they can only achieve around 1% efficiency – yet all the evidence has shows that they go onto achieve 4% and 5% (or more). For example:

- WLR price setting in 2006: "*BT stated that the efficiency target [1.5%] was too challenging*"[40]
- LLU price setting in 2005: "*BT considers that an efficiency factor of 1.5% is very challenging and that a lower assumption should be used*"[41]
- PPC charge setting in 2004: "*BT set out further arguments that a measure [of its inefficiency] of 0% to 1% is more appropriate*"[42]
- Network charge control in 2005: "*BT is already at the frontier of network efficiency. A target of less than 2% per annum improvement is more appropriate*"[43]

Ofcom should ignore or heavily discount what BT is claiming – it is not evidence based. History shows that they (intentionally or otherwise) massively underestimate their potential for efficiency gains.

3.3 BT's own projections to shareholders

The sense that historic rates of efficiency gains are likely to continue is reinforced by BT's statement to its own shareholders. BT claim in their 07/08 annual report[44] that they have delivered net[45] efficiency savings of over 4.3% in 07/08 (the underlying/gross level was higher than 4.3%) and expects to achieve 4.6% in 08/09 on all costs. If anything, these figures are likely to under-estimate the true potential efficiency improvement for Openreach since:

- companies tend to err on the side of 'under-promising and over-delivering' in statements to the City
- higher efficiency improvements can be expected in Openreach (compared to BT overall) since it has perhaps the least efficient and least modern working practices and the most potential to benefit from new IT (such as EMP)

Below are a variety of recent comments by BT to the City regarding improvements in operating costs and efficiency. This is clearly a business that can and expects to make substantial efficiency improvements.

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[39] http://www.ofcom.org.uk/consult/condocs/openreach/responses/openreach.pdf p37
[40] http://www.ofcom.org.uk/consult/condocs/wlrcharge/statement/statement.pdf §3.31
[41] http://www.ofcom.org.uk/consult/condocs/llu/statement/llu_statement.pdf §4.15
[42] http://www.ofcom.org.uk/consult/condocs/ppc_charge_control/statement/ppc_stmnt.pdf S.19
[43] http://www.ofcom.org.uk/consult/condocs/charge/responses/bt p3
[44] http://www.btplc.com/Report/Report08/pdf/AnnualReport2008.pdf page 23
[45] net of one-offs i.e. excluding impact of one-offs such as EOI implementation cost

BT comments to City re efficiency

- "*Operating costs down 4% – accelerating cost reduction programmes in response to economic climate*"[46]
- "*We will see a programme over the forthcoming years that I believe will deliver a significant improvement in our customer service and also a significant improvement in our cost base, because cost of failure and re work and answering calls that customers don't want to make are a significant part of our cost base*"[47]
- "*As part of our ongoing efficiency programmes we expect to reduce our total labour resources by some 10,000 by the end of the current financial year, the majority of which will be in the area of indirect labour, including agency, contractors, subcontractors and offshore workers. Staff costs before leaver costs increased by 2% to £1,322 million, … with the impact of pay inflation being more than offset by efficiency savings*" [48] [i.e. efficiency gain was at least 4%]
- "*a very solid performance from Openreach, again showing if you are pro-active in cutting your costs, even with flat revenue you can delivery profit growth*"[49].
- "*Finally Openreach, a stable performance, revenue and profits should be pretty stable with effectively the cost reductions offsetting what is a difficult external environment*." [50]
- "*Openreach is very steady, it has that utility feel around it, very much focussed on cost reduction*" [51]

3.4 Excessive corporate overhead

Openreach's cost of corporate activities e.g. finance, HR, strategy, legal is excessive. The costs of these activities accounts for 8.4% of their total cost base[52]. For TalkTalk Group[53] we provide the same activities for [[REDACTED]] of cost even though we have much lower scale economies. If Openreach were to achieve this efficient level then they should be able to reduce their total corporate overhead cost by around 70% or more. In this respect it is worth noting that in the last year BT Wholesale (which is facing greater competition and so drive to be efficient) achieved a 29% reduction in SG&A over one year[54].

3.5 Substantial potential for operating efficiencies

Openreach's own operating and service performance plan demonstrates the ability to drive lower operational costs by reducing avoidable costs of failure and operating more slickly. Importantly, many of these efficiencies are over and above the efficiency gains that KPMG identified.

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[46] http://www.btplc.com/Sharesandperformance/Quarterlyresults/Financialpresentations/q309slides.pdf
[47] Transcript of 4th quarter 2007/8 results presentation BT CEO, Ian Livingston
[48] BT Press release 2rd Quarter 2008/9 November 13 2008
[49] Transcript of 2nd quarter 2008 results presentation BT CEO, Ian Livingston
[50] Transcript of 2nd quarter 2008 results presentation BT CEO, Ian Livingston
[51] Transcript of 3rdd quarter 2007 results presentation BT CEO, Ben Verwaayen
[52] cost = operating cost plus depreciation
[53] This includes: Finance, Legal, Regulatory, Strategy, HR (Admin, Training, Group Services), MDs, Exec, some central commercial functions, revenue assurance, and allocations of Property Management, Group Legal, Corporation Tax, Group Finance, Corporate Treasury, M&A, Group Risk, Group Continuity, Group Marketing, Banking and Information Security.
[54] http://www.btplc.com/News/ResultsPDF/q309release.pdf

BT and Openreach have recognised this potential itself, for example:

- BT mentioned in its Annual Report "*Many of these programmes are closely linked to 'right first time' initiatives, which have the dual benefit of reducing our cost of failure as well as enhancing the customer experience*"[55]
- Openreach's own detailed plans (see Appendix A7) show that performance improvement will come through working smarter supported by changes in attitude, culture, new systems and processes rather than working harder or using more resources in the business[56]

These operational changes alone will deliver substantial reductions in the cost of failure reducing operating costs by up to £10 per line per year (i.e. 10-15%) and provisioning costs by 5-10%.

- Openreach's Project Turtle should reduce cost of repairing faults and in particular repeat faults through using previous fault histories, information of line characteristics (such as noise levels, capacitance, line loss – some from LLUOs' DSLAMs) and 'working more intelligently'. This alone will save £1 per line per year[57] on MPF rental.
- Reducing DOA rates from 5% to the 2% claimed in the plan will reduce average costs of provision by £2 or 7% of provision costs[58]. Other savings can be expected in other provision failures (i.e. not DOAs).

We would expect that the new operating plan will also achieve additional cost savings over and above the reductions in the cost of failure. For instance, the following initiatives (taken from Openreach's own presentation, Appendix A7) will deliver further cost reductions;

- *Reduced hand-offs to/from OMC* will reduce the number of staff required.
- *Removal of unmatched/unstructured addresses* will reduce the need for manual intervention.
- *Work will be doable when it arrives with the engineer* will reduce unproductive/wasted time.
- *A new process that ensures good stopped lines are restarted first time* will reduce need for engineer visits.

More generally, as the EMP platform and the most recent releases are increasingly adopted by customers it will reduce costs as it provides for more automated processes than the old tactical systems (e.g. dialogue services, KCIs, better address matching, better information at POS, fewer manual workarounds). Obviously the cost benefits will grade in as its is adopted for different products and by different CPs.

Overall, we would expect the new initiatives in the operating plan to deliver savings of at least 15% to 25% in total cost over the next 2-3 years (as well as improved

[55] http://www.btplc.com/Report/Report08/pdf/AnnualReport2008.pdf page 23
[56] See attachment in Annex 2 pages 4 to 6
[57] Currently about 12-20% of MPF faults are repeats and these on average incur 3 testing/engineering intervention cycles to get solved. Assuming 0.1 faults per line per year, 15% repeat faults, 2 additional interventions per repeat fault at £30 each results in a cost of £1 per line per year
[58] During 2007 DOA rates for MPF were running at around 5%. Openreach plan 1% in their new plan. Assuming that the cost of remedial action (i.e. cost of failure) is £60 then the 3% improvement should reduce costs by £2.40 or 7%

performance). This is comfortably achievable given the substantial IT investment that Openreach has made and plans to continue. Openreach has recently implemented the EMP system and is spending a substantial share of its £100m IT budget on further improvements (it is relevant in this context that the majority of system changes in each EMP release are internal requirements that are focussed on delivering improved efficiency and performance).

More generally on MPF we would expect that as volumes increase scale economies and learning will lead to improved process and industrialisation.

3.6 IT cost reductions

We see a number of IT changes in the next 2-3 years that will help drive efficiency and reduce IT related costs

- It may be (depending on the outcome of Ofcom's current considerations) that Openreach will no longer have to meet certain system separation requirements. We would expect that this will reduce costs by £10s millions
- It is likely that WLR2 will be closed down in 2010 or 2011. This should reduce both the IT cost involved in maintaining this system as well as service management costs required in operating dual systems/processes
- As BT Retail completes its migration to WLR as part of its Undertakings commitments it is likely that Openreach costs will reduce

3.7 Defined benefits scheme inefficient

The fact the BT has closed its Defined Benefits scheme to new employees (and many other companies have also closed schemes to new joiners) suggests that the scheme may not be efficient on a forward looking basis, in that the company can recruit and retain staff at a lower cost without offering new employees participation Defined Benefits scheme. Any impact of past inefficiencies and previous inefficient decisions should not be passed onto customers today through inflated wholesale prices.

3.8 Current pricing regime

Another factor that contributes to the conclusion that Openreach has the potential for high (and higher) efficiency improvement is the current regulatory pricing regime which probably has not incentivised efficiency as much as the future charge control structure will. The nature of the current price regulation on MPF and WLR (i.e. not a charge control but charges that can be re-determined) does not create a strong incentive for efficiency since BT will have thought that efficiency improvements could have been 'taken back' in a price review. Ofcom recognised this dynamic when it commented "*Charges that are re-determined regularly … provide the dominant provider with limited incentives towards cost minimisation ….*[59]".

[59] http://www.ofcom.org.uk/consult/condocs/rwlam/statement/rwlam161204.pdf § 9.151

3.9 International benchmarks

Attached in Appendix D is a report from Dr Chris Doyle[60] an economist at Warwick Business School examining international benchmarking evidence used by Ofcom.

Dr Doyle reached the conclusion that:

> "*The international benchmarking data when assessed in a wider context indicate that Openreach is performing below its full potential. Put differently, Openreach is delivering services at claimed costs which are too high relative to potential. I conclude that either BT is much less efficient than it should be, or it is exaggerating its costs or it is being allowed to make excess profits by the regulator. The case for the 18% to 36% increases proposed by Ofcom over the next 3 years – given prices are expected to be flat elsewhere – run counter to the evidence and if they are imposed will mean that by 2012 the UK would be languishing towards the bottom of the price league,*"

His conclusion reflects the fact that *prima facie* one would expect Openreach to be a lower cost operator than all/most other European incumbents since:

- competition, privatisation and regulation has been in place longer
- the UK has a relatively high population density
- and the UK size should allow it to enjoy scale economies compared to other smaller European countries.

We believe his conclusions are valid. Either Openreach's true costs are what they claim in which case they are highly inefficient or Openreach's true costs are lower than Ofcom have said in which case their costs have been exaggerated. Either way, wholesale charges should not be set on the basis of the costs provided and, if anything, MPF prices should be reduced going forward if they are to reflect the true underlying costs.

His report also implies that there is a greater need for closer scrutiny of the costs including transparency to allow other stakeholders to scrutinise the costs – something that has been severely lacking in this consultation.

3.10 International benchmarks – BT's approach

Ofcom have described in the document an alternative benchmarking approach that BT provided to assess whether the price of MPF is appropriate or not based on creating a basket including MPF as well as space and power costs. To use this approach would be absurd. The question is whether MPF prices in the UK are reasonable (or not). Adding the cost of power and space into the mix is about as sensible as including the price of ice creams. The price of space and power is irrelevant to what the appropriate price/cost of MPF is[61] in the same way that the

[60] Dr. Chris Doyle is an economist specialising in regulation and competition issues relevant to network industries in general and telecommunications in particular. He obtained a PhD in Economics from Warwick University where he is an Associate of the Centre for Management under Regulation at Warwick Business School and an Associate Fellow in the Department of Economics

[61] The only circumstances where it would be relevant to reflect the cost of space and power would be if certain cost elements were in some countries included in the price of MPF and in other countries in the price of space/power. However, absent any evidence that this is the case the price of space/power is irrelevant

price of ice creams is irrelevant as well. All this approach achieves is to add unnecessary complexity and confusion. Space and power price comparisons might be a useful comparator for assessing the appropriate price of space and power but not the price of MPF.

3.11 Efficiency improvements in costs not controlled/incurred by Openreach

Openreach does not control all the costs that are included in the CRS costs. For instance, there is an allocation of corporate overhead from Group and line cards are provided by BT Operate. However, this organisational structure should in no way reduce the efficiency assumption used. The obligation to be efficient is on BT not just Openreach. The way BT organise themselves internally should not be an excuse or reason to reduce the efficiency gain. We note that in Table 10.5 a lower efficiency rate is applied to 'corporate overheads'. There is no reason provided for this. We see no reason why it should be any less than is applied to other cost items.

3.12 Cost of improvements

We accept that in some circumstances there is a need to invest in order to gain efficiency improvements (for example, IT, redundancies). However, given the large IT capex programme in place and natural churn there should be limited extra cost involved.

4. Fault rate

The fault rate assumption is critical to the costs since some 30% of the costs are fault related. Ofcom have forecast a fault rate reduction of 4% to 6% per year although there is little reasoning or evidence to support this approach. We believe that this is a conservative/low forecast for what could be achieved and realistically a 5% to 10% reduction is achievable. We have a number of reasons to support this view which are explained below.

