BT's response to Ofcom's consultation paper:

"Leased lines charge control: a new charge control framework for wholesale traditional interface and alternative interface products and services"

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Section 1: Executive Summary

Ofcom's consultation considers how to regulate the pricing of a broad suite of "wholesale leased lines" services. These services are the key building blocks for the communications networks that UK businesses rely on and are vital to the future economic prosperity of the UK. It is important therefore that any charge control allows the market to operate effectively and allows us to deliver services in a timely and efficient manner.

During the period of the proposed charge controls, Openreach plans to invest up to £750m in providing wholesale Ethernet services to meet customer demand. Ofcom's regulatory framework in this area will signal whether investment in these new technologies so vital to the future of UK plc is worthy of BT's shareholders support

Having reviewed Ofcom's proposals in detail, we have the following headline comments:

- We support the proposal to define **broad charge control baskets** for AI and TI services. However, other proposed controls – most notably, **safeguard caps on "sub-baskets" of services** – will limit unduly our flexibility to offer services on terms demanded by our customers. We have proposed practical alternatives which we believe will give us the flexibility we need whilst not disadvantaging our customers and deal with underlying regulatory concerns.

- We welcome Ofcom's support for **our proposals to rebalance certain TI charges** to move cost recovery more in line with the indicative floors and ceilings. We support Ofcom's view that once these changes have been made – and recognising the price changes that have already been made on the AI portfolio – there is no need for any further adjustments to either AI or TI charges until October 2009.

- We are broadly supportive of Ofcom's proposed **"technology neutral"** approach in setting controls. However, Ofcom's model must take account of the costs we would face if we were to meet demand by sustaining the existing product set. The base year costs should therefore be uplifted.

- In setting the overall charge controls, **Ofcom's modelling understates our future costs and overstates our future volumes**. As a consequence, Ofcom has overstated the levels of X that should be set. We propose a number of amendments to the base year cost exclusions and key model assumptions and also highlight an error in Ofcom's use of our AI volume forecast data. We would stress the following issues in particular:

    - A central part of appropriate regulation is the setting of the right weighted average cost of capital (WACC) that can be recovered by BT in relation to AI and

TI services. Currently, the WACC is set too low. We consider it should be set at 13.3% or higher.

- It is critical that we should be able to recover a reasonable proportion of our **pension deficit costs** through regulated charges.

- In view of the change in economic climate since Ofcom started their review, charge controls should also be adjusted to reflect the considerable **downside risk to future demand** for the relevant services.

- We propose that any assessment of the **"cost orientation"** of individual charges should be carried out across services where these are purchased together. Ofcom will also need to ensure that any such test is never rigidly applied outside consideration of the broader effects any pricing may have on customers or competitors.

- We support Ofcom's proposal to allow **migrations from existing AI products to new, lower priced, AI products** to contribute towards the meeting of the AI charge control. However, we propose a more straightforward approach which we believe meets the same regulatory objective of ensuring CPs realise reductions in the charges paid to Openreach.

- The previous charge controls on TI services expired at the end of September 2008, but, given delays in the consultation process, we agreed with Ofcom that amended charges for TI services would be applied with effect from 1 October 2008. We therefore expect Ofcom to apply the new TI charges from this date.

Section 2: Context for this charge control review

In this consultation, Ofcom is looking to establish an appropriate regulatory framework for our pricing of wholesale leased lines services in the relevant SMP markets identified as part of the Business Connectivity Market Review ("BCMR").

Our starting point is that pricing regulation should be sufficiently light touch and flexible to ensure that markets can operate effectively and ultimately deliver services which businesses require in a timely, efficient and cost-effective manner. This is expected to be a period of significant change in the make-up of demand for wholesale leased line services as the trend away from TI services towards AI services continues and as overall bandwidth requirements increase. We would note, in particular, that AI services are increasingly key building blocks in communications networks on which UK businesses depend and which are so vital to the economic health of the UK. Regulation should aim to facilitate this trend and should certainly avoid being a barrier to such market-driven developments.

Before providing our detailed responses to the consultation questions, we set out in this Section some broad contextual background which we believe to be of particular relevance to the supply of the affected wholesale services over the next 3-4 years. It is against this backdrop that Ofcom must assess whether its approach to regulation is likely to facilitate optimum market outcomes. Critical to this are:

- The significant downturn in the outlook for the UK economy and the risk this presents to the derived demand for wholesale leased lines services through the impact on UK businesses.
- The significant – and risky – investments Openreach is making in developing its wholesale Ethernet access and backhaul portfolio to meet the demands of its customers at a time of such uncertainty.

Overall, we believe that consideration of this context supports amendments to Ofcom's proposed approach, in particular by:

- Ensuring that Ofcom's overall proposals allow scope for us to meet the evolving needs of our customers in the supply of existing legacy services and in the supply of new Ethernet services.
- Ensuring that Ofcom's modelling of our future aggregate revenue requirements takes account of the uncertainty of future demand and the associated high levels of risk in providing these services over the relevant period.

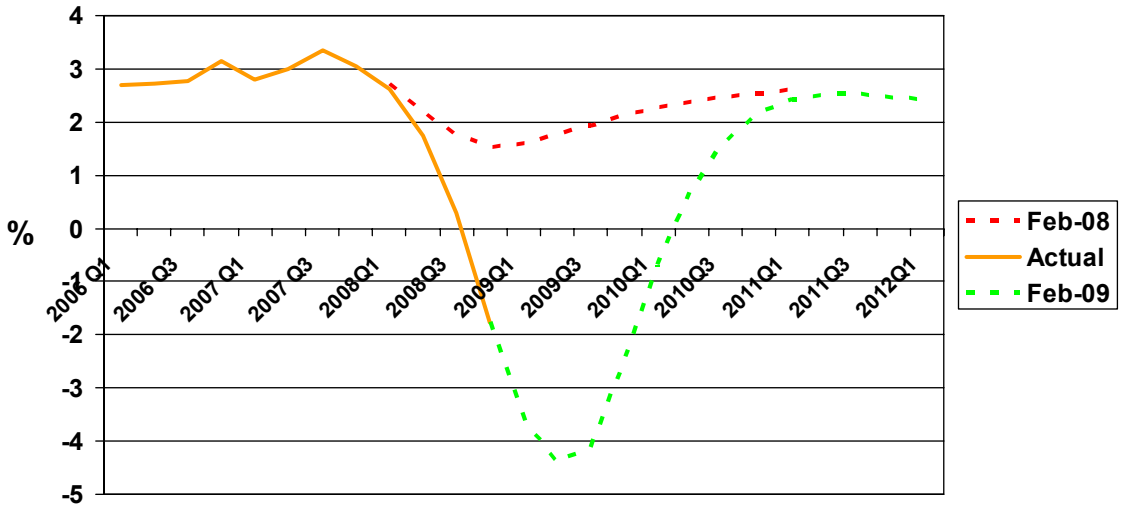
(1) The UK macroeconomic climate

Over the past 12 months the UK has entered recession and is forecast to experience negative growth over the next four quarters. This represents a significant reduction in economic activity which can be expected to have a negative impact on the demand for BT's services.

The impact of the recession on businesses is illustrated by a recent Experian analysis of UK business solvency statistics.[1] The report shows that there were 23,879 business failures during the year ending December 2008, a 30% increase compared with the same period in 2007. Indeed, during the final quarter of the year there were 7,238 business failures, representing a 52% increase on the equivalent period in 2007, a trend which is set to continue as we move into 2009. Such changes will clearly impact on demand for business connectivity services and on the derived demand for the wholesale products under consideration in this review.

Critically, it is also worth noting that current forecasts of overall GDP growth are well below forecasts available twelve months ago as demonstrated by the chart below.

UK GDP growth forecast (yr on yr % change)



Source: Bank of England quarterly inflation report (forecast)
Office of National Statistics (actual)

Such a dramatic downturn in the forecasts for the overall economy clearly represents significant downside risks for the volume forecasts for future demand for the relevant wholesale services and which Ofcom has used in its modelling work. This downside risk to volumes increases the risk that the values of X derived from Ofcom's model will be overstated

1 http://www.ccrmagazine.com/index.php?option=com_content&task=view&id=674&Itemid=37

and will require charge reductions as a consequence. Given that Ofcom has highlighted the sensitivity of the value of X to volume assumptions, the downside risk to demand strongly suggests that Ofcom should adopt values of X towards the lower end of the proposed ranges.

(2) Openreach's investments in developing the Ethernet portfolio

As the Ofcom consultation notes, Openreach is moving from the existing individual 'point-to-point' fibre deployment to, where economic, a product and service architecture based on common infrastructure. Related to this, Openreach is also aiming to simplify the portfolio and is introducing two main AI products – Ethernet Access Direct (EAD) and Ethernet Backhaul Direct (EBD).

Over the period of the proposed charge control, Openreach plans to invest a sum approaching £750m in AI services to further develop this market and to better meet customers' evolving demands. However, take-up of these services – and therefore payback periods on Openreach's investments – will clearly be sensitive to both the changes in demand driven by the macroeconomic climate and constraints our customers are likely to face on capex spend. There is the further complexity of managing the migrations path from old to new products. These investments therefore bear an intrinsically high commercial risk for Openreach.

Ofcom should therefore reflect this inherent risk within its modelling and ensure that the framework it establishes for constraining pricing behaviour does not, in itself, undermine these investments. For instance, Ofcom's approach must not hinder Openreach's ability to structure prices in a way which actively encourages migration from legacy products to the lower priced new products. Flexibility is also important to ensure that Openreach can offer pricing structures that better match its customers' requirements, Ultimately, this would be a "win-win" for Openreach and its customers and so it should be clear that regulation should facilitate flexibility within the context of controlling overall average charges.

As a result of Openreach's investments, the overall returns on the regulated AI services will be lower at the start of the control period with the business case based on higher returns towards the end of the period of the proposed charge control and beyond. This profile of returns is reflective of that envisaged in Ofcom's own explanation of the "technology neutral" approach to setting the charge control and would also reflect the appropriate profile of reward for making the current risky investments.