Even with a 4% to 6% improvement BT will remain significantly worse than best practice

- Current fault level is about 0.12[62] per line per year or more almost twice the best practice level of 0.06 (see Appendix A1)
- Ofcom's proposed improvement of 4% to 6% per year will mean the fault level will be about 0.09 which is still some 50% above best practice (or more if it is assumed that best practice improves)

BT has said to its shareholders that it is planning a 10% to 20% decline

- "*A lot of that has been through improving customer service, proactive work on the network, for instance we saved 140,000 repair visits this quarter, that means if you have got a line with BT whether directly or indirectly, on average, a line will go wrong once every 11 years. That's an improvement of once every ten years so we are improving fault rates and that is very important, and that meant the EBITDA has risen 4%.* "[63] Given the number of faults reported by Openreach were approximately 2.75m this reduction of 140k equates to a 5% reduction in 3 months
- "Our investment in service has led to continued improvements in lead times, with the average time reduced by 24 per cent, and the number of access faults decreasing by 21 per cent compared with last year"[64]

There are a number of operating initiatives that suggest the potential for substantial improvement.

- Over the last couple of years Openreach has started preventative maintenance programmes to reduce the level of faults including uplifting fault prone nodes, sealing down joints to reduce water damage and replacing outdated "blue bean" connectors with superior "no break" connectors. This is an on-going programme and so one would expect that the benefits of this (through lower fault rates) to increase over time
- Many elements of BT's Right First Time programme such as better information, improved diagnostics, better job closure information will reduce fault rates particularly repeat faults
- The recent introduction (2008) of SLGs on fault repair will increase the incentive to reduce fault rates

[62] Assumes 2.85m pa – averages BT's quoted figure of 2.75m faults per year and Chart A10.1 which implies 2.95m per year
[63] Transcript of 2nd quarter 2008/9 results presentation BT CEO, Ian Livingston
[64] Press release 2nd quarter 2008/9

5. WACC

The weighted average cost of capital that is used to calculate the allowable return on capital has a very significant impact on cost and price – a 1 percentage point reduction reduces the cost and price by around £3 per line.

We continue to believe that the most robust method of estimating Openreach's cost of capital is benchmarking against similarly regulated utility companies as set out in our previous submission (and making appropriate adjustments). Ofcom's approach of deriving the cost of capital for Openreach based on BT Group with a small, arbitrary and unsourced / unevidenced differential is wholly inappropriate given the substantially different risk characteristics of other parts of BT. Ofcom has provided no reasoning (cogent or otherwise) as to why its method is appropriate either in principle or in practice. We believe Ofcom's approach and result is fundamentally flawed resulting in a substantially over-estimated WACC.

Below we present our view of the appropriate cost of capital which is based using the CAPM pricing model but with assumptions based on utility benchmarks. This reflects some slight upward adjustments that we have made to certain assumptions to reflect recent developments. This provides a sensible and rational range for CRS WACC of 6.3% to 7.4%. The low level reflects the lower projected inflation rate (1%) going forward which reduces the cost of capital.

Figure 5a: WACC projections

	Ofcom		**TTG**	
	low	**high**	**low**	**high**
Inflation assumption	3.0%	3.0%	1.0%	1.0%
Risk free rate (real)	1.1%	1.7%	2.0%	2.5%
Risk free rate	4.1%	4.8%	3.0%	3.5%
Equity risk premium	4.5%	5.0%	4.5%	4.5%
Equity beta	0.75	0.85	0.70	1.00
Cost of equity (post tax)	7.5%	9.0%	6.2%	8.0%
Debt premium	2.0%	3.0%	1.0%	1.4%
Cost of debt (pre tax)	7.0%	7.5%	4.0%	4.9%
Corporate tax rate	28.0%	28.0%	28.0%	28.0%
Cost of debt (post tax)	5.0%	5.5%	2.9%	3.5%
Gearing	35.0%	35.0%	50.0%	60.0%
WACC (post tax)	6.5%	7.5%	4.5%	5.3%
WACC (pre tax)	**9.25%**	**10.75%**	**6.3%**	**7.4%**
WACC (pre-tax - real)	6.1%	7.5%	5.2%	6.3%

6. Other assumptions

In this section we comment on a number of the other assumptions that have been (or should have been) used to calculate the costs. In some cases we have commented on the actual assumption but in many cases since the actual assumptions were not made transparent or explicit we are left to comment without reference to the assumption made.

6.1 WLR costs under 21CN

Above we presented an analysis that suggested that the correct cost in 2012/13 for WLR should be more than £35 greater than MPF. The table is repeated below (Figure 6a).

Figure 6a: Cost difference per year between MPF and WLR (2012/13)

cost element	£ pa	Description
d-side	3.25	Line length adjustment (6% of d-side)
migration/transfer	5.70	annualised cost of transfer from 20CN
tie cables	1.97	cost of '21CN tie cable'
frames	0.00	no difference if MPF / xMPF use evoTAM and single jumper
line card	16.56	cost of only voice provided on MSAN
backhaul	5.00	Estimate
directories	1.83	no directory cost in MPF
service, sales, systems	4.00	estimate: since WLR more complex
TOTAL	38.31	

Ofcom has concluded that the difference should be only £10. This suggests that Ofcom have forgotten to include has ignored certain costs that should be included. We cannot tell whether these have been included and (if they have) whether the assumptions are appropriate since Ofcom has refused to provide the transparency to allow this. Whatever the approach Ofcom have taken, they have provided no cogent evidence and reasoning for the results it produces. The fact the current price differential is insufficient is confirmed by BT's withdrawal of its WVC voice product (which was using xMPF/MPF as an input) since BT said it was unable to recover its costs if it priced the service at WVC levels.

Below we describe the additional costs and/or relative cost change for the WLR service that will result from the move to greater equivalence (e.g. BT consuming MPF) and the different cost structure of 21CN. The key ones are:

- D-side cable. Ofcom assumes that the average length and cost of an MPF line is 6% less than an average WLR Residential line. This equates to ~£3 per year
- Transfer engineering cost. BT is planning to migrate customers from 20CN to 21CN. Much of this will be a forced migration. In this case BT will be unable to recover the migration/transfer costs from the WLR customer and so must recover them in the WLR rental charge. This equates to ~£6 rental charge[65]

[65] assuming economic life 10 years (needs to reflect churn to other networks), WACC of 10% (Ofcom mid-range). Charge £35 based on typical charge for LLUO transferring from WLR to their own NGN –

- Tie cables. WLR under 21CN will use '21CN tie cable' which include an in-line evoTAM. The cost of these must be recovered in WLR rental charge. The cost is about £2[66]
- Frames. In the current cost stack the cost of frames for MPF is approximately twice as much as for WLR. We think this reflects that fact that MPF involves two jumpers rather than the one that is used in WLR. TalkTalk is currently considering moving to 21CN tie cables which will remove the need for the extra jumper and so there will be no difference in the frames cost between MPF and WLR. We understand BT are planning to use 21CN tie cables for 21CN
- Line card. Obviously WLR requires a line card. MPF does not. We use a figure of £17 which is based on data in the consultation (§A10.79). Given the WLR service may be used standalone we think it appropriate that the WLR service includes the full cost of a line card in the case where it is used alone. This is discussed in Frontier's paper in Appendix B
- Backhaul: The WLR service requires some backhaul. MPF does not. We estimate the cost to be around £5
- Directories. As Ofcom recognised itself the WLR service includes a directory cost. MPF does not
- Service, sales and systems. WLR is a more complex service, with additional features and capabilities over and above MPF. This would imply additional costs in systems, sales and service management. We estimate this at £4
- Other: We believe that there are other costs that may need to be included such as testing, MSAN itself, accommodation for the MSAN and duplicated accommodation running MSAN and DLE. We have included no estimate for these since we do not have sufficient data (though Ofcom should)

We would expect Ofcom to fully explain the assumptions it is using, the basis for these and open up this analysis to external scrutiny prior to setting any charges.

6.2 Overall volumes

The overall number of lines is an important assumption since given the high number of costs that are fixed a reduction in lines results in a rise in unit costs. Ofcom have projected a 3% to 6% reduction in the number of lines over the next 4 years. We think this is far too large and believe the most likely outcome is that the number of lines will stay broadly flat.

Generally there are several trends driving the total number of lines: growth in total housing, fixed to mobile substitution, competition (from cable) and the number of second lines. Our view on these key drivers is summarised below. A more detailed description is provided in Appendix A3

- We see the fixed to mobile substitution decline slowing and possibly reversing. Fixed to mobile substitution has been driven historically by mobile voice substitution. Whilst there may be some substitution from mobile data this effect is both small (<10% of all mobile data subscriptions). More importantly, the

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even if BT were using a cheaper product Ofcom must consider whether to allow a level playing field the BT cost must be based on the cost to non-BT operators

[66] For 64-pair tie-cable connection charge £510 (~£83 pa assuming 10 years, 10%) plus rental £43 pa equates to £1.97 per line

increasing use of broadband to enjoy high speed/capacity services such as iPlayer and Canvas will result in some mobile only homes taking up a fixed line given the higher (and more cost effective) speeds that fixed broadband can provide

- Competition from cable is unlikely to change in any significant way and further reduce the number of BT lines
- Whilst there might be a reduction in the number of second lines due to fewer faxes it is important to recognise that there are only about 300,000 active second lines in the UK today[67] or about 1% of all lines (obviously Ofcom can confirm this figure with Openreach). Thus the impact of this decline will be small.
- The increasing use of bonded DSL (to increase aggregate broadband speed into homes and business) will increase the number of second lines. Our research shows that between [[REDACTED]] of broadband homes are interested in this proposition. The interest in this will increase as faster video services which require higher speeds become available which may imply a 2% to 5% increase in the number of lines 2012/13[68]. We can provide market research to support these conclusions

6.3 Mix of lines, shift to MPF

Although Ofcom have revised downwards its original estimates of the shift to MPF and particularly the move to 21CN the numbers still look significantly over-estimated

The number of MPF lines includes a large shift to 21CN including 9m lines[69] in 2012/13 using MPF or xMPF[70] – where BT provide a bundled voice and broadband service on MPF (e.g. WBCC) or a new voice-only service on xMPF (e.g. WVC). This represents a massive transformation. We do not think these forecasts make sense for a number of reasons:

- In the last 6 months, BT Wholesale has first further delayed its roll-out of Wholesale Voice Connect (WVC) and Wholesale Broadband Connect Converged (WBCC) products, and more recently put its entire strategy for future voice products under review
- The forecasts imply 3m to 4m voice-only lines on MPF. This development would require an xMPF product. The product does not exist today. There are on-going industry wide discussions on-going and even with a fair wind there will no even be the first steps of development until the R1200 release in November
- Furthermore, it is likely that BT will not be able to launch any converged product (e.g. WBCC) that uses MPF until the current inclarity over xMPF is resolved
- Given the voice product on 21CN is similar to that on 20CN there is little incentive for wholesale customers to migrate. Thus to encourage the migration BT will have to absorb the cost and possibly provide incentives to allow the migration to happen.
- The physical roll-out of 21CN equipment is continuing to face delays

[67] based on discussion with Openreach in 2008
[68] [[REDACTED]]
[69] it may be that some of the WLR lines will be provided on 21CN
[70] Ofcom confirmed that the projection for MPF included so-called xMPF lines i.e. lines being used to provide voice-only but with the wholesale service not being WLR3

- The migration to MPF/xMPF does not seem to reflect the pricing that Ofcom is proposing for these services. At the prices Ofcom is proposing the incentive to move to MPF from WLR/SMPF is weakened. Ofcom recognised the impact of the price on operator behaviour when it has concluded in it analysis on rebalancing that if the price difference between MPF and WLR was too high it would encourage an inefficient level of uptake of MPF[71].

Furthermore, the transition to MPF by non-BT operators is likely to be slower than Ofcom forecast since at the wholesale prices that Ofcom has proposed (with a narrowed MPF vs. WLR margin) the commercial case for moving to MPF is weakened. We estimate that at today's wholesale prices the costs of providing broadband plus voice over MPF is about [[REDACTED]] than using WLR and SMPF. This will reduce to about [[REDACTED]] under the new proposed wholesale prices. Given the cost of transitioning – ~£35 connection charge to Openreach plus other costs such as re-engineering and possibly having to get a customer permission the case for transition becomes more marginal. Appendix A3

We provide some additional analysis of the mix of lines in Appendix A3.

6.4 CVRs

The other key assumption that is related to volume is how costs move as a result of changes in volume. It appears that in the costs model for a 10% reduction in volumes there is a 2% reduction in (operating) costs implying a CVR of 0.2. Yet this is inconsistent with the LRIC data that suggests a CVR is 0.55 which implies a 5.5% reduction in costs for a 10% reduction in volumes. Generally CVRs are under-estimated since many costs categories are treated as fixed even though a portion of them are in reality variable.

6.5 Inflation and energy/copper prices

Ofcom carried out, we believe, the analysis that it presents in the Second Consultation document based upon information that Openreach made available to Ofcom in the period up to the end of summer 2008. It is clear that it would now be wholly inappropriate to use projections of the values of key inputs into Openreach's cost base derived from this period. In particular, as described below, the assumptions about inflation, energy costs, staff costs, and commodity prices are far above those that should now be expected during the next charge control period.

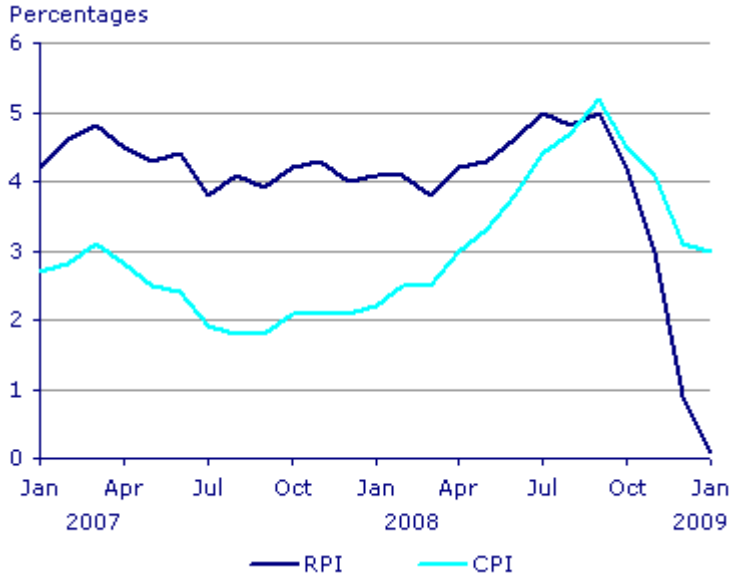
As an evidence-based regulator, Ofcom should (and, in fact, has a duty to) take these changes into account in its analysis as they are likely to have a very material impact on Openreach's overall level of costs.

RPI inflation

The model implicitly uses a 3% inflation rate. It is looking as if the inflation rate will be much much lower than this. In January the RPI inflation rate fell dramatically to 0.1% (i.e. the average increase in prices from Feb 08 to Jan 09 was 0.1%) (see Figure 6b).

[71] For the avoidance of doubt we wholly disagree with Ofcom's suggestion that the price difference between MPF and WLR is too low high

Figure 6b: Inflation rates



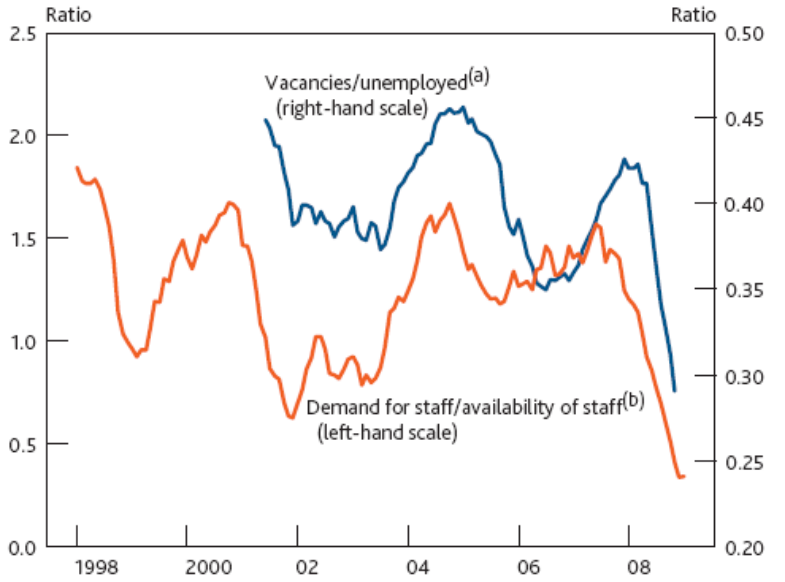
Predicting the inflation rate going forward is extremely difficult (one of the reasons we think this review should be postponed. However, should Ofcom decide not to postpone we think that the following assumptions should be used for inflation in the cost modelling

- The RPI inflation rate used to index from 08/09 to 09/10 costs in the model should be around 0% or slightly negative
- Over the period of the price control inflation is likely to average about 1%

We would expect this reduction to result in a reduction in most costs. For example, the pay deal for much of the workforce is based on an RPI + X formula[72] and we understand that cumulo rates is indexed to inflation. Other prices although not directly linked to RPI in a mechanistic way are likely to reduce in line with RPI. More generally, the weaker demand environment and increasing unemployment should act to moderate increases in prices and wages (as indicated by the diagram below).

[72] BT's current settlement for CWU represented grades was calculated as RPI+0.5%

Figure 6c: Indicators of labour market tightness



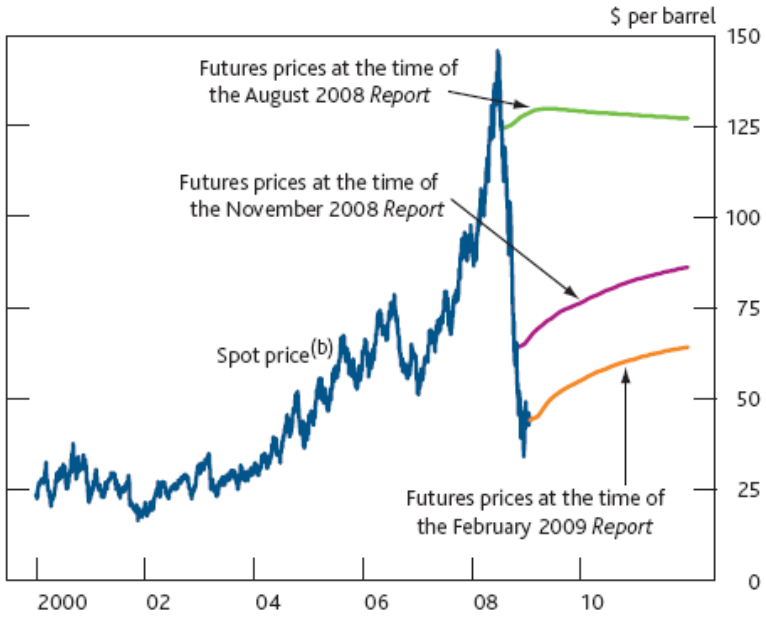
Sources: KPMG/REC and ONS (including Labour Force Survey).

(a) Number of vacancies divided by LFS unemployment. Vacancies exclude agriculture, forestry and fishing.
(b) The KPMG/REC demand for staff index divided by the KPMG/REC availability of staff index.

Copper / energy prices

Clearly over the last 6 months commodity prices have fallen dramatically particularly copper and energy prices which have a large impact on Openreach's costs. The exhibit below (from the Bank of England) shows how oil prices have fallen dramatically since the point at which the current cost estimates were made (i.e. Sept/Oct 2008).

Figure 6d: Oil price



Sources: Bloomberg and Thomson Datastream.

(a) Futures prices for August 2008, November 2008 and February 2009 are averages during the fifteen working days to 6 August 2008, 5 November 2008 and 4 February 2009, respectively.
(b) Brent forward price for delivery in 10–21 days' time.

It is essential that energy and copper prices are updated.

Similarly copper prices have fallen by over 60% since a year ago and 50% since when the cost estimates were made

Figure 6e: Copper price (grade A)

We accept that a reduction in the inflation rate below the 3% trend and reductions in other prices (such as energy and copper) may result in a holding loss[73] which

[73] this results from the need to offset the reduction in CCA depreciation that results from a downwards valuation of the asset value. This offset is required to allow BT to fully recover its investment through depreciation, holding gains/losses and return on capital employed

increases the CCA FAC cost. However, this increase should be smoothed out over a number of years to provide BT with an adequate return but avoiding price volatility. This smoothing approach been done using the Common Cost Normalisation Approach in the Leased Line Charge Control. We feel it is appropriate since smoothing avoids wholesale price volatility resulting from a one-off change caused by the recession.

6.6 Pension costs

Pension costs (excluding any pension deficit contribution) are (we understand) included in the pay costs.

In November 2008, BT announced a number of changes to its pension fund, which it expected to realise up to £100m a year of cost savings. On 11 November 2008, union leaders announced support for these changes. BT is to increase retirement ages, calculate pension based upon average rather than final salary, and increase the number of contributions required. This is clearly a material change – we estimate that correcting this would result in around a £1 reduction per line per year.

It is important that Ofcom considers the impact of these changes on pension costs before finalising Openreach's regulated prices.

6.7 Pension deficit contribution

BT have suggested that the pension deficit contribution should be included in the costs – though it has offered no reasoning (cogent or otherwise) aside of trying to draw analogies from other utility industries. Including this cost would be simply wrong.

We have explained our reasoning below.

Pension deficits do not reflect forward looking costs

All the costs uses in setting charges should be forward looking. Pension deficit contributions relate to past labour inputs and hence do not reflect forward looking costs. Therefore, inclusion of these costs would result in inefficient investment as prices would be set above forward looking costs. This inefficient investment could be made by BT itself or by competitors to BT, given that the market is contestable.

The importance of the use of forward looking costs in telecommunications regulation is well established with Oftel stating in 1995:

> "*Oftel believes that forward looking costs are the correct basis for setting charges, because they provide more efficient signals for pricing, investment and entry than historic costs*."

Since 1995 Oftel and then Ofcom has consistently used forward looking costs as the basis for setting charges.

The glossary to the document defines 'Forward-looking Costs' as:

> "*An assessment of costs on the basis that any costs which arise from past decisions should be ignored when calculating the profitability of current and future decisions. As well as future operational costs, the costs of maintaining and replacing assets are included*."

This is clearly consistent with the exclusion of pension deficit contributions.

There are two further related reasons for excluding pension deficit contributions:

- As BT's future returns would include an element of the pension deficit contribution (which is a fixed cost), BT would be given an additional incentive to expand the cost base of the regulated services, and hence recover a greater proportion of the pension deficit contribution from the regulated services.
- By setting regulated price levels at a level above forward looking costs competitive providers (or BT) may decide to invest in alternative infrastructure, even where regulated access network is more efficient on a forward looking basis. Conversely if and when the scheme moved into surplus, with a consequent reduction in pension contributions, the setting of prices below a forward looking level could deter efficient investment in alternative infrastructure. The uncertainty and volatility that would be introduced in future wholesale prices by the inclusion of pension deficit contributions (or reductions in pension contributions due to surplus) could distort investment in both the access network and downstream markets.

The Defined Benefits scheme may not be an efficient form of compensation

The fact the BT has closed its Defined Benefits ("DB") scheme to new employees and many other companies have closed schemes to new joiners suggests that the scheme may not be efficient on a forward looking basis, in that the company can recruit and retain staff at a lower cost without offering new employees a Defined Benefits scheme.

In addition the deficit may in part reflect past staffing levels which were in themselves inefficient (with BT having significantly higher relative staffing levels than European peers in the 1980s). Any impact of past inefficiencies should not be passed onto current customers.

Upside and downside risks associated with operating a DB scheme should be borne by investors

Operating a Defined Benefits pension scheme, where the assets and liabilities of the scheme are not close matched, increases the risk of the company overall. Consistently including payments to reduce the pension deficit in the regulatory cost base, or reducing the regulatory cost base to reflect surpluses, would clearly reduce the risk for investors by transferring this risk to wholesale customers.

Such a transfer of risk would be inequitable as investors can diversify and hedge the risks associated with the DB scheme, or indeed avoid the risk altogether by investing elsewhere, while many wholesale customers have little or no choice in their access provider. Given that the DB scheme was in place at the time of privatisation, BT's

investors should have taken into account the risks associated the DB scheme when making investment decisions.

Furthermore it is unclear whether the treatment of pension surpluses and pension deficit has been, and would be, symmetric if pension deficit contributions were included. This raises the risk that customers would pay the deficits while investors would enjoy the benefits of surpluses. Indeed the potential asymmetric treatment of pension contributions could provide BT with incentives to reduce pension contributions below the expected sustainable level when the plan is in surplus in order to maximise contributions from wholesale customers/competitors.

No material impact on risks of insolvency

Another consideration as to why to not include these costs is that if the scheme was not funded BT could become insolvent which would impact the operation of Openreach. However, the inclusion of pension deficit contributions in the cost base will not have a material impact on risks of insolvency

At the limit, deficits in BT's DB scheme, in the same way as losses in BT's operating businesses outside Openreach, could lead to BT's insolvency. This could potentially increase costs and lead to service degradation for Openreach customers. However the £52 million annual contribution to reducing the deficit included by BT would not materially reduce the risk of insolvency given the size of the pension scheme liabilities (of the order of £40 billion). Indeed it is not clear that any contribution would directly lead to a corresponding increase in free cash flow nor that any increase in free cash flow would be used to increase the level of equity, as opposed to increasing the level of dividend payments.

Differences between Openreach and other regulated utilities

BT have suggested (actually their only reason) that pension deficit contributions should be included since they have been included by other regulators. However, while other utility regulators have included payments to reduce pension deficits in the regulatory cost base for setting prices, the context in which these companies are regulated is significantly different and therefore it would be wrong to use this parallel:

- The markets in which the other utilities operate are typically not contestable and as such the potential inefficiencies due to not setting prices based on forward looking costs is much lower.
- The regulated businesses make up a larger proportion of the companies' operating businesses. Thus inclusion of pension deficit contributions in the regulated cost base will have a more direct impact on the ability of the regulated company to fund the pension deficit.
- Other regulators have created the expectation that pension fund deficits will be included in the regulated asset base. Ofcom (and previously Oftel) have consistently set prices on the basis of forward looking costs or have encouraged competition and a consequent withdrawal of price regulation. Investors in BT have not had the expectation (or should not have reasonably had the expectation) that pension fund deficits would be recovered from the operating businesses of BT and as such inclusion of pension deficit contributions would result in a windfall gain for investors.

Furthermore, it is worth noting the recent Hooper report on the future of the Royal Mail which will mean the pension deficit contributions are no longer funded by the operating business. Hopper's report recommended that the pension scheme is completely separated from the operating businesses with the result that in the future wholesale and retail charges will no longer include any pension deficit contributions, in part because of concerns that the higher prices implied by the pension deficit contributions may be causing customers to inefficiently use substitutes to mail, accelerating market decline.