In light of the above, it will be important that, when finalising its approach, Ofcom is explicit that Openreach would not see any future profitability "claw back" under any further charge controls. Absent such a clear signal, it will be difficult to persuade BT's shareholders that

investment in these services, so vital to the future economic health of the UK, is worthy of their support.

Overall, our response highlights those areas where we feel that Ofcom's proposed approach would unduly constrain our ability to meet customer demand and, thereby, make appropriate returns on our investments. We set out alternative proposals – notably in relation to the application of safeguard caps and on the use of floors and ceilings – which we believe strike a more appropriate balance between Ofcom's desire to protect customers and its desire that customer needs are met.

Section 3: Our overall position on Ofcom's key modelling assumptions and on recovery of BT's pension costs

For ease of reference, Table 1 below summarises our overall position on the key modelling assumptions driving Ofcom's proposed ranges for the values of X for the TI and AI baskets. The detailed justification for our position is set out in response to the specific questions. This Section also explains our position in relation to the recovery of a reasonable proportion of BT's pensions deficit costs within Ofcom's model as this issue is not explored by Ofcom in the consultation paper and no explicit questions are asked.

Table 1: Summary of overall position on key modelling assumptions

RPI-X Modelling Issue	BT's comments
Technological neutrality approach	We agree with the proposed approach as long as (i) this includes reasonable modelling of "hypothetical network" costs and (ii) that there is a carry-over of any net costs of new technology over the forecast period to any subsequent price control.
21CN costs	We agree direct cost exclusions are appropriate as long as legacy investment levels reflect those of sustainable networks. We disagree with the indirect cost exclusions as these costs will be incurred anyway and are not generated by 21CN.
RAV	We disagree with the proposed adjustment in the TI cost base; and agree that no adjustment should be made to the AI cost base.
Reduction in allowance for Debtor days	Ofcom's allowance is unrealistic and the cost model should use 34 debtor days for the TI basket and 40 debtor days for the AI basket to reflect what can be achieved in practice.
CCA adjustments	We agree with Ofcom's approach of using a 5 year average of past holding gains to calculate future asset price changes, but Ofcom should include "other CCA adjustments", where relevant, and should disaggregate between fibre cable and copper cable.
Volumes	Ofcom has overstated the AI volumes in their model based on forecasting information received from Openreach. In addition, Ofcom should recognise that in the current macroeconomic climate, there is more downside than upside risk to volumes so should avoid setting Xs on the basis of service demand which may not materialise.
Efficiency	We think that annual efficiency improvements, in terms of lower costs per unit provided, will be lower than proposed by Ofcom.
WACC	We believe the WACC for these services should be 13.3%.

AVEs/CVEs	Ofcom's estimates of the AI parameters are too low and are not adequately justified. As a result, forecast unit costs are likely to be understated.
Pensions deficit costs ***INCLUSION OF NEW COST LINE***	Ofcom should include an uplift so that SMP products contribute towards the extra costs BT is experiencing in contributing to pensions deficit costs.
X for TISBO and AI services	Based on the above considerations, BT considers that prices of TI services should be allowed to rise in line with the RPI; and that the X for AI services should be at the very bottom of the proposed Ofcom range – i.e. no higher than 3.25%.

Pension Deficit Costs

In our response to the Openreach Financial Framework Review, submitted on the same day as this response, BT sets out why the increased funding requirements of the existing pension deficit should be included as a relevant cost attributable to Openreach for the purposes of the cost assessment. The response to the Financial Framework Review also contains as an Annex a study commissioned from Davison Yarrow Ltd that discusses the treatment of pension deficits by other regulators, and compares them to Ofcom's approach. Ofcom's approach is inconsistent with that of other regulators, and regulatory precedent exists in other industries for these costs to be recovered though regulated charges.

The same rationale applies to other products for which mandatory price ceilings are imposed, including TI and AI services. The cost of servicing the pension deficit can only be met out of current and future cash flows, and therefore represent forward-looking costs that BT will incur.

Section 4: Answers to Ofcom's Section 3 Questions

Question 3.1 Do respondents agree that RPI is the best index for the charge control?

and

Question 3.2 Do respondents agree that an RPI-X control is the appropriate form of charge control for the regulation of TI terminating, trunk and Ethernet services?

- We agree that RPI is generally a suitable price index and that RPI-X controls can provide benefits for customers and good incentives for suppliers.
- We suggest however that this form of price regulation needs modification in circumstances where RPI is negative.

To the best of our knowledge, all UK price caps to date have used the RPI as the price control index. This reflects the basic idea behind RPI-X that prices are controlled against all other prices in the economy, and that these are appropriately measured by the RPI. BT also agrees that RPI-X is, in general, an effective form of charge control (where the aim is a reducing glide path over the period of the charge control) with many positive incentive properties. We therefore broadly agree with Ofcom's rationale as set out in paragraphs 3.15 to 3.17. We do, however, have certain qualifications as set out below.

Basis of RPI-X controls

If X is set at 0, this would mean that prices would not need to change relative to those in the economy – i.e. they could be held constant in "real terms". If X is positive, then prices need to reduce against all other prices in the economy, by X% a year. In effect, RPI is the component of the Controlling Percentage (RPI-X) which provides an allowance for inflation on the basis that, if there is inflation in the economy, the regulated supplier's costs will also tend to be increasing for this reason (and so prices can be increased by this amount). For example, the RPI allowance allows pay levels to be maintained in real terms before efficiency considerations central to "X" are made.

Thus, were X to be 0, prices could be increased by RPI on the basis that this is the general economy-wide trend in prices, which itself will reflect the general economy-wide trend in underlying costs.

The Ofcom cost models which underlie the derivation of X are invariably also in real terms, so no view needs to be taken on RPI itself.

Negative inflation

Ever since privatisation, RPI has been positive. We are now entering an extraordinary economic period in which RPI is likely to become negative, which would mean that, in addition to any reductions required by X, nominal prices of the services in the price control baskets would in addition also be required to fall by the recorded decreases in retail prices.

We believe that, were RPI to be less than zero, the Controlling Percentage ought not to include a negative value for RPI, but that this should default to zero. This would mean that the price control in nominal terms would never be larger than X.

We consider that this is justified because many of our costs will not actually decrease in nominal terms even if inflation as measured by the RPI is negative. Such costs include, for example, property rentals which have "upwards only" reviews and fixed rate capital financing of debt. Staff pay costs may also be difficult to reduce in nominal terms. In effect, when it is negative, RPI is not a good measure of the nominal movement in costs because of the asymmetry which occurs when RPI is negative and not positive.

It is also the case that the cost modelling which underlies the derivation of X uses real input prices. In a deflationary world this will under-estimate capital costs which will need to reflect higher depreciation (reflecting unrealised holding losses) due to lowering annual capital prices.

These factors all combine to make it far more difficult to meet any price control formula, and at the same time maintain a fair return on capital employed, if RPI becomes negative. Were the Controlling Percentage to be amended in the way suggested above, this effect (which is clearly not intended by Ofcom) would be avoided.

AI Basket

In considering this response, it has become clear to us that it is more difficult to set, and for us to evaluate, the AI basket than the TI basket due to the level of uncertainty in demand for these services and the complication of computation due to actual and potential migration activity. Our support for a four year basket is based on the superior incentive properties of price controls over cost plus regulation over the period of the proposed charge control and predicated on some practical issues surrounding the workings of the AI basket being clarified and resolved. Our support is also for overall price controls, rather than for widespread use of sub-baskets which not only add significantly to the administrative load of compliance (for Ofcom and ourselves) but also limit the flexibility associated with a basket oriented approach.

Timing of price control reviews

Ofcom should also consider the relationship between different regulatory charge controls and seek to synchronise these where they involve common input assumptions. For example, for AI business connectivity services Ofcom is proposing a four year control whilst for other

Openreach controls one or two years are proposed. Given that there are shared components in some cases, there is a case for price reviews for Openreach's services to be undertaken at the same time and for these usually to apply for the same duration.

Question 3.3 Do respondents agree that a four-year duration for the charge controls on TI terminating segments, trunk and Ethernet services is appropriate?

Given the UK market conditions for these products, we generally favour price controls over other forms of cost-based price regulation. Among other things, charge controls provide a high degree of certainty in terms of overall price levels and because they limit the administrative burden involved in annual price determinations. Their incentive properties (in terms of cost minimisation and volume growth) are also generally good although for some incentives to apply it is vital that there is consistency between adjacent related price controls.

We would suggest that the broader context in which these controls are being set makes this a particularly difficult exercise. New services are being introduced, but migration between services – although still likely to be significant – will be difficult to forecast, particularly given the deterioration in the external macroeconomic outlook. We believe there must be a significant risk that large downsides to central forecasts might materialise.

One response to this situation might be for price caps to be set for periods shorter than 4 years. However, we are generally not in favour of shorter price caps, as these reduce many of the benefits of price controls themselves. We therefore support 4 year controls but within the context of the charge controls themselves allowing maximum flexibility to reflect the inherent uncertainty of the markets. It is also important that Ofcom press ahead with regulatory innovations such as the use of an "average revenue control" for AI services which will reduce the need for Ofcom to model the rate of migration to new services from existing services. We provide more detailed comments in response to Question 5.1 on how we believe the "average revenue control" approach can be made to work in practice.