Summary

In summary, BT are suggesting that wholesale prices are set to cover BT's previous under-funding of its pension scheme. To now burden existing customers with this previous business decision would be morally, economically and legally grossly unreasonable. If this was allowed it would effectively mean that during periods of surplus BT's shareholders can keep the surplus but when the pension is in deficit it wants customers to pay the extra!

6.8 Other adjustments

It was notable that in the Leased Line Charge Control (LLCC) Ofcom's analysis included (quite appropriately) many corrections made on detailed assumptions such as attribution bases, payment terms and rebalancing internal and external costs/prices (Tables A8.2 and A8.7). As far as we can tell none of these type of adjustments has been made on the CRS costs even though CRS revenues are about 2½ times larger than that of leased lines. We would expect Ofcom to properly check these items.

6.9 Asset charges (depreciation and return on capital employed)

The consultation document provides very little transparency of the assumptions and basis for fixed asset related charges (depreciation, holding gains and losses, the RAV adjustment and the calculation of holding gains and losses, mean capital employed). For example the discussion on fixed asset additions is limited to one page and Ofcom appear to have accepted (without adjustment) all of BT's assumptions relating to fixed asset expenditure.

In our view this is an area that warrants special attention because the estimated costs show an increase in unit depreciation costs from £10 per MPF line in 2007/8 to £24 in 2012/13. In our view, this cost would, in a steady state be expected to increase with inflation from the £10 to say £11. Given the size of the increase in depreciation costs (and mean capital employed), it is reasonable to expect a full and detailed justification. Whilst Ofcom indicate that there are various adjustments that contribute to this increase, there is breakdown of this increase in costs or analysis that demonstrates that this increase in costs is reasonable.

In order for us to understand BT's and Ofcom's calculations for fixed asset related charges, we asked for detailed schedules showing the workings of the RAV adjustment, calculation of holding gains and losses, depreciation calculations and fixed asset additions and retirements.

Ofcom have provided us with summary schedules of historic and current costs for Openreach, the Core Rental Services and various asset categories. Whilst helpful, these schedules do not allow us to fully understand how BT's model calculates capex charges or whether or not they are reasonable. In particular:

- The schedules do not provide the details of gross costs and depreciation that we requested
- Information for different asset categories was provided for BT Openreach, not for CRS as requested
- No details are provided of the workings of the RAV adjustment
- No details are provided of the holding gains or losses
- The schedules give rise to a number of other queries which we have not yet had a chance to discuss with Ofcom
- Data was requested for 2007/8 (i.e. actuals) as well as forecast, in order to assess reasonableness against actuals. This was not provided.
- The information does not agree to data contained in the consultation document and the Regulatory Accounts.

Our preliminary analysis, based on a limited review of the schedules, have raised further issues:

- It is not apparent how the fixed asset schedules of Openreach reconcile to those in the Regulatory Accounts or in the reconciliation between BT's model and the Regulatory Accounts shown in the consultation document[74]
- The schedules show no details of asset retirement or sales, yet we know that BT does sell scrap copper and that the number of lines is declining.
- There is a large increase in working capital in 2008/9 (£206m) which is not explained. For CRS net working capital is assumed to increase from -£122m to -£7m. This equates to an increase in allowed ROCE of £11.5m for CRS.
- Why does the average depreciation charge in Openreach HCA increase from 9% (of opening NBV) to 10.5%?
- The CCA-RAV schedules do not appear to include holding gains or losses – how are these treated?
- Fixed asset additions in the schedules do not appear to agree to those in the consultation document[75]. For example in the consultation document dropwire additions in 2012/13 are stated to be £155m for dropwires, in the schedule the total capex for Openreach dropwires in 2012/13 is £169m.
- The CRS proportion of total fixed asset additions increases from 69% in 2008/9 to 71% in 2012/13. We would expect this proportion to decline as Openreach develops its 21CN network and CRS volumes decline.
- Overall capex for copper and duct is shown to decrease between 2008/9 and 2009/10 and then increase. What is the reason for this (particularly given projected declining local loop volumes)?

[74] Table A9.4
[75] Paragraph A10.109

For the following reasons we have not been able to conclude on whether or not Ofcom's calculations of fixed asset related costs are reasonable or not:

- Ofcom has calculated a very significant increase in depreciation costs. This has not been fully explained or justified.
- We were not able to examine the detailed models behind the calculation of fixed asset charges.
- We have undertaken a preliminary review of the additional information provided by Ofcom. This has raised a number of significant queries which we have not had a chance to put to Ofcom.

Therefore we have unable to properly assess Ofcom's assumptions for MCE, fixed assets and depreciation because we have not been provided with details of the RAV model. Ofcom have offered to discuss these issues further with us after the closing date for responses. Obviously on the basis of this we may have more comments to make. However, we believe that even after this limited sharing of information there will remain an information deficiency.

6.10 Working capital

The cost of funding the working capital requirements of BT's services should be included in charge control calculations through the allowed return on capital employed. The Mean Capital Employed calculation typically includes internal and external debtors and creditors. This is an area of the regulatory accounts which, in the past, has been found to require adjustment for the purpose of calculating costs relevant for a charge control.

The Consultation Document makes no reference at all to working capital, and no detailed breakdown is given on the assumptions for working capital included in either the Base Year calculation or forecasts. The working capital balances for the Wholesale Local Access Market included in the Regulatory Accounts are set out in Figure 6f below.

Figure 6f: Wholesale Local Access - Working Capital

£m		2006/7	2007/8
Internal Revenue		0	0
External Revenue		244	316
Total Revenue		**244**	**316**
Internal Debtors		39	37
External Debtors		2	10
Total Debtors		**41**	**47**
Implied Debtor Days			
Internal Debtors		n/a	n/a
External Debtors		3	12
Total Debtors		**61**	**54**
Short term liabilities			
Internal		0	0
External		-55	-106
Total short term liabilities		**-55**	**-106**
Net Current Assets		**-14**	**-59**

Source: RGL analysis of BT's Regulatory Accounts

In 2007/8, BT changed some of its calculations relating to internal (notional) debtors:

> "*The calculation of notional debtors in the 2008 Current Cost Financial Statements have been changed to reflect equivalent settlement terms experienced by BT with its external customers. The comparatives have not been restated to reflect this change in calculation*."[76]

The notes to the Regulatory Accounts also state:

> "*Working Capital: The figures for debtors and creditors include an approximation of the internal "notional" debtors and creditors that would be incurred if trades between BT's lines of business were undertaken to a third party and at arms length. They are based upon the average trading terms of BT Group's external trades. External debtors reflect BT's external debts being allocated to services and products*." [77]

Our analysis of the working capital balances included in the regulatory accounts for wholesale local access raise a number of queries which need be addressed before it is possible to comment on the reasonableness or otherwise:

- Why are there any internal debtors if there are no internal sales?
- On what basis have internal and external debtors been assumed?
- What are external short term liabilities?
- How have working capital balances been calculated in the Base Year in BT's model?

[76] BT's 2007/8 Regulatory Accounts Page 11
[77] BT's 2007/8 Regulatory Accounts Page 16

- What assumptions have been made for working capital balances in BT's estimates?
- How have working capital balances been allocated across difference services in BT's model?
- Do external debtor balances reflect actual working capital balances, contractual payment terms, or some other basis?

6.11 Cost of developing xMPF

It may well be appropriate to include the cost of developing xMPF. xMPF may require a small increase in Openreach's fixed development and systems costs. Since xMPF is of benefit to all voice and broadband customers it is appropriate to spread this cost across all lines. This adjustment can be made in the costs once it has become apparent as to the actual development path for xMPF.

6.12 Other

There are a number of other assumptions that Ofcom need to review

- *BT Retail SLG payments.* We note that the KPMG report identified a charge to Openreach which was to cover the SLG payments to BT Retail. This cost should be removed and replaced by the efficient SLG cost as discussed in §A10.80. It is unclear whether this has been done
- *Costs of operational separation.* We are unsure how the costs of operational separation and other costs involved in implementing the Undertakings have been treated. We believe that these costs are not allowable in the recoverable costs of Openreach charges (as we highlighted in the previous submission). Given the high cost of developing new systems and organisations if these costs have not been treated correctly then £10s million of excess cost might be included in Openreach's costs. Ofcom needs to be transparent about how these costs are treated
- *Counting Featureline, Telex as MPF lines*. We understand that in the modelling BT's Featureline, Featurenet and Telex services are counted as 'using' MPF. In reality they do not. The only BT service that consumers MPF is SDSL. The number of lines treated in this way is about 400,000 lines[78]. We accept that for modelling it is sometimes sensible to do make simplifying assumptions (such as this). However, it is not clear what the impact of this simplifying assumption is. For instance, if these lines cost a high amount to provide (e.g. due to the cost of number management services) then this would inflate the cost of services categorised as 'MPF'. Ofcom must understand the impact of this simplifying assumption and if appropriate model these services separately and explicitly
- *Historic capitalisation of IT costs.* Ofcom have pointed out (§5.15) that there has previously been a low capitalisation of IT assets (and consequently low depreciation) resulting from BT categorising the costs as work-in-progress (WIP). Assuming that the right treatment was to capitalise at the time, this treatment may lead to excessive cost being accrued in the control charge period since some of this cost should have been expensed in the previous period (when, for BT had sufficient profit to cover it)

[78] Total internal MPF lines 08/09 is 0.4m. There are only about 20,000 SDSL lines

6.13 Move to geographic de-averaging of prices

In our first consultation response, we highlighted that it may be appropriate to move to geographic de-averaged costs which would reduce MPF charges by as much as £10. We were disappointed that in the consultation Ofcom did not discuss at all this very material issue or provide cogent evidence and reasoning for their approach.

At the moment Openreach's access products (MPF, WLR, SMPF) are charged at a single (averaged) price across the UK (excluding Hull). De-averaging prices will improve allocative efficiency by ensuring that prices are close/closer to cost. This ensures that all consumers who value a product at more than its cost are able to purchase it.

Ofcom considered the issue of geographic-de-averaging of access products in the LLU Review[79] in 2005 but decided against on the basis of affordability and practicality issues. Given the wide breadth of this review of Openreach's prices and that Openreach as had over 2½ years to 'bed down' following its creation we believe that Ofcom should now seriously reconsider whether it would be in consumers interests to move to de-averaged prices. We estimate that a move to geographic de-averaging would probably result in a reduction in the cost per line for lines used by LLU by 10% to 15%[80].

6.14 Impact of NGA

BT has been subtly suggesting that unless it gets a high/excessive price for LLU/WLR services it will not invest in NGA. This 'pressuring' of Ofcom is both morally and economically wrong and if allowed would effectively penalise all DSL broadband customers by imposing a tax on them to fund BT's fibre investments.

In its response to the First Consultation document, BT wrote that "*a settlement which does not look at the sustainability of all elements in the telecoms value chain will inevitably raise significant questions for the very substantial ongoing investment demanded to support the existing infrastructure as well as the financial viability of any future large scale projects such as the deployment of NGA networks*" .

More recently, BT has made a connection in public between the achievement of a favourable settlement on the Openreach Financial Framework, and its willingness to invest in NGA. Whilst it is of course perfectly appropriate that Openreach be allowed to make returns that give it a fair return on its investments, such an approach (as suggested above by BT) of apparently holding Ofcom to ransom is inappropriate and must not be allowed to sway Ofcom's judgement on this review. There are a number of reasons for this:

- the economic basis for doing this would be wrong. Ultimately NGA is a replacement for the current access network. Therefore, in deciding whether to invest in NGA, BT would look at the relative returns on NGA and its current

[79] para 3.7 http://www.ofcom.org.uk/consult/condocs/llu/statement/llu_statement.pdf

[80] Based on following assumptions: most expensive 1/3 lines cost 50% more than average and cheapest 1/3 cost 50% less than average; assuming LLU rolls out to 80% population and the cheapest lines are in LLU areas the average cost per non-LLU line will be 60% higher than average and thus the LLU lines 15% less. Given some cheaper lines will exist in non-LLU areas then it is likely that the average LLU lines will cost 10% to 15% less than the average

access network. Anything therefore that increased the return on capital from the current access network (by allowing excessive prices) would reduce BT's incentive to invest in the next generation infrastructure.

- even if BT had stronger free cash flows (resulting from excessive LLU/WLR prices), there is no reason why it should be expected to use those to invest in NGA. BT could be expected to invest in NGA if, and only if, the returns from that investment exceeded its required "hurdle" rate. If BT's free cash flow was higher, yet nothing took place to change the expected return on the NGA investment, BT could be expected to do something else with its cash, like reduce its pension fund deficit, or increase its dividend.
- BT is not the only operator assessing the case to invest in NGA. For example, Virgin Media has made a significant investment and others are considering investing too. If BT were allowed to increase LLU/WLR prices to fund its fibre investments this would effectively distort competition and favour investment by BT. Also, even if BT's argument was sound that higher free cash flow increased the prospects of NGA investment (and we indicate above why this is not so), it would follow that reducing other ISPs' cash flows would reduce their incentives to invest.
- it is clear from BT's trading update on 22 January 2009 that any financial weakness stems primarily from its Global Services division. In that update, BT indicated that it was taking a £340m charge to reflect a review of its Global Services business, and that EBITDA from Global Services was expected to be negligible. However, BT also indicated that EBITDA for the quarter to December excluding Global Services is expected to be up 5% year-on-year. It is now clear that if BT's capacity to invest in NGA is any less than it might be then it is in large part due to its foray into the global IS consultancy market. It would therefore be absolutely inequitable and inefficient were LLU operators and broadband customers to be obliged to bail out BT for its business failings on the pretext of providing funds to enable NGA investment.
- increasing NGA penetration is not the only public policy objective pertinent here. The Government's Digital Britain review confirms that driving broadband adoption among the 40% of households that don't have broadband is an initial and even more important step in realising the benefits of the digital world in our society. Yet allowing Openreach to raise prices on the pretext of NGA investment would result in higher retail prices for today's broadband – a significant backwards step in any attempt to increase adoption of today's broadband.