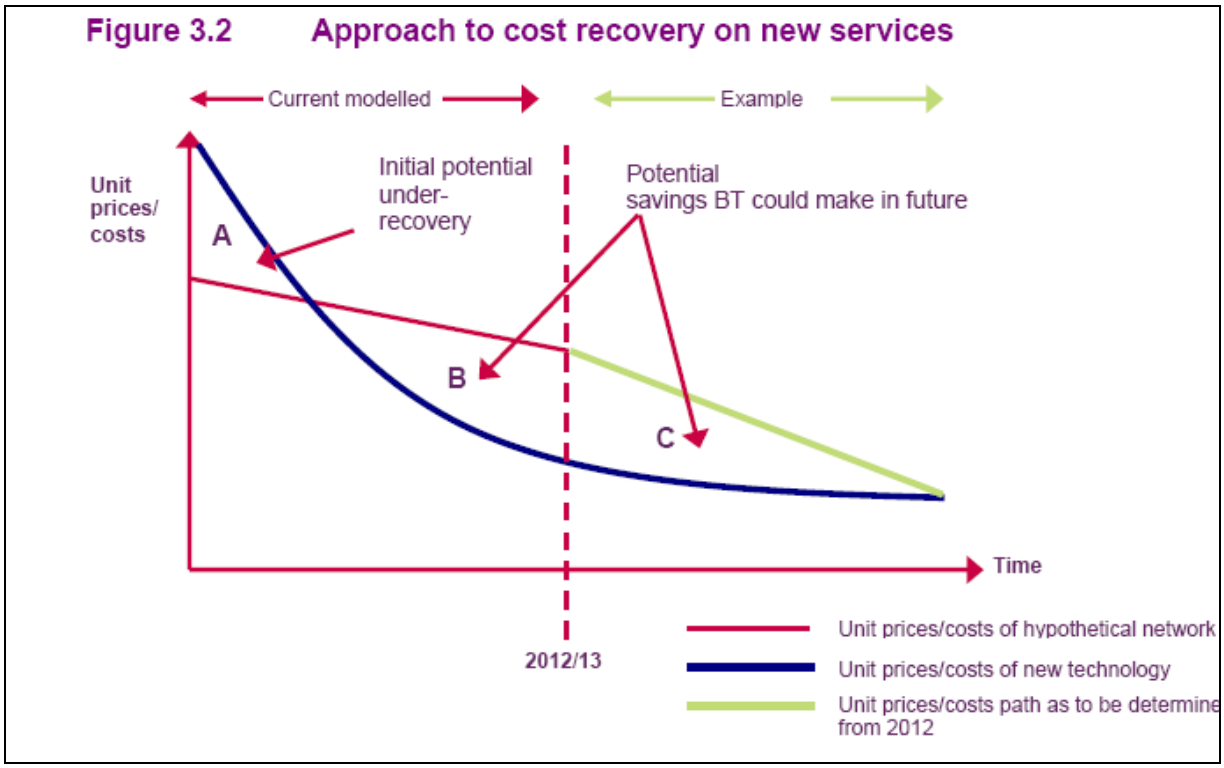
Question 3.4 Do respondents agree with our proposed technology neutral approach to modelling?

- We broadly agree with Ofcom's proposed approach for these controls.
- However, this is subject to the requirement that the costs of the hypothetical network reflect those of sustaining legacy platforms in the long-run.
- In addition, the approach needs to recognise that net cost savings may not materialise until after the proposed controls end. An assurance that these will not be regulated away or "clawed back" is therefore needed to provide the right incentives to investment.

We agree with Ofcom that an approach to cost modelling based on estimating the efficiently-incurred costs of a "continuing hypothetical network" is, in the circumstances, a reasonable and appropriate way to proceed. The degree of uncertainty as to both the timing/extent of migration over the forecast period, and of the cost of the network upgrades underway, make it very difficult to create a unit cost model based on the planned NGN over the forecast period.

As Ofcom observes, the implementation of a single charge control under the proposed technology neutral approach, and which applies irrespective of platform used to provide services, also has good incentive properties. This is because it would encourage us to migrate services onto a new platform if the costs of doing so are lower than continuing to use an existing platform. This was also the approach used by Ofcom to set mobile call termination charges (whether by 2G or 3G).

However, there are still some important issues which need to be addressed if the proposed approach is to fairly and appropriately reflect our costs of service provision. Ofcom's Figure 3.2 provides a helpful illustrative basis on which to discuss this issue and it has therefore been repeated below.



Continuing hypothetical network

The approach described by Ofcom clearly relates to the costs of a continuing network, i.e. one in which investment levels are sufficient to maintain a level of capital employed which would be necessary were the network to be sustained over the long term period. In other words, the Red cost line (unit costs of a hypothetical network up to 2012/13) in the Figure

reflects the on-going, long-run costs which would be incurred were there to be no migration of services to new platforms. Therefore, whilst we accept that under the Ofcom approach it is appropriate to exclude costs truly incremental to 21CN from the base year, this is with the proviso that adjustments are made to both depreciation and Mean Capital Employed of the legacy assets. This is required so that the technology neutral model estimates what would have been needed in the absence of 21CN investment. In other words, "truly incremental" 21CN costs ought to be excluded but not 21CN costs which are replacement for investment in the legacy platforms which would otherwise be necessary and which would have been incurred "but for" 21CN.

In particular, there are reasons why the depreciation rate for the current network in the regulatory accounts is lower than it would be "in the usual course of business" as some assets may be nearly fully depreciated but still in use. In addition, Mean Capital Employed will be lower than in a "steady state" as some legacy assets have been replaced by investment in the NGN. Consequently, an adjustment upwards from the levels allowed for by Ofcom must be made to the value of the legacy assets to represent the capital expenditure that would have taken place in the absence of NGN. Likewise, the depreciation rate should be adjusted to a "steady state" level. We suggest how this calculation might be made in our answer to **Question 3.9**.

Short term price cap and long term paybacks

Ofcom's presentation of the proposed approach to cost recovery shows that costs will be temporarily higher on the new network (the magnitude of which is represented in schematic terms by Area A in the above figure) before cost savings are achieved. As drawn by Ofcom, Figure 3.2 suggests that overall there will be cost savings to BT in the period to 2012/13 (i.e. Area A is smaller than Area B as drawn in the figure).

We are not of the view that such an outcome can be assumed and it is quite possible that by 2012/13 extra costs will have been incurred overall due to the parallel running of new and legacy platforms. Savings from new technology are to be anticipated, but these may not exceed the extra costs (which result from the need to continue in parallel to operate the legacy platform and incur costs to do so) incurred until after 2012/13. In terms of the Figure, Area B plus Area C (cost savings) are expected to be larger than A (the extra costs incurred in moving to the NGN), but Area A may be larger than Area B. In other words, the benefits from the expenditure represented by Area A may not accrue until beyond 2012/13.

We appreciate that this creates a regulatory problem in that the use of a 4 year control cannot capture the longer term effects involved when investments are being made in order to make savings over a significantly longer period. We do not, however, consider that the right response to this is to extend the length of the price control, as large forecasting errors become increasingly likely as the duration of the control is extended. There are, instead, some practical steps which Ofcom should take to address this issue.

First, Ofcom should indicate what it intends its approach to be to the costs and benefits represented by Areas A, B and C in the period after the proposed price control. BT is not requesting that Ofcom "ties its hands" in future (even were it able to do so) but that it provides what assurance it can that price controls will be applied consistently across time so that no efficiently-incurred costs are disregarded and left unrecovered in interconnection charges. In so doing, Ofcom will in effect be extending its approach to price control beyond 4 years, but without needing to make longer forecasts (which can be re-set nearer the time).

One important implication of this assurance would be that the difference represented by Area A less Area B (the cost in moving to the new technology) would be recognised as a legitimate cost of service provision if there is to be a further price control beyond 2012/13. This would be consistent with Ofcom's approach to mobile termination rates from 2007 which included an allowance for costs incurred in bringing 3G networks into service (including an allowance for the funding of the investments and inflation over the intervening period). It would recognise that such migration costs can be efficiently-incurred as they are necessary to make possible a lower level of charges on NGNs in the medium to long term.

We would also appreciate reaffirmation by Ofcom of its policy not to introduce one-off price reductions at the end of the control envisaged for 2008/9 to 2012/13 in order that the benefits from Area C are seen as legitimate recompense for the costs incurred in the period from 2008 to 2012/13. In the Consultation Document, Ofcom mentions that under its proposals the charge control would reward us when we achieved cost savings (e.g. by migrating services to the NGN sooner) by allowing us to keep such savings until the end of the control period. However, this is in reference to the forthcoming control period, when no savings may accrue. For this reason, Ofcom should signal that one-off price reductions will not be imposed in 2012/13 if we have not benefited from net cost savings by the end of the current control period.

Without such actions, regulation risks imposing an under-recovery of incurred costs over 2008/9 to 2012/13 (which would not be consistent with either our objectives or Ofcom's statutory objectives and aims, and which could have market distorting effects) and also provides no confirmation that cost savings will be permitted to accrue to BT under future price control(s).

Question 3.5: Do respondents agree with Ofcom's proposal to continue to use prior year weights to assess compliance with the proposed control on charges for TISBO and trunk services?

We agree that for TISBO and trunk services prior year revenue weights ought to be used. These provide certainty for implementation of the control. In addition, the issue of migration of services within the basket, which arises in the case of the AI basket, does not have the same importance for TI services.

Question 3.6: We would welcome views on the merits of an average revenue control for AI services and on whether this could be combined with a prior year weighted price cap on the AI basket as a whole

In the context of a relatively dynamic portfolio, where demand for new and evolving services will – to an extent – replace demand for existing legacy services, we welcome the intent behind Ofcom's proposals. However, as we set out in our answer to **Question 5.1** – which also covers our answer to **Question 6.1** – we propose an alternative and much simpler approach to the actual calculation of average charges within the regulated basket.

Question 3.7 Do respondents agree with the application of the "k factor"? We would also welcome stakeholder views on the appropriate level of the interest and penalty rates to be applied.

- We agree with a "k factor" which applies symmetrically to over and under-achievement of the basket price requirements.
- However, we do not consider a penalty rate to be fair and proportionate if the cause of any under-achievement is demonstrably due to factors outside our control, such as inaccurate forecasts by CPs.

Ofcom propose a "k factor" to be applied to the Controlling Percentage. This factor would effectively be an interest rate applied to any over or under-achievement of the basket, i.e. it would be symmetrical. Whilst it seems reasonable to have a "k factor" (based on an appropriate LIBOR rate), it needs to be recognised that there are a number of factors outside Openreach's control when it comes to forecasting product volume on a monthly basis and at the product variant level. This is particularly relevant were Ofcom minded to have an adjustment term to the "k factor" which would penalise us for making price changes below those required.

Due to the nature of the Openreach business, it is dealing with "derived demand", the business being dependent on CPs' actual demand and their ability to provide accurate forecasts. Currently there are no contractual penalties attached to CPs making inaccurate forecasts. Openreach already has a strong incentive to arrive at an adjusted output which is as accurate as possible in order to achieve maximum operational efficiency. Openreach has additional reasons to ensure its forecasts are the best that could have been made at the time, in order to extract the best deal from suppliers and because such contracts can include contractual penalties. In such circumstances, Openreach does not consider that a punitive uplift to the adjustment factor would be appropriate. We therefore suggest that either of the following approaches is adopted:

- Following the example provided by Ofcom of the controls on National Grid, a threshold could be set for any under-delivery of price reductions against the basket requirement, with no "uplift factor" applying unless the threshold is exceeded. We would be happy to discuss with Ofcom how such a threshold ought to be set. It might be based, for example, on historical levels of accuracy of CP forecasts across services within the Ethernet portfolio.

- Alternatively Openreach could submit its quarterly operational forecast to Ofcom. As long as the same forecast were used for basket control purpose, it should be clear that Openreach was not "gaming" the price control as it has far stronger incentives for the forecast to be as accurate as possible for operational efficiency reasons.

We note that if penalties were to be applied to Openreach due to forecasting "errors", then we may need to consider imposing a contractually enforceable forecasting process.

Finally, we also suggest that any uplift to the "k factor" can be set aside if Openreach can demonstrate to Ofcom that its price reductions were set in good faith based on the forecasts it received from CPs, and that it had been the failure of orders to match forecasts that led to any under-setting of price controls. That is, were there to be an "over-recovery" as against the price controls, then Openreach should not be penalised where it can satisfactorily demonstrate to Ofcom that such an outturn had occurred due to factors beyond its control and was not due to any attempt by Openreach to "game" the flexibility afforded by current year prices. In such circumstances, we do not consider that the penalties proposed by Ofcom would be fair and proportionate.

Question 3.8 Do respondents agree that CCA FAC is the appropriate cost basis for setting the proposed charge controls?

Ofcom recently consulted on this issue during the Openreach Financial Framework Review.[2] Ofcom suggested there that, in deciding on the basis for setting prices, there are trade-offs between allocative efficiency, cost minimisation and in providing the right incentives to invest. BT considers that these issues are also relevant to the basis for price setting for TI and AI services.

In our FFR response,[3] we said that we thought price caps provide powerful incentives for productive efficiency (i.e. cost minimisation). There are no obvious trade-offs with either of the other two types of efficiency described by Ofcom, because price caps provide incentives for productive efficiency whatever the level of charges. If there is a conflict, it is therefore between allocative efficiency and dynamic efficiency – in other words, the suggestion by

[2] "A New Pricing Framework for Openreach", Ofcom May 2008.
[3] Available at http://www.ofcom.org.uk/consult/condocs/openreach/responses/ see page 52 onwards.

Ofcom in the FFR that prices in line with costs might not create the right incentives for firms to invest and innovate. Put directly, low access charges which create the right incentives for other firms to invest and innovate, might not reflect the resources used to provide the service.

In our Response, we pointed out that it does not follow that encouraging further take-up – through low charges – results unambiguously in an increased level of efficiency and innovation. BT's access networks are not monopoly networks and the lower the charges for BT's network, the more difficult it may become to make a commercial return on competing networks. This applies particularly to networks which have not been built and for which all the costs are still avoidable. Many business connectivity services fall into this category.

Furthermore, even if it were correct to assume that lower wholesale access charges promote dynamic efficiency, there is a conflict with another requirement on regulated charges – that they should promote allocative efficiency. Prices lower than cost will encourage over-consumption, because customers will be purchasing the service up to the point where their private value equals price, and this is below the cost of provision. At the margin, the resource costs of providing the service will be greater than the value of the service. This would (unless there were clear, demonstrable externalities) be inefficient.

Recognising "sunk costs"

A relevant consideration is the level of costs which reflect the resource costs of supply. A familiar claim is that sunk costs should be disregarded on the basis that these are not relevant going forward. However, the clear consequence of such a policy is that it provides very poor forward-looking incentive properties – knowing that a "hold-up" of this kind is a possibility, and that assets cannot be withdrawn should "hold-up" occur, a rational investor will not commit funds in the first place. For sustained investment, some protection of the investor's (i.e. shareholders' and debtors') interests is therefore necessary in any regulatory regime which has long term efficiencies in mind.

Thus, Article 13(1) of the Access Directive states that, "National regulatory authorities shall take into account the investment made by the operator and allow him a reasonable rate of return on adequate capital employed, taking into account the risks involved".[4] This is reflected in Section 88.2 of the Communications Act 2003, which states that Ofcom must take into account the extent of the investment in setting prices of network access services.

Charges set on the basis of long run cost largely meet this requirement because the long run is defined as the period over which all assets (and costs) are variable. This also accords with regulation which provides that all efficiently-incurred costs can be recovered in regulated charges.

[4] Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks & associated facilities (Access Directive)

Mark-ups

The remaining issue is what mark-up ought to be applied to long run costs, there being a need for a mark-up to cover the difference between the totality of service long run incremental costs and the total distributed costs of supplying the set of services in question (these being known as "fixed and common costs"). The most economically efficient prices are those based on Ramsay Pricing principles. However, this has been used in the past because of a lack of the necessary data. Both CCA FAC and LRIC + Equi-Proportional Mark-Ups therefore use a set of rules to allocate fixed and common costs. Ofcom has stated in the past that these two approaches have little difference.

Both are clearly significantly better than HCA as a costing approach as they represent the costs that a new market entrant would face. In terms of the choice between CCA FAC and LRIC +, Ofcom sets out the case for CCA FAC in the Openreach Financial Framework Review Second Consultation:

- CCA FAC is a widely understood concept and has been the anchor for many previous price controls;[5]

- CCA FAC is based on public data and which has been reconciled to the audited regulatory financial statements;[6]

- in terms of 'static efficiency', charges set in line with CCA costs consistently across the portfolio will avoid creating competitive distortions; and

- a fully cost-reflective charges ensures that competition is not founded on special protection for a particular type of entrant, or service user, and hence is likely to be good for 'dynamic efficiency'.[7]

In such circumstances, it should be clear that CCA FAC provides an appropriate basis for evaluating starting charges for price controls (and enables appropriate Cost Floors and Ceilings to be calculated, as is discussed further in **Annex 1**).

[5] Paragraph 6.7 of the Second Consultation, "A New Pricing Framework for Openreach", December 2008.

[6] As previous footnote.

[7] Paragraph 6.44 of the Second Consultation" A New Pricing Framework for Openreach", December 2008.

Question 3.9: Do respondents agree with our proposal that, in principle, costs truly incremental to 21 CN should be excluded from our base year 2006/07?

We accept the principle outlined by Ofcom that the aim of technology neutral modelling is to assess the costs that would have been incurred in the absence of a decision to invest in an NGN. In making cost adjustments *not only* is the removal of incremental 21CN needed *but also* an upwards adjustment to costs is necessary to reflect ongoing costs that would have been incurred in the absence of NGN investment.

It is important for allowance to be made for the inclusion of the impact of any reduction in capital expenditure in legacy platforms consequential to the decision to invest in NGN. This adjustment flows through into both depreciation and mean capital employed, which requires an upwards adjustment to reinstate the displaced investment. This is consistent with the approach Ofcom outlines in paragraphs 3.97 and 3.99 of the Consultation Document.

Thus, whilst "truly incremental" 21CN costs should be excluded from the base year costs, BT agrees with Ofcom that they should be replaced with those costs that would have been incurred had the investment in NGN not occurred. A suggested method for calculating these notional costs (investment in legacy assets in the normal course of business which have been displaced by the investment in NGNs) is as follows:

a. Estimate the average rate of capital expenditure on legacy assets in the years prior to the decision to invest in NGN

b. Estimate the proportion of this capital expenditure attributable to volume growth (through use of Asset Volume Elasticity and volume growth)

c. Deduct the "growth" capital expenditure from the total capital expenditure to estimate the rate of asset replacement required in the normal course of business

d. Compare the actual capital expenditure on legacy assets to the long-run average rate calculated by steps a) to c). If actual capital expenditure is lower than the long-run average this indicates the volume of capital expenditure that has been displaced by investment in NGN. This shortfall equals the "notional" capital expenditure that should be reinstated if adjustments are made to remove the incremental NGN costs.

The "notional" capital expenditure in each year is summed starting from the period when the decision to invest in NGN was taken. This will identify the aggregate capital expenditure displaced by NGN. This value can then be depreciated using average asset lives to derive the notional adjustment to both depreciation and to mean capital employed.

The suggested methodology above deals with direct costs. Indirect costs of NGN investment (i.e. the allocation of overheads) should not be removed as they are not dependent on whether the investment in 21CN is made.

Question 3.10 Do respondents agree with the use of national costs to set the charge controls for the 34/45 and 14-/155 Mbit/s in the non-CELA region?

The use of national costs to set charge controls in the non-CELA region means that costs within the CELA region are included in the national average costs. As unit costs in the CELA region are likely to be lower than the national average, primarily due to higher customer density, the costs in the non-CELA region will consequently be higher than the national average.

The implications of using national costs for 34/45 and 140/155 Mbit/s in the non-CELA region is that the costs will be lower than they otherwise would be. Not only does this bring into question the cost-orientation (or otherwise) of the resulting charges, but it could also lead to the non-CELA area becoming less of an economic prospect for competing operators and therefore have the unintended effect of distorting competition in that geographic market.

We therefore do not agree with the use of national costs and believe that disaggregation of costs between CELA/non-CELA regions is justified and appropriate.

Question 3.11 Do respondents agree with our proposed ranges for the WACC for TI and Ethernet services?

Our full response on the cost of capital is contained in the response to the Openreach Financial Framework Review (FFR) second consultation submitted to Ofcom on the same date as this response (6 March 2009). A summary of the position is given here and which cross-refers to this work.

We are pleased to note that Ofcom has taken some account of the evidence submitted in response to the first consultation which:

- justifies a wider range for consideration of the appropriate WACC; and
- indicates that the regulatory WACC should be above that suggested in the first consultation.

Nevertheless, we consider that the range proposed by Ofcom is still too narrow and that using the mid-point of that narrow range is not consistent with recent practice of the Competition Commission (CC). The reasons for these conclusions are set out fully in Openreach's Response to the Openreach Financial Framework Review.