To allow this would in effect be imposing a tax on broadband customers to fund BT's fibre investments. Ofcom should not allow in anyway any increase in CRS costs (including WACC) or charges to reflect NGA. More specifically, Ofcom must ensure that the development and implementation costs associated with NGA are not in any way born by CRS or ancillary services.

7. Cost adjustments

The table below provides estimated adjustments that should be made to Ofcom's costs projections based on the descriptions provided in previous sections. Overall we calculate that the WLR-res and MPF costs need to be reduced by about £500m more than the Ofcom low case which equates to a 22% lower cost in 2012/13 than Ofcom have forecast.

Figure 7a: Impact on CRS EBIT in 2012/13 (relative to Ofcom low case)

Category		notes
Allocation corrections		
OR more independent	£18m	lower allocation to reflect Openreach more independent
OR not customer facing	£10m	exclusion of costs not relevant to Openreach
Fairer allocation basis	£54m	less use of 'unfair' asset / salary allocation basis
allocate to overseas assets	£10m	correct non-allocation to overseas assets
Lower OR growth	£10m	reduce allocation to reflect relative decline of Openreach
mis-allocated LLU system costs	£8m	allocation not in line with policy decision
mis-calculated cumulo rates cost	£6m	cost should decline with reducing lines
allocation from Openreach	£15m	Openreach charge back Group for e.g. advertising on vans
under-allocation from non-reg	£30m	reflect better assumptions and other corrections
change duct allocation basis	£39m	move away from cross-sectional allocation basis
Total	£200m	
Other changes		
lower inflation	£80m	average 1% over 4 years (not 3%)
increased asset charge	-£10m	resulting from reduced inflation
energy	£15m	reverse out 50% increase in Ofcom case
realistic efficiency improvement	£112m	5% efficiency rather than 2.4%
fault	£20m	8% rather than 6% used by Ofcom
pension	£19m	BT claimed reduced pension costs in Group by £100m
WACC	£142m	7.4% WACC not Ofcom 9.25%
volume	£30m	0% growth not 3% decline
total	£407m	
TOTAL adjustments	£608m	
of which:		
- Ofcom not previously considered	£219m	
- relevant from 08/09	£346m	
reduction for 'compounding effect'	-10%	
TOTAL	£547m	
MPF/WLR-res		
% of CRS	89%	
amount	£487m	
total MPF/WLR-res costs	£2,199m	pre-adjustments
% cost reduction	22%	

The adjustments are based on the comments made in the rest of the document. We can provide Ofcom more detail and the spreadsheet on how these are calculated. These are best estimates since we have not been provided with sufficient information to be able to be more precise.

We can then apply this adjustment to the individual MPF and WLR-res services. However, in doing that we need to also need to factor in the shift in relative cost/price between the services both to reflect underlying cost differences and the costs of WLR on 21CN. Given the lack of transparency it is difficult to be precise about this. For instance, we do not know whether the insufficient difference between WLR and MPF results from allocation of WLR costs to MPF or whether WLR costs are simply understated. However the following provides a plausible set of adjustments

Figure 7b:Adjustments on MPF and WLR charges

	pre-adj	adj from above (-22%)	adj for relative pricing	final price
MPF	£96.55	£75.18	-£3.00	£72.18
WLR	£105.51	£82.15	£17.00	£99.15
difference	*£8.95*	*£6.97*		*£26.97*

This suggests that the true cost for MPF is actually lower than it is today.

In this analysis it is worth noting that a number of adjustments have not been taken into account since we did not have sufficient data to estimate the adjustment. The main ones have been noted below. Some of these could be quite material

- Whether retail SLG has been treated correctly
- Impact of treating NI correctly
- Impact of treating Featureline, Featurenet, Telex correctly
- Operational separation cost
- Volume mix change
- Other adjustments to the cost allocations to come in line with DAM and/or previous policy decisions and/or 'unreasonable' for this purpose
- Any adjustment to the asset charges such as depreciation, holding gains/losses, capital expenditure etc (except duct done above)
- Adjustment for (possibly) incorrect treatment of internal services versus external
- TPON costs
- Under capitalisation of IT costs
- Geographic de-averaging
- Increased CVRs (though obviously not relevant at 0% market growth)
- Other areas where we have concerns but do not have any information to assess whether the concerns are valid e.g. approach to allocation of vacant exchange and office space

8. Rebalancing

A key factor affecting the absolute and relative MPF and WLR prices is Ofcom's decision to 'rebalance' prices to align them with CCA FAC costs by 2012/13. This reflects Ofcom's view that current prices are not aligned with CCA FAC costs (i.e. are imbalanced) and that there is a benefit that will flow from rebalancing by aligning prices with these costs. This has the effect of increasing the MPF price in absolute terms and relative to the WLR price.

We think that approach is wholly unsound and contradicts both the available evidence and Ofcom's policy objectives:

- Firstly, there is no evidence of an imbalance – if anything the relative prices suggest the need to rebalance in the other direction by reducing MPF prices relative to WLR. Furthermore, the shift to 21CN will further increase the need to reduce MPF prices relative to WLR
- Secondly, even if there was an imbalance (and this was supported by evidence) there are strong economic and other reasons to maintain this imbalance into 2012/13 since consumers will enjoy more efficient and effective competition and more innovation by encouraging a shift to NGNs by maintaining a high WLR/MPF difference

The results from this analysis suggest there might be a strong case for rebalancing prices the other way.

Attached in Appendix B is a paper from Frontier that describes this reasoning in detail. Below we summarise the main points.

8.1 No evidence of any imbalance today

The first point is that there is no evidence of an imbalance. If anything the relative pricing and costs suggests the need to rebalance in the other direction by reducing MPF prices relative to WLR/SMPF in the future. There are a number of reasons underpinning this conclusion.

Firstly the mark-up on MPF implied by the Ofcom's CCA FAC costs is more than twice the mark-up on WLR/SMPF (see Figure 8a below). Indeed even at the current prices the mark-up on MPF is higher than WLR/SMPF. This would imply *prima facie* that there is no imbalance today to be corrected.

Figure 8a:Mark-ups on MPF versus other products (07/08)

	MPF	**WLR + SMPF**
LRIC	64.85	93.48
CCA FAC	84.10	106.50
% mark-up	30%	14%
MPF excess mark-up		113%
LRIC	64.85	93.48
price	81.69	116.28
% mark-up	26%	24%
MPF excess mark-up		6%

Further evidence in 07/08 that there is no imbalance comes from the actual CCA FAC numbers. If the known differences between MPF and WLR are removed (line cards, directories and longer e-side copper which MPF does not have) MPF costs are 10% higher than WLR. This is illogical since MPF includes fewer components and activities than WLR – for example, MPF does not require accommodation for equipment, tie cables or backhaul.

Looking into the future to 2012/13 it is also worth considering whether there is an imbalance. We do not have LRIC data for that period. However, there are two very clear indications that would suggest that Ofcom's CCA FAC numbers (which imply the need to rebalance) are wrong.

- Firstly, there appears to be an excess level of costs allocated to MPF since excluding known differences MPF costs are 7% higher than WLR (same analysis as above). This is illogical since MPF includes fewer components and activities than WLR
- Secondly, the move to equivalence and the shift to 21CN which will incur new and additional costs for WLR suggest that the cost difference between MPF and WLR should be £35+ (see Figure 8b). Ofcom's suggestion that the difference in CCA FAC between MPF and WLR in 2012/13 is £10 is not evidence-based. Furthermore these figures suggest that longer term there should be a rebalancing in the other direction to increase the difference from the £19[81] today to £25 or more

Figure 8b:Estimated difference in MPF and WLR costs (2012/13) [82]

cost element	**£ pa**	**Description**
d-side	3.25	line length adjustment (6% of d-side)
migration/transfer	5.70	annualised cost of transfer from 20CN
tie cables	1.97	cost of '21CN tie cable'
frames	0.00	no difference if MPF / xMPF use evoTAM and single jumper
line card	16.56	cost of only voice provided on MSAN
backhaul	5.00	Estimate
directories	1.83	no directory cost in MPF
service, sales, systems	4.00	estimate: since WLR more complex
TOTAL	38.31	

Therefore, we strongly believe that the evidence clearly points to no need to rebalance MPF and WLR prices by reducing the difference but rather a need to increase the price of WLR relative to MPF. Therefore, Ofcom should explicitly consider whether and how this rebalancing should happen.

[81] WLR £100.68, MPF £81.69

[82] In 12/13 based on WLR/WVC provided on 21CN. Line card £16.56 based on £16.08 in 11/12 inflation by 3%. £16.08 on p228 Condoc 2. Other cost elements that might be different would include testing, MSAN itself, accommodation for MSAN and duplicated accommodation running MSAN and DLE

8.2 Clearly beneficial to maintain imbalance in 2012/13 and beyond

If Ofcom did demonstrate a compelling and evidence-based case that there was indeed an imbalance which might require rebalancing by increasing MPF prices relative to WLR, Ofcom would also need to consider whether it was beneficial to consumers to rebalance. Ofcom has outlined some arguments and then concludes that there should be full rebalancing over 4 years. We believe that this assessment is flawed. Ofcom has greatly over-estimated the benefits of rebalancing and ignored many of the downsides/disbenefits from rebalancing. Below we articulate both the benefits and disbenefits. Whilst there are clearly arguments both ways the argument for maintaining an imbalance is both strong and compelling.

The main cost or dis-benefit of not rebalancing that is considered by Ofcom is the static inefficiency that can result from distortion to operators' choice of wholesale products. The impact of this is less than £3m per year once sensible adjustments are made. (Appendix B provides full details of the derivation of this number).

The benefits of not rebalancing are very strong. They are founded on the superior benefits that NGN based competition (using MPF) delivers over competition based on WLR and SMPF. Ofcom recognises these benefits:

> "*The introduction of Next Generation Networks (NGNs) is the most significant change to telecoms networks since competition was introduced two decades ago. These new networks have the potential to deliver significant benefits to consumers, competitive communication providers and BT*"[83]

By not rebalancing (and possibly rebalancing the other way), Ofcom will support this transition to NGNs and deeper network based competition in a similar way to which it successfully supported the transition from ISPs using IPStream to using SMPF. The particular benefits it brings are:

- More price and feature innovation in voice services
    - TalkTalk can provide greater feature innovation using our own network that using WLR (see Appendix A4 for a list of product features we can do on our own platform that we cannot do with BT)
    - By having access to the underlying cost structure we have more flexibility to price innovate since we are not presented with an average price. This would allow TalkTalk to, for example, offer lower prices to customers with higher incoming traffic
- We are able to provide better service to customers since we directly control more of the network ourselves (and are not hampered by going through BT's systems). More cost efficiency in the voice layer could be plausibly worth up to £40m
- Reduced prices from increased competitive intensity in the future – an illustrative calculation based on an Ofcom welfare model suggests benefits of up £120m

In addition there will be other static benefits that result from not rebalancing in this case:

[83] http://www.ofcom.org.uk/consult/condocs/nxgnfc/statement/ngnstatement.pdf §2.2

- Ofcom does not take into account demand factors when considering static efficiency. In particular, the benefit from Ramsey pricing effects whereby efficiency is increased by recovering more common cost from less price elastic services. Frontier's illustrative calculations show consumer gains of around £97m from implementing Ramsey pricing.
- A quicker transition to NGNs which reduces the dual-running cost that arises from operating legacy and NGN network simultaneously

Ofcom and BT have presented some arguments which (based on further investigation) are either non-arguments or are irrelevant. In particular:

- The concept that rebalancing will provide greater regulatory certainty and predictability. Provided Ofcom signal what they are intending to do whether prices are rebalanced or not does not improve certainty
- The risk of under- or over-recovery of common costs. This risk can be easily addressed by adjusting prices at the outset to reflect different levels of recovery and also introduce an explicit (and simple) correction mechanism
- The disincentive for Openreach to invest is only relevant if the incremental cost is not covered and maintaining an imbalance will cause this to happen

The benefit of maintaining an imbalance is clear and compelling both from a quantitative perspective and qualitative. From a purely quantitative basis the benefits of not rebalancing are £100m plus whilst the benefit from rebalancing are £3m maximum.

If Ofcom wants to promote competition between NGNs it should have no hesitation in continuing any imbalance and possibly expanding it. If Ofcom does not maintain an imbalance it is effectively weakening its support for competition between NGNs and for network based competition in general.

8.3 Need to increase WLR prices relative to MPF

As we state above it appears that the difference in costs between MPF and WLR prices (£35+) will be greater in 2012/13 than the current price difference (£19). This would imply the need for an increase in WLR prices relative to MPF. Increasing the difference between WLR and MPF prices to their underlying costs would create substantial benefits in not artificially and inefficiently discouraging operators from moving to more efficient NGNs and the substantial benefits that NGNs have over legacy networks.

We believe that Ofcom must consider this rebalancing when setting the charge ceilings for CRS services. It should also consider the need for margin protection to avoid BT margin squeezing MPF through low WLR prices – a similar result was achieved by BT's voluntary commitment not to reduce IPStream prices below a certain floor in order to not squeeze broadband operators using SMPF.