A comparison of our central estimates, based on this work, with those provided by Ofcom is given in Table 2 below:

Table 2: Comparison Of BT And Ofcom Proposals For WACC

	Ofcom's December 2008 Assessment		BT February 2009 Assessment	
	Range	ARoR[+]	Range*	ARoR[**]
Openreach	9.25-10.75	Not stated	9.1-12.5	12.1
RoBT (incl. TI and AI)	**10.25-11.75**	**Not stated**	**9.7-13.7**	**13.3**
BT Group	9.75-11.25	Not stated	9.4-13.1	12.7

[+] Allowed Rate of Return.
* BT's range is explicitly a 95th percent confidence interval.
** The Allowed Rate of Return here is set at the 90th percentile as recommended by the CC.

Taken overall, we are of the firm view that Ofcom's range for the levels of the WACC is still too narrow. A more plausible range would have a lower Low value and a higher Upper level beyond the top end of Ofcom's range. The key difference, however, is that the higher Upper is much greater than that in Ofcom's range, whereas the lower Low value is not significantly different from that in the original Ofcom range. In turn, this indicates that the mid-point of this wider range - and any associated uplift above the mid-point to incentivise investment - should be higher than Ofcom's equivalents.

WACC and future actual returns

It is worth stressing that, whilst the WACC represents an estimate of the future cost of financing capital expenditure for the purposes of modelling future regulated revenue requirements, this does not imply that future actual returns above this level would be in some way inappropriate. Investment in new platforms and services has inherent risk and a distribution of possible returns is likely (depending on whether demand materialises or the technology meets expectations). This means a return higher than the estimated WACC might be earned (if the risk "pays off") or a lower return earned if our expectations when making the investment are not met. It is an inherent function of RPI-X controls that regulated companies are incentivised to "outperform" the control.

On this point, we would also reiterate that as a result of Openreach's investments in new Ethernet services, the overall returns on the regulated AI services will be lower at the start of the control period with higher returns towards the end of the period of the proposed charge control and beyond. Such a profile would be entirely reasonable, and Ofcom should clarify expectations that any future regulation would not seek to "claw back" such returns.

Question 3.12 - Do respondents agree with our proposed approach to discounts, in particular the proposed treatment of geographic and term discounts under the charge control?

We do not agree with Ofcom's proposed approach to discounts and consider that price reductions in the form of geographic and term discounts should contribute towards our charge control obligations. While we accept that geographic and term discounts have the potential to raise competition issues in certain circumstances, we consider that Ofcom has sufficient legal and regulatory instruments to address any associated potential market abuses (e.g. concerning the legitimacy of price discrimination). Our view is that a price control mechanism is not the appropriate means of addressing such concerns as it is an instrument designed to control overall price levels.

Ofcom's proposed approach with regard to geographic pricing and term discounts is likely to discourage BT from introducing pricing innovations demanded by our customers, and prices will end up being determined principally by regulation and not in response to customer requirements and market forces. As explained below, Openreach has already introduced an element of geographic pricing in the pricing structure for EBD as well as minimum period options for a number of Ethernet services. Ofcom's approach to treatment of these discounts may inhibit further developments of this nature. We note that Ofcom is silent in the Consultation Document about how it would address these existing discounts. We request that Ofcom reconsider its proposals in this area, for the reasons set out in more detail below.

Geographic discounts

It is important that we should not be discouraged from reflecting geographic cost differences in the prices charged for services as this is consistent with what happens in competitive markets. The discussion in the Consultation Document suggests it is acceptable for us to reduce prices in some geographic areas (where we face most competition) and increase prices elsewhere. This is consistent with our view that the very fact that we face competition in particular areas will indicate that costs are likely to be lower in these areas than on average. Prices which vary by geography are, in such circumstances, more likely to be cost orientated than prices which do not vary. Were prices to be set on a national basis, competition will develop in the lower cost geographies where margins are highest. In geographies where costs are higher than average, margins may be too small to make competition economic. This means that competition will be overly encouraged in certain areas and will not develop to the extent possible outside these areas. We should, therefore, not be discouraged from responding to geographic cost differences and all reductions made to prices, whether or not there are geographical restrictions on the availability of certain prices, should count towards meeting price control obligations.

Finally, it is worth noting that an element of geographic pricing is already applied to the pricing of the Openreach Ethernet Backhaul Direct (EBD) product. EBD rental prices fall into three

different bands which are based on network utilisation. The bands are therefore closely aligned with urban, suburban and rural geographic areas. As it is proposed to include EBD within the AI basket, these different price bands will automatically qualify and will contribute towards our charge control obligations. The same should apply to other forms of geographic pricing that may be introduced in future.

Term discounts

We consider that much the same arguments apply to term discounts, which are a form of price reduction that should count towards meeting a price control obligation. The exclusion of discounts from the basket will have the effect, for example, of shaping Openreach pricing strategy and discourage the launch of price innovations that satisfy customer demand and are consistent with market practice.

We consider that there are compelling arguments as to why term discounts or 'minimum period options' represent an efficient method of pricing in certain circumstances. Term discounts are common in a great many markets and represent a means of sharing efficiency benefits of longer term contracts with customers. These benefits include savings in transactional and sales costs and an increased ability to efficiently plan and manage assets and inventory.[8] Also, we may in turn be able to obtain lower prices from our suppliers if we agree to longer-term contracts, with the benefits of these lower prices flowing through to end-customers who also sign up to minimum period contracts. However, should demand for the product utilising the input not materialise, we could be left exposed to higher unit costs or penalties from our suppliers. Restricting us from being able to count term discounts or minimum period options within our price control obligations could therefore result in costs (for us and for CPs) being higher than they would otherwise have been as these savings will not be realised.

Ofcom's decisions in such areas as this will have an important bearing on the way the UK market develops. It is worth noting that most US carriers, for instance, offer substantial term discounts for 60 month contracts and connection and installation charges are often waived for customers who sign contracts of 36 months or more. Openreach already offers minimum period options on a number of BES products as a result of demand from its customers, and there is industry demand for these to apply across the Ethernet portfolio.[9] We do not think regulation should hinder such further developments by BT in the UK, nor should Openreach

[8] We do not agree with Ofcom's supposition in paragraph 3.227 that "the main beneficiary of the discounts in this case may be BT's downstream operations, as the largest customer and one which would presumably see no disadvantage in being contractually tied to Openreach for five years". All customers seeking longer term contracts would be making a commitment, and the relinquishing of flexibility applies to BT's downstream operations just as it would to another CP.

[9] Industry has been raising this with Openreach at OTA sub group meetings since June 2008

be de facto penalised by not having such discounts count towards the price control obligations.

Section 5: Answers to Ofcom's Section 4 Questions on TI charge control

Traditional Interface leased lines are a well established technology but one that is being fast eclipsed by other emerging connection products. Nevertheless, customer investments in equipment and the high service quality available from this portfolio will mean that significant demand for these services will continue for some time even though the total volume of circuits will steadily decline. Consequently, investment is still needed in the networks to maintain the portfolio and, where appropriate, move customers to the new 21CN network. It is therefore critical that regulation is set in such a way that ensures we can make reasonable returns on our investments in the current uncertain, and therefore risky, environment.

This Section sets out BT's answers on the specific questions raised by Ofcom in Section 4 of the Consultation Document. We first explain why we consider that the overall X for PPCs should be no more than 0, so that average prices will remain in real terms at the level set by BT's proposed rebalanced prices at the start of the charge control period. We base this on the following main considerations.

- The cost adjustments proposed by Ofcom have not been sufficiently justified and many of these adjustments should be reinstated.

- The efficiency challenge should be at the bottom end of the range set out by Ofcom and should be *at a maximum* 1% of total costs per annum.

- Volume risks are now overwhelmingly on the downside due to the impact of the global financial crisis and the UK recession on GDP and hence on aggregate demand in the UK economy.

- A higher cost of capital is warranted.

The combined impact of the above factors is that a price control of RPI – 0 should be set. This cannot be considered to be generous as it is possible to construct plausible scenarios where an RPI+X control would be warranted.

We have also commented briefly on the draft SMP Conditions for TI services as contained in the Consultation Document, particularly on the over-complexity of the charge control requirements as currently written. These comments can be found in **Annex 2** to this response.

Question 4.1: Do respondents agree with Ofcom's proposal of a single TI basket including TI terminating segments and trunk services?

This is a sensible development, especially as CPs buy Partial Private Circuits on an end to end basis (such PPCs include both trunk services and terminating segments) and there are extensive common costs between trunk and terminating elements to PPCs. In setting a single basket, however, Ofcom needs to have the confidence to allow price rebalancing between services (at a controlled rate) and should avoid the temptation to create a complex series of sub-baskets which would only serve to reduce the pricing flexibility which is one of the advantages of a broad basket.

Question 4.2: Do respondents agree with a sub-cap of RPI-0% on the sub-basket of TI terminating segments in the TI basket?

As stated in **Question 4.1** above, the use of sub-baskets restricts the potential benefits that come from operating a single TI basket.

The purpose of a price control basket is to allow BT the flexibility to respond to market conditions. The use of sub-caps restricts this freedom and constrains BT without any obvious benefit. This is needed especially in areas where unit costs are changing rapidly as when driven by rapid reductions in volumes.

The reasoning behind sub-caps is to prevent price shocks to customers if rebalancing leads to excessive price changes. Within the single TI basket it is likely that costs for different services may change at different rates, meaning that some rebalancing of prices is both necessary and desirable.

We believe a better approach to the prevention of price shocks would be to restrict the weighted average aggregate price change across the sub-baskets to be no more than +5% in nominal terms, or RPI-X+5% should the value of RPI-X be positive in any year, whichever is higher.[10] This ensures headroom within the sub-basket for price rebalancing, if required, whilst excessive price shocks are prevented without removing the benefits that come with having a broad overall basket. This approach ensures that the sub-basket remains less constraining than the overall price control to preserve some pricing flexibility within the overall basket.

[10] For example, were RPI to increase to 5% then, if X were low, there would be little difference between RPI-X and the nominal sub-cap.

Question 4.3: Do respondents agree with Ofcom's proposal that sub-caps of RPI-0% are required for the sub-baskets of rental and connection charges?

Please also see the answers to **Questions 4.1 & 4.2** above.

We do not believe that sub-caps are generally helpful as they reduce or may even eliminate the benefits that arise from having a broad basket. The imposition of a price control should in itself provide sufficient protection for customers, especially where most services are bought in combination. CPs do not, for example, simply purchase connection but will always do so alongside rental services. In the event that sub-caps were to be imposed, we believe an alternative sub-cap set at the higher of RPI-X+5% or 5% would be a more appropriate means to prevent excessive price shocks to customers.

Question 4.4: Do respondents agree with Ofcom's proposal to include equipment and infrastructure charges in a separate basket of their own (the "Equipment and Infrastructure basket") and subject to an overall cap of RPI-0%? Do respondents also agree that each charge in this basket should not be allowed to increase more then 5% in nominal terms in any control year?

This is a sensible proposal, given that the costs associated with equipment and infrastructure are largely driven by the contracts that we have with the equipment suppliers. Such costs are therefore different in nature from the remainder of the TI basket.

The cap of a 5% increase in nominal charges is a reasonable balance between controlling prices and allowing us to adjust prices should the underlying costs change. In addition, an RPI-0 price control provides incentives to achieve cost efficiencies and negotiate the best prices, in a way that straightforward cost pass-through fails to achieve.

Question 4.5: Do respondents agree that ancillary services are included in a basket of their own and subject to an overall basket cap of RPI - 0%?

The majority of ancillary services relate to services which are provided to BT Wholesale from Openreach. Therefore, if the relevant revenues are deemed significant enough to apply a charge control on Openreach's provision of the relevant services, then any regulation on ancillary services should require a price control that is no more onerous than the control applied, if any, to Openreach prices.

Question 4.6: Do respondents agree that RBS, SDSL and BT Netlocate should not be subject to our formal charge control?

We agree with Ofcom's analysis that, in the various circumstances which apply to the provision of these services, it would be disproportionate to extend regulation by imposing formal price controls on these services.

Question 4.7: Do respondents agree that holding gains/losses should be recalculated for the TI basket of services by using the historic five year average in the trend of real asset price changes? Do respondents agree that no allowance should be made for "other" holding gains/losses in the TI basket of services?

When evaluating historical performance it is necessary to use all CCA adjustments, as reported in the regulatory statements, in order to reflect the actual economic cost we have incurred.

We agree that for the purposes of setting future prices it is appropriate to recalculate the holding gains and losses using a long-term estimate of future asset price changes. We agree that using an historic five year average in calculating the trend of real asset price changes is a sensible methodology for predicting future price changes as it is transparent and unambiguous. It is important that these calculations disaggregate between access fibre cable and copper cable.

We do not agree that **no** allowance should be made for "other" holding gains/losses. As we explain below, other CCA adjustments include some elements, such as the adoption of modern equivalent asset based valuations that are relevant to future asset price movements. Therefore, the 5 year average should include not only the holding gains /losses but also relevant elements of "other CCA adjustments".

This will ensure both asset price changes and an estimate of future technological progress is included when considering the net replacement cost of assets in the future.

Other CCA Adjustments

Ofcom's calculation of a 5 year average asset price change trend, as illustrated in Table A9.2, uses our reported "holding gains/losses" but includes only those price changes that have occurred within that year.

We also report other CCA asset valuation movements under the heading “other CCA adjustments”. These include a variety of one-off adjustments some of which are relevant to forecasting future asset price changes and some of which are not.

Two examples of CCA adjustments relevant to future price changes are:

- Assets that are re-valued under “Modern Equivalent Asset” principles, because of technological advances or improvements (or improved contracts) should be included in the average used for forecasting as an indicator of further advances in the future.

- Assets that are re-valued due to a revision of indices used in previous years should be included in the average since they are also price movements.

The remaining items included under “Other CCA adjustments” include the impact of asset life changes and the impact of improved estimates of asset volumes and other one-off items. These items will not necessarily recur in the future, so should not be included in the 5 year average used to estimate future CCA holding gains / losses. However, as previously stated, such items remain relevant when assessing the profitability on a CCA basis since they represent a real change in the carrying value of assets in the balance sheet and therefore are a true economic cost.

BT’s re-estimated 5 year average price changes

In the Table below, we include relevant “other CCA adjustments” in the 5 year average price changes and disaggregate between copper cable and fibre cable.

Ofcom's Table A9.2 revised

Asset	*5 year average nominal price change* New figures	*5 year real price change* New Figures	Note
Cable			
Fibre Cable	-2.1%	-5.2%	
Metallic Cable	+6.8%	+3.7%	
Duct	2.0%	-1.1%	
Local Exchange	0.7%	-2.4%	
Main Exchange	+0.0%	-2.0%	1 , 2
Transmission	-6.3%	-9.4%	
Other Ntwk Eqpt	+0.0%	-2.0%	1 , 2
Motor Transport	+0.0%	-2.0%	1 , 2
Land & Bldgs	+0.0%	-2.0%	1 , 2
Computers & OM	+0.0%	-2.0%	1 , 2
Other	+0.0%	-2.0%	1 , 2

Note 1 Asset now valued using HCA so future nominal holding gain/loss will be zero
Note 2 Real terms price change calculated using 2% inflation forecast (consistent with Bank of England inflation target).

In the above Table, some assets are now valued at Historic Cost which means that the average holding gains/losses over the past five years are not relevant to future forecast asset values. Under an HCA valuation basis, these assets will not be subject to nominal holding gains/losses during the price control. We have used the Bank of England inflation target of 2% to convert this to a real holding loss. However, for assets priced on a CCA basis (principally duct, cable and transmission equipment) we have shown the real holding gains/losses experienced over the past five years.

Question 4.8: Do respondents agree that the RAV adjustment should be applied to the base year costs of the TI basket?

We do not consider that the "RAV adjustment" should be applied to TI services. This is because there were specific reasons for applying the adjustment to copper access services which are not relevant to TI services. There is no merit in being consistent with another regulatory decision which was made in response to different circumstances. This is explained further below.

The adjustment was made previously on specific copper access services because Ofcom found that allowing us to charge wholesale prices consistent with CCA principles could result in an over-recovery of costs. This was due to the fact that our copper access services were price controlled on an HCA basis up until 1997, but on a CCA basis thereafter. Ofcom calculated that, in the specific circumstances which applied to these copper access services, a transition from HCA to CCA during the lifetime of an asset could lead to an over-recovery of incurred costs. This reasoning is set out, for example, in Section 5 of "Valuing copper access, supplement to Part 2 – Proposals" published by Ofcom in 2005.

This position does not arise in the case of TI services. PPCs were first launched in August 2001 and terminating segments have been subject to price controls based upon CCA principles ever since. Trunk elements were considered prospectively competitive at the close of the 2003/4 Leased Line Market Review and had a cost-orientation obligation placed upon them. Unlike copper access services, PPCs have therefore never been price regulated under an HCA regime. There has therefore been no switch over from HCA to CCA, which was the justification for the 2005 RAV adjustment. Thus, for example, there is no watershed date, such as 1997, at which time the regulatory pricing regime changed from using one accounting basis to another.

In addition, the policy change as it applied to copper access services explicitly stated that the copper access network was not likely to attract investments from competitors in the medium term. Again, such a situation does not exist for fibre-based services (the predominant type of PPC) where Ofcom has said that it wishes to see as much infrastructure competition as possible. TISBO services, especially those using fibre, are predominantly located in those parts of the UK where there are a number of infrastructure competitors. Regard should therefore be taken of the role of regulated prices in setting investment incentives, as Ofcom recognised when it moved to a CCA-based regime in 1997.

On this, Ofcom has also supported the use of a forward-looking long run incremental cost approach on many previous occasions. Indeed, the current obligation on TISBO services refers to charges being based on "a forward looking long run incremental cost approach". The RAV adjustment is not consistent with such a policy.

Thus, in our view, neither of the two central reasons which Ofcom relied upon in making the RAV adjustment to the copper access network is applicable to TISBO services. Consistency of regulation is not achieved by reading across an adjustment made under one specific set of circumstances to a dissimilar set of circumstances. We therefore consider that reading across the copper RAV adjustments to predominantly fibre-based TISBO services is not justified and that no such adjustments should be made.

Were Ofcom to remain of the view that such RAV adjustments should still apply, then these should only be made to PPCs delivered by copper lines (sub 2Mb/s services and the proportion of 2Mb/s Local Ends that are delivered over copper). This means that the adjustment should apply to only a small fraction of the assets involved in TISBO provision and, given that the RAV adjustment unwinds over time anyway, by 2010/11 the adjustment itself will be insignificant against the likely forecasting error in any case.

Question 4.9: Do respondents agree that the direct costs relating to 21 CN should be excluded from the 2006/07 base year costs of the TI basket?

We agree with the direct cost exclusions as long as legacy investment levels in the cost model of the hypothetical network reflect those of sustainable networks. Please see an explanation of this point in our response to **Questions 3.4 and 3.9** above.

Question 4.10: Do respondents agree that the debtors in the TI basket should be amended to reflect contractual payment terms?

- Ofcom's proposed reduction in debtor days to reflect strict contractual terms is not realistic or achievable. In particular, strict contractual terms are impossible to achieve due to disputed invoices on which interest on late payment is frequently suspended. An allowance must be included for this and an additional 17 days is consistent with information we provided[11] to Ofcom for their consultation on actual debtor days in 2008.

- We therefore believe that **34 debtor days** should be used as the actual BT performance on TI products. This is consistent with the values within the Regulatory Financial Statements and fairly reflects the commercial environment faced by us and other CPs.

Ofcom's objective in setting the level of notional debtors is to reflect the cost of working capital required to finance the payment terms offered by BT. Ofcom states that Oftel previously determined prices on the assumption that customers would be billed in arrears with 30 days to pay but that the practice in 2006/07 was to bill quarterly in advance with 30 days to pay.[12]

Rental services are billable in advance each month and due 30 days after the date of the invoice. If the bill is issued on the first calendar day of the month, with service delivered on average on day 15, payment on contractual terms will be received on day 31, i.e. 16 days

[11] BT's Comments on Ofcom's Consultation Paper: "BT's regulatory financial reporting: changes to BT's 2007/08 regulatory financial statements", 29 May 2008
[12] Paragraphs 4.72 and 4.73 of the Consultation Document

later. This period of 16 days, from delivery of service to receipt of payment, is Ofcom's view of the number of days for which debt is outstanding.