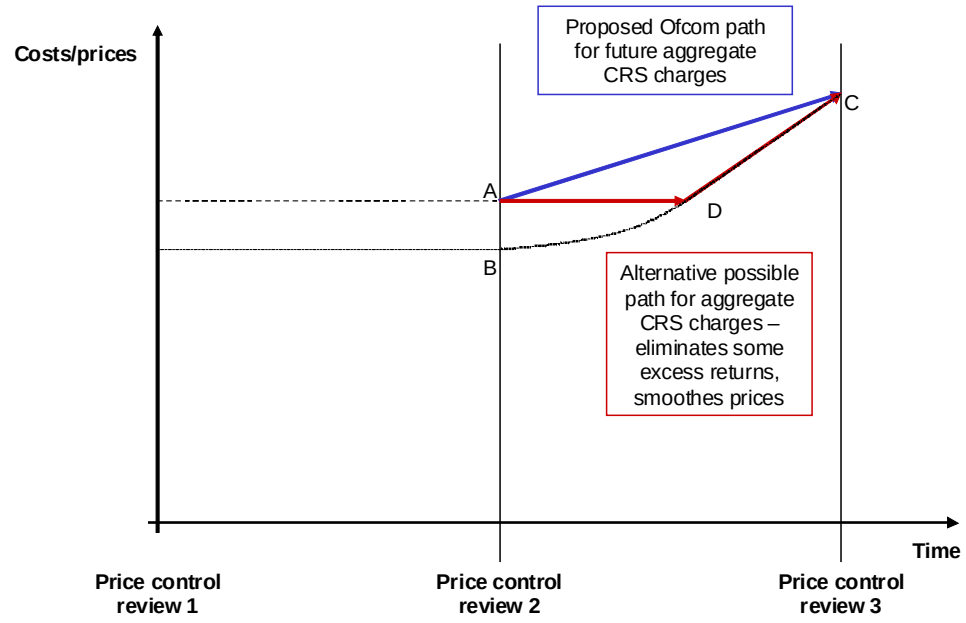
9. Glidepath

Ofcom have proposed that prices are linearly adjusted in a 'glidepath' starting from 1 April 2009 towards their claimed CCA FAC figures on 1 April 2012[84].

Ofcom's 'linear glidepath' approach implicitly means that even though Openreach will make excess profits (£73m[85]) in 2009/10 without any price changes Ofcom will allow Openreach to raise charges and make another £17m in profit. Allowing this would be shameful. Furthermore, economically there is no cogent reason to support this approach. It is worth noting that Ofcom do not appear to have considered any other approaches to the trajectory of charges.

We have proposed an alternative glidepath that effectively keeps price unchanged until CRS returns fall below the cost of capital (which on Ofcom's numbers is sometime in mid to late 2010). This approach is illustrated in the following exhibit. The alternative glidepath is A>D>C rather than the linear one which is A>C (which Ofcom has proposed).

Figure 9a:Glidepath options



This approach has substantial benefits over the 'linear glidepath' which Ofcom has proposed

- It ensures that wholesale customers/consumers do not have to fund additional excess profits, although it allows Openreach to continue to keep its excess profits

[84] The exceptions to this is that in the high cost case MPF charges are raised by ~£2 more than the linear glidepath in 2009/10. Also WLR – residential charges are not reduced in 09/10 since they have to then rise thereafter.
[85] Based on Ofcom mid case

- It has minimal or no negative impact on Openreach's efficiency incentives (provided that Ofcom signals that it will use a traditional glidepath in the next review)
- There is no impact or no material impact that would result from less smooth prices, reduced investment incentive on Openreach or weakened predictability (provided that future changes are signalled). Also it will have a very minimal inefficiency impact resulting from distortion to operators' choice of wholesale products.

Clearly, if the costs are lower that Ofcom forecasts and BT makes excess profit for longer then the delay to the start of the glidepath can be more than the ~12 months suggested. Based on our cost adjustments, BT will continue to make excess profits through 2010/11. Obviously Ofcom need to properly review costs before it can assess whether and when there is a need to start change prices.

Another way of viewing this is that the start of the new regime is delayed until CRS returns fall below its cost of capital. Ofcom seem to be suggesting that there is a need to start a new regime on 1 April 2009. This is clearly unjustified. There is no reason to start the new regime on 1 April 2009 or indeed any time soon after. This was a date arbitrarily set by Ofcom and based on the costs it has no legal (or other) obligation to begin a new regime.

The issue of glidepaths is discussed in a paper by Frontier Economics in Appendix B.

10. Advance notification and adjustments

10.1 Advance notification prior to introduction

Ofcom have proposed a one week notification period between publication of the Statement (which will include the actual charges) and introduction of the new charges by BT (this important fact was included in §8.75). A week is not sufficient time for us to adjust retail prices to account for any wholesale price increase and therefore we will in effect be forced to absorb any price increase. In effect it will be an expropriation of money from TalkTalk to fund BT's excess profits.

We think Ofcom's proposal is fundamentally unreasonable and at odds with its statutory obligations. We explain why below.

It takes TalkTalk [[REDACTED]] days from decision about any retail price change to having it fully implemented. [[REDACTED]]

[[REDACTED]]

There exist no hard and fast rules about the timing of introduction of new charges.

Ofcom's previous reasoning appears to have been founded on allowing other players sufficient time to react to the wholesale price change. This was implicit in the reasoning behind in recent waiver in relation to leased line price reductions[86]. The key reasons seemed to be:

- Allowing customers to adapt retail prices and check for anti-competitive pricing (i.e. excessively high prices) and take any remedial action (e.g. an appeal). This has principle has been reinforced in Market Reviews. For example

  Notification of changes to charges and terms and conditions at the wholesale level can further assist competition by giving advanced warning of changes to competing providers purchasing wholesale services. This is important to ensure that providers have sufficient time to plan for such changes, such as restructuring the prices of their downstream offerings in response to charge changes at the wholesale level"[87]

- Allowing competitors to adapt their competing wholesale prices and check for anti-competitive pricing (i.e. prices set too low) and take any remedial action (e.g. an appeal)

On the basis of this a 90 day notification period is used as the standard in many cases. For instance, where BT is changing charges itself.

Ofcom has reduced the advance notification period to below 90 days in certain cases but only in the case of wholesale price reductions which had the effect of removing (partly or fully) BT's excess profits. This was the case in the waiver in relation to leased line price reductions and the 30 days notification period used for MPF charge ceiling reduction in 2005 and the WLR charge ceiling in 2006. Obviously, this situation is not valid in this case

[86] http://www.ofcom.org.uk/consult/condocs/btprice/statement/
[87] http://www.ofcom.org.uk/consult/condocs/rwlam/statement/rwlam161204.pdf §6.109

In this case we fail to see any cogent reason that could justify a shorter period than 90 days. Clearly these price changes are not about removing excess profit from BT. Rather any MPF price increase will actually be further increasing BT's excess CRS profit (based on Ofcom's own numbers). Thus the net effect of imposing a shortened period will be transfer money from TalkTalk to further increase BT's excess profit. This is wholly asymmetric with the treatment that BT receives.

The only reason that could possibly justify such as decision would be to reduce the inefficiency impact resulting from distortion to operators' choice of wholesale products (as discussed in rebalancing). However, given the sum total of the price difference will be about £1.40 the impact on supposed inefficient downstream investment would be trivial.

We are very concerned at the lack of clear and cogent reasoning that Ofcom have offered as to why it should depart from previous practice. Its reasoning seems to be:

- it is objectively justifiable since "*communications providers are aware of the proposal to change charges*" §8.75
- this does not unduly discriminate since "*The date and notice will apply to all parties … they will be in a position to respond to the revised notification equally*" §8.76
- it is proportionate since "*a smooth transition of charges over a number of years … will [not] be unduly disruptive*" §8.76
- it is transparent since it is being consulted on §8.77

This reasoning is very weak and flawed for several reasons. For example:

- the logic as to why it is objectively justifiable is simply wrong – the relevant test here is our advance knowledge of the actual wholesale price. Clearly we are not aware with any certainty of the charge (even if we believed that it would fall within the range Ofcom has proposed)
- The suggestion that is proportional since there will be a smooth transition over several years is irrelevant. The fact that the price change is smooth over several years in no way makes the one week notification period proportional

If Ofcom pursue the one week notification period it will be tantamount to regulator-supported 'daylight robbery'. It is not objectively justifiable, it is unjust.

10.2 Adjustments for 'delay' in Statement

It appears highly unlikely that Ofcom will be able to introduce new charges on 1 April 2008 as previously suggested given the short period between the consultation submission deadline and also the need (as we describe below) to provide a reasonable notice period prior to introducing the new charges.

It has been suggested to us that this delay could be 'neutralised' by having a higher charge for 09/10 than would otherwise have been the case. For example, if the 'correct' increase from 1 April 2009 would have been £6 per annum (i.e. 50p per month) then if the charge was introduced 'late' on 1 June the increase would be set

at 60p per month – i.e. a ‘super-increase’ to reflect the ‘late’ start and allow the same overall increase across the next 12 month.

Such an approach is wholly unwarranted. We describe this below.

- The 1 April 2009 implementation target is an arbitrary date with no clear logic underlying why it is an appropriate start point. Indeed all the evidence suggest there is no need to adjust charges at all for at least 12 months
- If a super-increase is introduced the charge would in effect no longer be forward-looking (which is the key underlying tenet for all this price setting work) since the price would effectively include a cost from the previous period
- There would be absolutely no (static or dynamic) economic benefit whatsoever from this – it would simply be a unwarranted transfer
- It would be wholly inconsistent with Ofcom’s approach to charge controls where Ofcom has never backdated price reductions (even though in most cases BT has been making excess returns)
- This bears no comparison to the situation on leased lines where there was voluntary backdating of price reductions since the delay in setting the charges was solely due to BT. In this case the delay in setting these charges is due to a combination of BT and Ofcom

11. Non-core rental services

In this section we comment on a number of aspects of the proposed controls over non-core rental services (i.e. those LLU and WLR services which are not one of the three main rental services that are regulated) including the structure of the control/basket as well as the control itself. Overall we are disappointed with what Ofcom is proposing in many respects and we believe that it will not meet Ofcom's own objective to "*Ensure that controls cannot be manipulated by Openreach in a way that puts other CPs at a disadvantage*".[88]

We believe that the current proposals are not appropriate and substantial changes are required to make them fit for purpose.

Below we discuss:

- the scope of the control in terms of what services are included/excluded
- the cost projections that have been used to set the control
- and the nature of the control – both the potential for abuse and solutions to prevent this abuse

It is worth noting that almost a [[REDACTED]] of our costs are for non-CRS services. These are clearly very important services.

11.1 Scope of control

We are rather disappointed at the scope of the control in that it excludes certain essential services such as MPF special fault investigation (SFI), and enhanced care services. The rationale for this appears to be that since these were new since the last Market Review they cannot be included in the basket. This means that these services will lack any form of control on price even though BT clearly has a stranglehold over their provision and the only approach to get a price resolved will be to bring a dispute to Ofcom.

This inadequate scope will likely get worse in the future as new services are introduced since it appears that Ofcom is likely to let new services fall outside any price control. Currently about [[REDACTED]] of our Openreach costs will lack any price regulation and this figure it likely to increase with the introduction of new (unregulated) services.

We understand that Ofcom believes that its ability to extend cost orientation obligations is limited by the current Market Review and that the only way of including such services would be through a new Market Review. This is clearly an unsatisfactory situation and in future Market Reviews must be properly future-proofed to encompass all essential services. Without this there is clearly a strong incentive on BT to game the charge control structure by introducing new services to replace olds ones with the new ones being outside the charge control.

The Ofcom's proposal to not include any new services in the baskets seems particularly unreasonable given that Ofcom has relaxed controls on some services.

[88] §7.4 (iii)

For example, tie-cables, SMPF standard line test and ESS have previously had charge controls on them but are now included in a basket. It would seem reasonable that there is some form of 'trade' with BT for relaxing controls on some services in return for including other services within the basket.

There are also some strange anomalies in which services are included within the baskets (and have a cost orientation obligation) and those that are not. For instance: 21CN tie cables (which include EvoTAMs) are included in the basket but the connection of the EvoTAM itself is not.

11.2 Cost projections

As we highlighted above the level of transparency on the cost projections for ancillary services is frankly appalling. For instance, there are no volume projections, no unit cost figures, no cost breakdown, no explanations, no adjustments made[89], no explanation of allocations, no revenue or price breakdown for the main services, no explanation of the significant differences in returns between baskets.

Given this we are wholly unable to comment on whether the costs are reasonable and therefore the appropriate level of X in the RPI – X formula. However, given the major flaws that have been made in the projections for CRS (such as over-estimating starting costs, underestimating efficiency gains and overestimating WACC) we can be pretty confident that the costs are unreliable and over-stated. We therefore conclude that the implied returns are completely unreliable.

We look forward to Ofcom providing transparency so that we can properly scrutinise the costs and therefore be able to make an effective and intelligent response prior to Ofcom setting any charge.

11.3 Nature of control on baskets

Baskets have clear potential benefits in that they require less regulatory administration, effectively hedge over-forecasts and under-forecasts of costs across multiple products and allow BT to price efficiently using Ramsey pricing. However, they also allow BT flexibility over pricing that can be, has been and is being used in an anti-competitive and anti-consumer manner – for instance, 'under-pricing' services used internally, or overpricing services they do not wish to sell. We are very concerned that the structure of the baskets do little to protect against these real dangers. Below we outline what these concerns are in more detail and how they can be addressed.