Connections are billable in arrears and due 30 days after the date of the invoice. If the bill is issued on the day of connection, payment on contractual terms will be on day 31. This period of 31 days, from connection to receipt of payment, is Ofcom's view of the number of days for which debt is outstanding.

The number of days assumed between delivery of service and receipt of payment is important because this affects the mean capital employed, through working capital, and therefore the fully allocated cost of services. For this, the number of debtor days is multiplied by the average revenue earned per day, to work out the "notional debtor". The cost of this notional debtor, as part of the mean capital employed, is then calculated by multiplying by the WACC.

Our view

We do not agree that debtor days should be amended to reflect strict contractual terms, but rather that they should reflect the actual experience of dealing with customers. The figure for debtor days included in Ofcom's modelling should continue to reflect a realistic view of what can be achieved in practice by BT or by another CP. By using the strict contractual terms, Ofcom is understating the costs we realistically face, actually incur and cannot reasonably avoid or control. Charges based on strict contractual terms will not therefore allow BT to recover its efficiently-incurred costs.

There are three areas where Ofcom's approach does not reflect the actual experience BT has with external customers:

- ***Connections:*** BT operates a monthly billing cycle (it would be inefficient and costly to operate a daily billing cycle). This means there is an average of 15 days delay between a new connection and an invoice being raised on the monthly billing cycle. The notional debtor on connections should therefore be calculated on a 46 day average compared with a 31 day average assumed in Ofcom.

- ***Rentals:*** There is a "broken" rental period on the first month a new circuit is provided. This is because the connection will not always be provided on the same day as the monthly billing cycle. On average, there will be 15 days broken rental added to the first month's rental. This would be settled on standard contract terms an average of 46 days after the service has been provided, compared with an average of 15. This adds an extra 1 day to the notional debtor, if an average PPC life of 3 years is assumed.[13]

[13] 31 days divided by 36 periods = 1 day

- ***Disputed invoices:*** interest on late payment is often suspended whilst the dispute is investigated. Some allowance should therefore be included within the notional debtor to reflect the actual experience we have with external customers. This would require an additional 17 days to be included, in line with the information we provided[14] to Ofcom for their consultation on actual debtor days in 2008. We consider that the actual 2008 information is representative of historic levels of debtor days, and there is no reason to believe that future levels of debtor days would be materially different.

Overall, Ofcom should therefore use 34 debtor days for modelling the costs of TI services.

Question 4.11: Do respondents agree that 3rd party PoH costs should be recovered via separate per circuit PoH charges included in the TI basket?

Third party PoH costs are currently recovered by applying an uplift to external Local End rental. However, retail private circuits have no PoH and consequently do not incur this charge. We agree that it would improve transparency if this charge was shown separately for PPCs. This method also avoids the need for extensive development of billing and verification tools which would be disproportionate to the materiality of the costs to be recovered.

Question 4.12: Do respondents agree with the proposed approach towards prices for the TI basket of services during the period to 30 September 2009?

BT has proposed changes to PPC prices for the period to 30 September 2009. We do not however believe that further obligations to move, and keep, individual prices within a specified cost range are justified. The reasons for this are set out in **Annex 1.**

We have included in **Annex 1** a description of the relationship between the economic test for cost orientation and the Distributed Floors and Ceilings which BT includes in its Regulatory Financial Statements and which deals with these points in more detail.

Consistent with this description, we are proposing to change the way PPC costs are recovered to bring it more in line with the indicative floors and ceilings provided by the DSAC and DLRIC calculations. As the change to cost recovery is a rebalancing between trunk and terminating segments the impact on individual customers will inevitably depend upon the

[14] See footnote 11 above.

relative amounts of these elements purchased. For most CPs this will have little impact and will be broadly neutral overall.

In order to identify which services to rebalance, BT compared the revenues generated by each product to the indicative DLRIC/DSAC revenue floors and ceilings. The analysis was based upon current Carrier Price List values and the latest available published information on DLRIC and DSAC so that figures were, as close as possible, contemporaneous. Where the total revenue was substantially below the DLRIC or substantially above DSAC, BT has proposed changes that bring these prices closer to this range.

Moving within the indicative floors and ceilings can involve quite large changes to individual prices, so where the total revenue difference is relatively small, BT has left prices unchanged to avoid unnecessary disruption. These can be addressed within the control, if that proves necessary, in later control periods. The following figure shows the evaluation BT used in constructing its proposal which Ofcom describe in paragraphs 4.84 and 4.85 of the Consultation Document.

Figure 1: BT's Carrier Price List Compared with 2007/8 published DLRIC and DSAC

In Figure 1, the dark bars represent the difference between revenue and DSAC. Where the bar is above the zero level, prices are below DSAC, whilst where the bar is below the zero

level, prices are above DSAC. The one service where this is significant is 2Mb/s Trunk. In contrast, the light coloured bars compare revenues with DLRIC. Here, the bar is above zero where the price is above DLRIC while it is below zero where prices are below DLRIC. The size of the bars represents the "headroom" between the component's revenue and the edge of the DLRIC/DSAC range. If prices are outside the range, the size of the bar represents the extent to which revenues should rise (if below DLRIC) or fall (if above DSAC) in order to be brought back within the range. The most significant of the components with prices below DLRIC are 64k Link and 64k Local End, and 2M Local End. Other components do have prices outside this range but the revenue impact of this is relatively small, as shown on the above chart, meaning that the impact on total revenue is not significant.

Starting charges

The previous PPC charge controls expired on the 30th September 2008. We agree with Ofcom that the delay in publishing the LLCC should not be allowed to alter the outcome and therefore we offered a commitment to leave prices unchanged in the absence of a control until the new charges were decided. We expect Ofcom to complete the action necessary to counteract the publication delay by instructing us to apply any new starting charges from the end of the previous control.

Further rebalancing in the second basket year

We note Ofcom's proposals that "BT Wholesale should review its charges during 2009/10 in the light of the latest available DSAC/DLRIC information, and rebalance prices where required to bring them within the appropriately measured floors and ceilings....". A similar proposal also applies to AI services.

We discuss this at length in Annex 1. In this Annex, we explain that we accept Ofcom's proposition that charges should usually be expected to fall between the LRIC floors and SAC ceilings levels to be cost orientated. We also accept that the appropriately measured DLRIC/DSAC cost range can be used as an approximation of the LRIC/SAC test. However, we do not consider that any such requirement can be absolute as this would mean that no objective justification can be given for prices to be outside the range when these may exist. In using the LRIC/SAC approach to cost orientation, Ofcom should also recognise, as it has in the past, that the published DLRIC and DSAC measures are not synonymous with the LRIC and SAC concepts. Ofcom should also recognise that the appropriate level of granularity of the test must be one which is meaningful and appropriate in the circumstances.

Question 4.13: Do respondents agree with the proposed one-off adjustments to the starting charges of equipment prices as proposed by BT?

We remain of the view that a one-off adjustment to prices at 1 October 2008 represents a reasonable and pragmatic approach.

Question 4.14: Do respondents agree with the volume forecasts used in the LLCC model for the TI basket of services? If not, please provide your views on the future volume forecasts of services within scope of the charge control.

The volume forecasts used in Ofcom's model were prepared and provided to Ofcom in Q4 2007. The economic outlook has deteriorated substantially over the past 15 months, meaning that there is now a higher likelihood that future volumes will eventually turn out to be lower than forecast. In other words the "downside risk" to volume forecasts are now considerably greater than the upside. Evidence of the changing macroeconomic outlook is set out in Section 2 and so has not been repeated here.

Question 4.15: Do respondents agree with Ofcom's proposed efficiency assumption range of 0% to 5% when forecasting BT's future costs in the TI basket?

We believe the proposed efficiency range is too high and that the range itself is too wide. BT has commissioned Deloitte to investigate fully the evidence in support of Ofcom's efficiency range and their report has been provided to Ofcom separately.

The key points to emerge from this analysis are that:

a) BT's total network efficiency is not "roughly on the decile"[15] but is some 6% more efficient than the top decile benchmark.

b) Ofcom's model produces an estimated rate of historical underlying efficiency improvement, across all components, in the range of 0.5% to 1.5% per annum.

c) Deloitte has measured productivity gains using a number of different methods, leading to a range of 0% to 2.2% as underlying productivity growth.

d) NERA's report[16] itself stated, ".. our view that the underlying growth in productivity has fallen since the beginning of the current decade. A point estimate for recent productivity growth would be 2% per year."

[15] Section A9.22 *Leased Lines Charge Control Consultation, Ofcom, 8 December 2008*

e) Some credit should be given for BT's current level of efficiency above the benchmark.

Table 3: Summary of findings from Deloitte and Nera work

Model: BT relative to top decile in 2006/2007	Estimated time trend	Annual real cost change
Deloitte SFA: -6.3%	**0%**	**-2.2%**
Deloitte FE TFP: N/A	**N/A**	**0% to -1.9%**
Deloitte indexation: N/A	**N/A**	**-0.5%**
Ofcom model revised by Deloitte	**N/A**	**-0.5% to -1.5%**
NERA SFA (table 4.7, model giving -6%)	**0%**	**-2.2%**
NERA FE (table 5.2)	**N/A**	**-1.9%**

See Table 8 of the Deloitte Report

Table 3 above summarises the findings from the Deloitte and NERA work and supports the conclusion that annual real cost changes (the cost frontier) has been moving at a rate of between 0% per annum and 2% per annum.

Ofcom's cost model includes both real unit cost and asset price decreases as separate parameters to the efficiency challenge. Care is needed to avoid double counting input cost reductions in *both* the efficiency challenge *and* the model's input parameters.