Potential abuse

The most obvious forms of abuse result from reducing the price of products used internally and increasing the price of products used externally (whilst staying within the overall cap). BT have done this for years. One of the most blatant and obvious examples of this was in the AISBO basket where it priced BES products (which BT did not purchase itself) at 2.5 times FAC. Though the incidence of this should reduce

[89] in particular the numbers should be smoothed and matched since, for instance, some revenues are not latched to their costs e.g. co-mingling costs amortised but revenues are accrued fully at installation

in time with the advent of more equivalence and so BT using more and more of the same products other operators use there will continue to be differences in the mix of products that BT purchases due to their different point in the lifecycle (e.g. market share capture or network transition or stability) or different business model (e.g. SMPF based or MPF based). For example: BT may reduce the price SMPF services compared to MPF since it uses little MPF today; there is a potential for abuse since BT uses so-called 21CN tie cables and other operators use different ones.

Another frequent abuse that is used by BT to increase the returns (whilst remaining within the RPI-X average % price change) is to reduce the price of declining products thereby allowing them to increase the price of growing products. This approach allows BT to stay within the overall cap whilst achieving excess returns. The reason for this is that the volume mix used to derive the overall price change is based on previous year product mix.

In Appendix A6 we have included a simple spreadsheet to demonstrate both how this works and the magnitude of the excess return that BT could achieve by doing this. This is based on a simple case of two products – product A increasing from 100 to 200 units and product B declining from 200 to 100 units. This assumes a 0% annual allowable change in average prices (based on previous year volume mix) and a 10% sub-cap (as per proposed by Ofcom). By year 4 BT could be gaining revenue 16% above cost yet staying within the overall cap.

This problem will be quite significant in the basket proposed by Ofcom since the baskets include products that are used in different points in the overall lifecycle (e.g. connection charges –which are weighted to the early years – and assurance charges – which are weighted to the later years).

The last form of abuse is overpricing upstream products to encourage purchase of downstream products. BT have done this in the past to discourage network competition by pricing, for example, IPStream below SMPF. Though the ability to do this is somewhat less than in the example of IPStream versus SMPF since the products Openreach provide operate in a narrower 'stretch' of the value chain there is some possibility of this. For example, we are currently in discussion with BT regarding a so-called 'skeletal' or stripped down co-mingling product (i.e. upstream product) that does not include all the features of say a BBUS product (i.e. downstream product). BT's clear incentive is to discourage use of the stripped down product. Under the current charge control they would have a lot of pricing flexibility possibility to the degree to which they could price the upstream product at a higher price than the downstream one.

Suggested remedies

Of course one approach to prevent this type of abuse is to impose individual charge control on all or some of these products. Though this may be unpalatable in many respects Ofcom should seriously consider this on some of the major products unless it can definitively demonstrate that it has an approach that can prevent abuse.

We think there are a number of possible approaches short of individual charge controls that may be able to prevent abuse if properly implemented. These are described below.

Correction approach for change in volumes

The abuse whereby BT reduces the price of declining products thereby allowing increases in the price of the growing products can be partly addressed by either calculating the allowable prices changes on the basis of estimates for current year volumes or allowing for a correction when the current year volumes are known. This appears to be the rationale behind the 'k-factor' approach that is used in the Leased Line Charge Control proposals.

Guidance on cross-portfolio consistency

The existing LLU prices did (up to December 2008) include a strange anomaly in that the so-called 'right-when-tested' (RWT) price for MPF was some 12 times the price the price for SMPF (£39 versus £3.75) even though the service provided (and cost) was exactly the same. Given that BT internally is relatively a far greater purchaser of SMPF RWT than MPF RWT, this pricing was effectively discriminatory. Ofcom could prevent such future gaming and abuse by introducing a requirement on BT to maintain a 'consistent pricing approach' across it portfolio in that where products are similar they should be priced similarly.

Clarity on cost orientation rules

Currently, the guidance from Ofcom on the meaning of cost orientation has been very poor. However, in the recent leased line charge control it said "*In assessing cost orientation, we generally apply a first-order test which requires that the price of each item or service should be between the Long Run Incremental Cost ("LRIC") floor and Stand Alone Cost ("SAC") ceiling*"[90]. Frankly this is not good enough. The phrase 'first-order test' implies little that is definitive and provides certainty. Furthermore, there is a need for guidance on how DLRIC and DSAC should be calculated (including cost allocation). There must be further guidance on cost orientation.

Guidance on pricing of products outside baskets

There are many important charges now and in the future that will fall outside the baskets. It would be valuable if Openreach and/or Ofcom provided some guidance on how these services might be priced and how cost allocation will be handled (in particular how cost allocation to these products will reduce the cost allocation to CRS services or services in the ancillary baskets).

Guidance on relative pricing of substitutional products

To avoid the problem of overpricing of upstream products it may be appropriate to use as a rebuttal presumption that the price of an upstream product should be based on the cost of the downstream one less the avoided costs (i.e. a 'retail minus' approach).

[90] http://www.ofcom.org.uk/consult/condocs/llcc/leasedlines.pdf §3.128

Guidance on treatment of new services

Ofcom have not been clear on how new services will be treated. There are many questions that need answering such as:

- how will it be decided whether a new service is within the basket or not, what is the decision making process, what will be the criteria?
- How will Ofcom ensure that BT do not game the rules by creating new services (which are allowed to fall outside the basket) that are effectively substitutes for products within the baskets?
- In the case where a new product falls within the basket what will be the rules for setting the initial price (since it won't be governed by a previous price)?
- In the case where a new product falls outside the basket what rules will apply about the amount of common cost allocation the service will attract?

Monitoring and transparency

One obvious method of checking compliance is for relevant information to be published. This needs to be in a form that allows easy monitoring of compliance and allows checking for the most frequent forms of abuse e.g. price / FAC for overall basket, internal and external, average price change based on this year and previous year volumes. This must include a cogent explanation of how they allocated costs and decided prices.

12. Timing of subsequent reviews

We believe that there is no justification or need for Ofcom to change price at all in the next 12 months (and probably for longer). However, if Ofcom did wrongly change prices in next few months then it would need to consider whether to review subsequently.

Ofcom have raised the possibility of reviewing the WLR charges in the upcoming Wholesale Narrowband Market Review (§2.13). We presume that given there is likely to be a Wholesale Local Access Market Review (which includes LLU products) in the next one to two years that Ofcom would also review LLU charges at this point in terms of the need for continued price regulation, which LLU products should be charge controlled and the levels of those prices.

Therefore, if Ofcom does go ahead and sets charges in the next few months (which we believe is the wrong approach), we believe that Ofcom should then fully review WLR and LLU prices in one to two years on the back of the Market Reviews[91]. Furthermore, Ofcom should clearly signal that timetable now. The logic underlying this position is described below – principally our concern is that it is difficult to reliably assess and predict costs at this point which raises a high probability of under- or over-recovery due top poor forecasts. The two price reviews should also be linked to ensure consistent data is used in the two exercises.

The main reason for the need to review prices is that it is difficult today to accurately predict many assumptions and therefore the costs. This raises a substantial risk that the costs will be under-forecasted or over-forecasted. For example:

- most important is the lack of high integrity data that has had a decent level of objective and independent scrutiny. As we highlighted above we believe there are severe deficiencies in the quality of the data and the scrutiny and transparency. In the period up to a review in (say) two years it would be possible to use the time to address these problems – we understand Ofcom is planning to conduct a review of the data used for charge setting and other purposes.
- the economy is currently highly volatile and unpredictable which makes it extremely difficult to make reliable forecasts for key assumptions such as general inflation, energy/copper inflation and WACC. The 'right' assumptions are fluctuating month-by-month as the outlook changes
- the cumulo rates settlement is unclear. In BT's own words "*There is considerable uncertainty over what BT's rates bill will be post 2010/11*"[92]. This settlement may have a large impact on CRS prices since cumulo rates account for ~8% of total costs (today)
- the appropriate costs depend in part on the rate of migration to 21CN and the subsequent use of MPF – yet the rate of migration to 21CN is highly unpredictable. BT's projection for the speed of migration have been woefully inaccurate – for instance, less than 2 years ago in June 2007 BT were saying

[91] We believe that given Openreach will continue to make about cost of capital returns on CRS for at least one to two years that Ofcom should not set any new WLR or LLU from this consultation process.
[92] http://www.ofcom.org.uk/consult/condocs/openreach/responses/openreach.pdf p28

they would start migrating to 21CN in July 2008. We sit here today in March 2009 with the likely start of migration later this year at the earliest

- Linked to 21CN is uncertainty around the introduction and use of xMPF. xMPF is an LLU product that allows an LLU operator to offer voice-only to a customer and the customer is able to take broadband (on SMPF) from another operator. If this is introduced this is likely to affect the volume of different LLU products and costs[93]

Another benefit that would come from a subsequent review is that key services which today are unregulated services could be brought with the 'regulatory-fold' and therefore appropriately regulated.

By reviewing in two years time would not save a 'bad decision' by setting charges today – however, it would reduce the negative impact.

We recognise that there are downsides from re-reviewing prices too frequently most notably reduced incentive for cost minimisation / efficiency gains and less long term certainty (for both Openreach and its customers). However, given the significant difficulties in making reliable forecasts today due to the poor quality data, economic environment and uncertain 21CN outlook we believe that on balance a full review in two years is the better option. Ofcom recognised this in the Leased Line Charge Control where it has said that it will closely monitor the situation and intervene if necessary given the current volatility[94].

[93] since if done to ensure a level playing field certain costs related to xMPF would be shared across LLU and WLR products

[94] http://www.ofcom.org.uk/consult/condocs/llcc/leasedlines.pdf §1.7

Appendix A1: Fault rates comparisons

Number of Faults per 100 lines per year
(2006)

Country	Operator	Total lines	Residential	Business
Spain	Telefónica de España	13.63		
France	France Télécom	8.3		
UK	British Telecom		15.48	10.74
Italy [1/]	Telecom Italia	13		
Portugal	Portugal Telecom	11.2		
Ireland	Eircom		18.16	7.52
Switzerland [2/]	Swisscom Fixnet	20		
Austria [3/]	Telekom Austria	5.73		
Belgium [4/]	Belgacom	5.57		
Greece [5/]	OTE	13.5		

[1/] Target defined by AGCOM for 2006 under the Universal Service Obligations
[2/] Target defined by Ofcom since 2003 (Universal Service Quality Targets)
[3/] Target defined by RTR since 2002 (Universal Service Quality Criteria for Telekom Austria)
[4/] Target defined by IBPT for Belgacom since 2003 under the Universal Service Obligations
[5/] Target defined by EETT, valid since 2002

IBPT, EETT

Appendix A2: Price changes – notification to customers

[[REDACTED]]

Appendix A3: Volume and Mix Forecasts

Overall volume

Ofcom have provided two separate volume forecasts; the first or 'High Cost Case' uses the forecast provided by Openreach and shows a 1.7 million or 6.7% decline in the total number of lines between 2007/08 and 2012/13. The alternative or 'Low Cost Case' shows a decline of half that, 800,000 or 3.4% over the period, which Ofcom say is a cautious estimate of the decline of total lines.

While the 0.8% decline of lines forecast by Openreach in the first consultation was possibly prudent, the 6.7% reduction in the second consultation is a significant over-correction to their previous forecast. This poses serious questions on the assumptions Openreach has based its forecast on.

The severity of the decline of total volumes in 2011/12 and 2012/13 (between 2.3% and 5.0% in Low and High case respectively) also raises serious questions on the validity of the assumptions on which the two forecasts Ofcom have been based and the lack of justification on the severity and timing of the decline in the latter years.

Openreach say the demand for residential fixed lines supplied through BT's network continues to follow a downwards trend throughout the period under review with the following reasons for that being[95]:

- Increase in mobile only households
- Increase in competition from cable
- Reduced demand for second lines as a result of broadband take up

Ofcom also add that overall decline is also dependent on other factors including the current economic climate and impact on new homes and house moves as well as effect of mobile substitution.

The Government has said it remains committed to it's housing target for 2016 [96] of 240,000 additional homes a year to meet the growing demand and address affordability issues. The Department for Communities and Local Government have said that even in the current economic downturn, they are committed to meeting their pledge and level of housing supply needs to increase over time towards this target, a total of three million new homes are needed by 2020, two million of them by 2016.

We also believe that fixed to mobile substitution and reductions in the number of second lines previously used for fax or dial-up purposes to have matured by now and only expect minimal adjustments within the first two years of the forecast period.

Fixed to Mobile substitution

- While the information presented by Ofcom does not show the specific impact from an increase in mobile only households in the period to 2012/13 there is wide recognition across the UK telecoms market that the fixed to mobile substitution in the access market for voice services has matured at c.10%.

[95] Condoc Para A11.9 page 241
[96] http://www.communities.gov.uk/publications/housing/homesforfuture

- A recent study commissioned by TalkTalk on the fixed to mobile substitution in broadband access found that by 2012 only c.10% of total mobile broadband customers will be fixed to mobile substitution, with the significant uptake of mobile broadband shared between 'complimentary to fixed broadband' and 'itinerant working population and students'.
- With the increasing uptake of video content on-line and mobile broadband offering slower speeds and network congestion, lower usage limits and overall more expensive than fixed broadband retail prices, a reversal of fixed to mobile substitution is likely to be seen
- The case for fixed to mobile substitution exists in the calls market rather than the access market, and fixed line operators continue to see this trend.

Competition from cable

- Virgin Media have 4.1 million residential exchange lines [97] which gives an implied share of 18.8% of total residential exchange lines. However Virgin Media's network coverage is c.50% so increasing in market share in terms of number of lines in the current market is a challenge within their current footprint.
- Virgin Media have not announced any strategic intent to increase their network coverage, with their current strategic focus on high speed broadband, video-on-demand and mobile services. Virgin Media have been pretty clear that in terms of network services, they have not looked to increase fixed line / cable coverage, but look to increase value of bundle and services within the existing network footprint.
- At a retail level, high speed broadband and TV services are key to Virgin Media's customer acquisition strategy. With 3.7 million of it's 3.9 million customers on-net, and majority of customer growth off-net or on BT infrastructure, it is clear that increasing market share of the UK broadband residential market in cable areas is a challenge for Virgin Media within the current footprint.

Second lines

- Whilst there might be a reduction in the number of second lines due to fewer faxes it is important to recognise that there are only about 200,000 active second lines in the UK today or less than 1% of all lines. Thus the impact of this decline will be small.
- The increasing use of bonded DSL (to increase aggregate broadband speed into homes and business) will increase the number of second lines. [[REDACTED]]

Considering all these factors, including the Government's commitment to new houses, we believe that the decline in the total number of fixed lines is somewhere between +2% and -2% over the period to 2012/13, [[REDACTED]]

[97] Ofcom Market Data Tables Q3 2008 page 9
http://www.ofcom.org.uk/research/cm/tables/q3_2008/q32008.pdf

Mix

Internal and External lines

The volumes forecasts provided are average volumes, split between internal (to BT Group) and external lines. We asked Ofcom to provide more detailed explanation on movement of each of the internal and external bases, in the form of;

	Opening Base
+	Additions
+/-	Migrations (e.g. from WLR and SMPF to MPF)
-	Churn / disconnection (e.g. fixed to mobile substitution)
=	Closing Base

Ofcom indicated that volumes forecasts were not prepared on this basis, with no explicit assumptions on migration (see below) and churn. Ofcom need to consider a more detailed model approach to the showing the movements of each of the bases over the period given the impact that volumes have on allocation of fixed and common costs in order to check whether assumptions are reasonable and plausible. As we explain below we do not think the assumptions on mix are plausible.

Broadband Penetration

Ofcom did not undertake an analysis of broadband penetration over the period but said that other Ofcom publications have forecast that the growth of fixed line broadband penetration appears to be levelling off at around 60-65% of households. We estimate broadband that broadband penetration is likely to grow to just over 70% by 2012, in line with industry commentators.

The total number of broadband lines is not available in the forecasts put forward by Ofcom. In the first consultation document Ofcom advised us that the total number of broadband lines could be calculated by adding MPF and SMPF lines. In the second consultation Ofcom have said that MPF lines include voice only lines as BT Wholesale migrate WLR and SMPF customers to 21CN. This is analysed further below.

TalkTalk considers that broadband penetration is too important a metric to not explicitly take into account in a consultation which involves substantial migration assumptions of internal and external lines from WLR and SMPF products to a converged product. Ofcom needs to consider providing further transparency.

Voice only on MPF

Using Ofcom's broadband penetration guidance for the UK market as a whole and using market churn rates for voice and broadband, we calculate that in the High Case, 5.3 million (34%) of 15.6 million MPF lines in 2012/13 are voice only, with 10.3 million (66%) voice and broadband. And in the Low Case, 3.3 million (37%) of 12.9 million MPF lines are estimated to be voice only. This is simply not possible without the introduction of xMPF which is currently on-hold.

Openreach Internal Volumes 2007/08

Ofcom have included 400k lines as *'MPF Line Rental – Internal'* in 07/08. We have asked Ofcom to provide further details and breakdown on this number as unable to agree back to the Regulatory Accounts 2007/08 or indeed any public statements. *MPF Line Rental – Internal* volumes increases to 500k in 2008/09 projection in both High and Low Cases.

Ofcom have said that MPF internal volumes includes a mix of Featureline, Featurenet, telex and ISDN lines. Ofcom have failed to provide a breakdown and a notified us that the schedule it has received from Openreach had 'expired' and were unable to provide this information before the submission deadlines. We are concerned that these lines practically do not use MPF and without understanding what services they relate to raise concerns about the costs which have been allocated to these lines and by implication other lines.

Migration to MPF (from WLR and SMPF)

The two volume forecasts presented by Ofcom include substantial migrations from WLR and SMPF to MPF. The High and Low Cost cases show substantial movements in the WLR, SMPF and WLR bases, shown in the table below;

Net migration (lines million) 2007/08 to 2012/13

	Openreach Forecast			Ofcom Alternative Forecast			Difference		
	Internal	External	Total	Internal	External	Total	Internal	External	Total
MPF	+10.5	+3.9	+14.4	+8.6	+3.0	+11.6	+1.9	+0.9	+2.8
WLR Residential	-10.3	-1.2	-11.5	-7.4	-1.2	-8.6	-2.9	+0.0	-2.9
WLR Business	-3.6	-0.8	-4.4	-3.1	-0.8	-3.9	-0.5	+0.0	-0.5
SMPF	-6.5	-0.6	-7.1	-6.5	-0.4	-6.9	+0.0	-0.2	-0.2

Source: Ofcom

In the above Openreach or High forecast 10.5 million (73%) of the 14.4 million increase in MPF lines are BT internal volumes, through migration from WLR and SMPF. In the Ofcom Alternative or Low forecast 8.6 million (74%) of the 11.6 million increase are internal. These substantial internal migrations to MPF will include both voice only and voice and broadband customers, as mentioned above, and we are therefore concerned that the xMPF input required to deliver a 21CN voice product does not exist yet appears to be a key assumption for migration of lines from WLR.

Thus we have major concerns with the lack of transparency and validity of the assumptions in the volumes forecast in both High and Low cases.

Forced migration of SMPF lines

The high migration volumes internal and external lines from SMPF to MPF in the three years from 2010/11 to 2012/13 does not appear possible through normal market churn on SMPF and connecting new provides to MPF.

Using a broadband market churn rate of 1.75% per month of 21% per annum we calculate that 2.5 million (39%) of the 6.4 million internal lines reduced in three years

from 2010/11 – 2012/13 could be explained through normal churn. This suggests that the remaining 3.9 million lines are force migrated to MPF. This applies to both High and Low cases. For external lines, we calculate that 1.4 million lines are force migrated.

Ofcom have been asked to confirm the split between market churn and forced migrations to explain the movement from WLR and SMPF to MPF in the latter years of the forecast. We are concerned about the validity and basis of these assumptions, the cost assumed external lines will cost Communications Providers an estimated £50.7m in MPF connection costs, and the £137m charge which internal migrations would give rise to. We are also concerned with how these costs are assumed in the forecast to be recovered by Openreach.

Given that TalkTalk Group have [[REDACTED]] customers, it is very unlikely that other communications providers would force migrate existing SMPF customers onto MPF incurring expensive connection or migration costs.

Ofcom Market Data vs Ofcom condoc

As a starting point in order to comment on the total exchanges lines forecast in the consultation document, we attempted to validate the most recent year end numbers in the forecast, in this case 2007/08, with other publicly available or Ofcom published information.

It is not possible to reconcile the WLR Residential – internal volumes for 2007/08 of 15.8m lines [98], with Ofcom's *Telecommunications Market Data Tables* for Q1 2008 (i.e. March 2008) which were most recently published in December 2008 [99].

Exchange Lines (millions)	2007/08			
	Residential	Business	MPF	Total
Internal	15.8	4.6	0.4	20.8
External	1.8	1.2	0.9	3.9
Total Exchange Lines	17.6	5.8	1.3	24.7

Source: Ofcom condoc

However the total number of internal lines WLR (Res) + WLR (Bus) + MPF = 20.8m lines and 3.9m external lines in the consultation document does not reconcile back to the Market Data Tables, which are presented in table below.

Exchange Lines (millions)	Q1 2008		
	Residential	Business	Total

[98] http://www.ofcom.org.uk/consult/condocs/openreachframework/off.pdf Table A11.1 on page 242
[99] http://www.ofcom.org.uk/research/cm/tables/q2_2008/Q22008.pdf Table 7 on page 9.

BT	15.8	5.9	21.7
VMed	4.1	0.4	4.5
Other	3.5	3.9	7.4
Total	23.4	10.2	33.6

Source: Ofcom Market Data Tables

In fact the outputs in the consultation document and the market data tables to not agree with the Residential, Business, PSTN and ISDN numbers which BT Group announced for quarter ending March 2008, presented in table below.

Exchange Lines (millions)	Q1 2008			
	Residential	Business	Openreach	Total
BT Retail PSTN	15.79	4.07		
BT Retail ISDN	0.00	2.68		
Openreach / External			4.67	
Total Exchange Lines	15.79	6.75	4.67	27.21

Source: BT Group KPIs

Further explanation should be provided on the definition of Openreach internal volumes, and explanation to fully reconcile the total number of exchange lines between BT KPIs, Ofcom's market tables and the consultation document.

Appendix A4: Voice features only available on own platform

[[REDACTED]]

Appendix A5: Example of unexplained cost fluctuations

Cost per Line	Ofcom High Cost Case						Ofcom Low Cost Case					
	07/08	08/09	09/10	10/11	11/12	12/13	07/08	08/09	09/10	10/11	11/12	12/13
Pay												
MPF	£19.05	£19.74	£18.97	£19.12	£20.65	£20.32	£18.25	£19.23	£18.59	£17.17	£18.71	£17.79
W/LR	£17.16	£18.16	£17.50	£17.54	£19.01	£18.90	£16.54	£17.50	£16.94	£15.76	£17.13	£16.30
MPF Higher / (Lower) than W/LR	+11%	+9%	+8%	+9%	+9%	+8%	+10%	+10%	+10%	+9%	+9%	+9%
Accommodation												
MPF	£10.32	£10.63	£11.53	£11.82	£12.78	£13.49	£10.32	£10.12	£11.16	£11.27	£12.09	£12.53
W/LR	£9.32	£9.62	£10.11	£10.55	£11.24	£11.94	£8.98	£9.26	£9.74	£10.03	£10.64	£10.98
MPF Higher / (Lower) than W/LR	+11%	+11%	+14%	+12%	+14%	+13%	+15%	+9%	+15%	+12%	+14%	+14%
Stores, contractors, misc												
MPF	£5.35	£5.57	£5.21	£5.11	£5.14	£5.18	£5.56	£5.06	£4.83	£4.65	£4.51	£4.41
W/LR	£5.74	£5.14	£4.96	£4.91	£4.90	£4.97	£5.51	£4.96	£4.65	£4.50	£4.42	£4.33
MPF Higher / (Lower) than W/LR	+11%	+8%	+5%	+4%	+5%	+4%	+1%	+2%	+4%	+3%	+2%	+2%
Corporate Overheads												
MPF	£3.97	£4.05	£4.09	£3.80	£4.05	£4.15	£3.97	£4.05	£3.72	£3.58	£3.65	£3.64
W/LR	£3.64	£3.70	£3.66	£3.49	£3.83	£3.98	£3.47	£3.58	£3.41	£3.21	£3.29	£3.33
MPF Higher / (Lower) than W/LR	+9%	+9%	+12%	+9%	+6%	+4%	+14%	+13%	+9%	+12%	+11%	+9%
IT												
MPF	£5.56	£5.57	£5.21	£4.96	£5.38	£5.56	£4.76	£5.06	£4.83	£4.47	£4.70	£4.72
W/LR	£4.89	£5.08	£4.84	£4.68	£5.02	£5.31	£4.72	£4.90	£4.41	£4.09	£4.24	£4.21
MPF Higher / (Lower) than W/LR	+14%	+10%	+8%	+6%	+7%	+5%	+1%	+3%	+10%	+9%	+11%	+12%
Fleet												
MPF	£3.17	£3.54	£3.35	£3.36	£3.51	£3.58	£3.17	£3.54	£2.98	£3.04	£3.07	£3.02
W/LR	£3.30	£3.34	£3.23	£3.34	£3.35	£3.48	£3.18	£3.23	£3.04	£3.00	£3.01	£2.99
MPF Higher / (Lower) than W/LR	-4%	+6%	+4%	+0%	+5%	+3%	-0%	+10%	-2%	+1%	+2%	+1%

Appendix A6: Gaming basket example

allowable basket change (i.e. X in RPI-X)			0.0%				
sub-cap delta			10.0%				
volume							
A		25	100	125	150	175	200
B			200	175	150	125	100
unit cost (incl ROCE)							
A			£10.00	£10.00	£10.00	£10.00	£10.00
B			£10.00	£10.00	£10.00	£10.00	£10.00
total cost							
A			£1,000	£1,250	£1,500	£1,750	£2,000
B			£2,000	£1,750	£1,500	£1,250	£1,000
total			£3,000	£3,000	£3,000	£3,000	£3,000
price change							
A	*at sub-cap*			10%	10%	10%	10%
B	*to stay within overall cap*			-5%	-8%	-14%	-25%
price							
A			£10.00	£11.00	£12.10	£13.31	£14.64
B			£10.00	£9.50	£8.71	£7.50	£5.64
revenue							
A			£1,000	£1,375	£1,815	£2,329	£2,928
B			£2,000	£1,663	£1,307	£938	£564
total			£3,000	£3,038	£3,122	£3,267	£3,492
profit			£0	£38	£122	£267	£492
excess profit % cost			0%	1%	4%	9%	**16%**

Appendix A7: Openreach operational efficiency plans

The attachment is a summary of Openreach's operational plan for 08/09 which is an extract of a presentation at the OTA Executive on 28 May 2008.

[[REDACTED]]

Appendix B: Frontier Economics papers

Appendix C: RGL Forensics papers

Appendix D: Dr Chris Doyle report