Based on this analysis and Deloitte's evaluation of efficiency trends, we believe the appropriate efficiency challenge should be towards the bottom end of Ofcom's range. This should be based on a frontier shift of between 0% to 2% per annum less an allowance for BT's current level of efficiency being above the level of the top decile benchmark. This implies that Ofcom should use a maximum figure of 1% per annum as an efficiency challenge for the TI basket.

Question 4.16 Do respondents agree with the range of WACC proposed for services in scope of the TI basket?

We consider that the appropriate WACC for TI services is 13.3% for the reasons given in our response to **Question 3.11** above.

[16] Section 6, Conclusion, final paragraph, NERA's Analysis of the Efficiency of BT's Network Operations, 19 December 2008

Question 4.17: Do respondents agree with Ofcom's assumptions on AVEs and CVEs when forecasting the costs of the TI basket?

We believe there is no reason why the AVEs and CVEs should have changed for TI services during the period since the last price control review. Consequently, believe it is reasonable to leave these values unchanged.

Question 4.18: Do respondents agree with Ofcom's proposal to use the average historic five year trend in asset price changes as proxy to future prices when forecasting costs of the TI basket?

We believe that it is a reasonable approach to estimate future asset price trends by examining the past history in real asset prices. However, we think that Ofcom has under-estimated the extent to which real asset price trends are falling (refer to answer to **Question 4.7** above). We have recalculated Ofcom's Table A9.2 to take account of the relevant price and valuation changes that were booked to "other" unrealised holding gains /losses that were excluded from the price trend data previously calculated.

Question 4.19: Do respondents agree with Ofcom's approach of re-allocating fixed costs from the TI services to the AI services?

We note that the effect of Ofcom's approach leads to a higher X for the TI basket than would otherwise be the case. We are concerned that this could have a negative impact on the incentive for customers to migrate onto other services. BT accepts, however, that the extent to which this is offset by a lower control on AI services means that, overall, fixed costs should be recovered across both baskets combined.

Section 6: Answers to Ofcom's Section 5 Questions on AI price controls

As set out in Section 2, Openreach plans to invest considerable sums of money in the development of AI services and has capex plans of up to £750m for these services over the period of the proposed charge control. This investment is critical to the future economic growth but is not without significant risk. It is important that the outcome of Ofcom's review provides a clear signal to BT's shareholders that such investment is worthy of their support.

Our starting point is that price regulation for AI services should be light touch, with flexibility to allow for uncertainty over future demand, the shift towards newer, more efficient technology and changing patterns of demand.

In our view, Ofcom's proposed approach to controlling AI pricing goes some considerable way in this regard by recognising migration effects in the AI basket. The method of computation has, however, become extremely difficult and we think that it can be simplified (which will make it easier to implement and more transparent) whilst still meeting the main regulatory objectives set out in the Consultation Document. In particular, complexity and inflexibility arises because of:

- the need to provide a product "mapping" of new to old services in order to monitor charge control compliance;
- the inclusion of multiple, overlapping sub-caps which reduce the benefits of the broad basket proposed by Ofcom by reducing significantly flexibility; and
- the proposal to move all prices within cost floors and ceilings within 12 months which further reduces flexibility and may prevent legitimate pricing options (which are being requested by industry or driven by demand changes) being implemented.

We therefore propose an alternative approach to the overall regulation of AI services that we believe better meets regulatory objectives and customer needs based around a broad basket control and "price guarantees" around existing price list entries.

We also have a number of concerns with Ofcom's modelling of the future costs of providing regulated AI services using the "technology neutral" approach. Our proposed amendments to Ofcom's modelling suggest that the appropriate value for X should be no more than the lower end of Ofcom's proposed range of 3.25%. Ofcom's own analysis shows there is a high degree of variation in returns depending on the level of volumes achieved. Given the current economic climate, and the criticality of AI services for future economic growth, we consider setting a low value for X strikes an appropriate balance between ensuring cost reflective

pricing and providing Openreach with incentives to fund and invest in new technologies to drive forward this key market.

Term and geographic discounts represent another form of pricing flexibility that would be consistent with industry requirements. As explained in detail in our response to **Question 3.12**, Openreach considers that geographic and term discounts should count towards meeting the regulatory requirements for price reductions, and there is no objective reason why it should not. If these pricing options are not taken into account when assessing compliance with the charge control requirements, this would act as a disincentive on Openreach to provide such pricing options even though customers want them.

Finally, Openreach should also have the ability to offer new commercial pricing options/structures that our customers demand. These would sit alongside the existing price structures and so give customers comfort that they could remain on existing structures if they wish. We believe this approach will provide the necessary safeguards to industry that Ofcom is looking to provide and will ensure that Openreach is well placed to respond to customer requirements over time.

On a related note, Openreach would point out that another potential barrier to offering timely promotional offers of this nature is the lengthy notification periods required by virtue of other SMP conditions. Openreach does not consider that these notification periods are always appropriate, and place Openreach at a material competitive disadvantage compared to other providers of AI who can implement immediate promotional offers or aggressive customer acquisition campaigns which Openreach is unable to match because of the notification requirements it alone faces.

Question 5.1 Do respondents agree with Ofcom's proposal of a single AI basket with separate sub-caps of RPI-0% on each of the sub-baskets of WES and BES services? Do respondents also agree with the sub-cap of RPI-0% on each of the sub-baskets of connections and rentals?

- While we welcome the proposal to define a single broad basket for AI connection and rental services, we are concerned that taken with Ofcom's sub-basket proposals, the overall effect will be to unduly constrain Openreach's ability to deliver pricing solutions demanded by our customers.

- We propose an alternative approach to the setting of safeguard caps which will provide a greater degree of freedom for Openreach whilst providing comfort to customers that, within the context of ongoing reductions in average charges, no individual charges will materially increase.

- We also propose an alternative, simplified, approach to the monitoring of compliance with the RPI-X basket control which will ensure that on average customers will see decreases in the cost of receiving AI services.

This is a key question in Ofcom's consultation as the proposals here ultimately reflect the extent to which Openreach will be constrained in making commercial decisions on the provision and pricing of AI services over the next four years and, therefore, the extent to which regulation will act as a barrier – rather than an enabler – of optimal customer outcomes. As we have set out above, Openreach requires a regulatory framework which provides a high degree of flexibility to meet customer requirements for AI services in a highly uncertain environment.

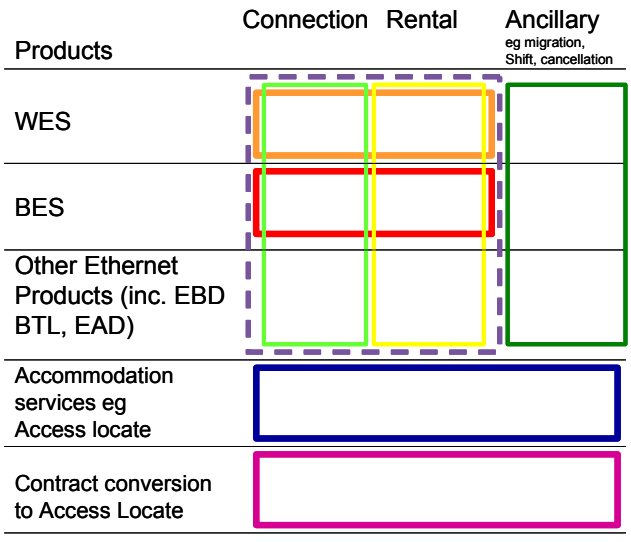
Ofcom's proposals

The proposal referred to in Question 5.1 would place two parallel types of constraint on Openreach's pricing of AI services:

- An RPI-X charge control on the average prices charged by Openreach across a defined basket of AI connection and rental services.

- "Safeguard" (RPI-0%) caps on separate, but overlapping, sub-baskets of AI services seemingly designed to offer some degree of "protection" to CPs purchasing a given set of AI services.

On top of these constraints, Ofcom is also proposing separate safeguard controls on ancillary services, accommodation services and contract conversion charges. The figure below shows how the safeguard controls overlap with each other and the main AI basket.



We would also note that, through Ofcom's statements about the separate "cost orientation" SMP obligation, Ofcom is also proposing that prices for individual AI services should be adjusted and remain within published floors and ceilings. Our specific comments and proposed amendments to Ofcom's approach are addressed in answer to Question 5.7 and at Annex 1, but the additional constraints here are clearly relevant in assessing the overall impact of Ofcom's proposed approach.

Our view is that, taken together, the proposed measures would unduly constrain Openreach's pricing of AI services in that Openreach would be unable to deliver a full range of pricing solutions which may be demanded by customers. Below we set out our key concerns before proposing changes to Ofcom's proposals.

The effect of Ofcom's proposals on Openreach's Ethernet pricing

Although the very uncertainty we have highlighted makes it impossible to predict precisely what pricing customers may want to see over the next four years, we have set out below some examples of the type of pricing flexibility our customers are likely to want to see:

- Demand from CPs that, to accommodate cash constraints in the current environment, connection charges on certain services are reduced with a consequent acceptance that rentals charges may need to rise.

- Building on the above, demand from CPs for new services to be provided at a single periodic charge to cover both the connection and rental over a defined contract period (e.g. £X per year over 3 years).

- Demand for "special offers" on a certain suite of connections over a reasonable period, designed to encourage bandwidth upgrades or to stimulate early migration from other services.

In short, as the new Ethernet portfolio evolves with operational costs and activity gravitating toward these new services, it is important that BT is able to effectively and efficiently utilise both the new and existing product networks and platforms (EBD, BTL, EAD etc.), and we may need to flex pricing and/or structures to meet customer demand and enable efficient utilisation.

Our concern is that while we can see the above proposals being consistent with our requirements to reduce average prices by RPI-X across the basket of services, the separate safeguard caps on the defined "sub-baskets" of services – particularly, the separate connection and rentals sub-baskets – would be likely to act as an absolute barrier to such

solutions being offered. Ofcom's proposed approach to assessing floors and ceilings at a granular service level would act as a further potential barrier to meeting any such customer demand.

The key issue here is that it is not clear why regulation should seek to block the pricing propositions set out above. The purpose of safeguard caps on sub-baskets of services *within* the broader RPI-X basket must be to offer a degree of protection to certain customers that the balance of charges across services will not be materially altered so as to place, for instance, CPs purchasing access, but not backhaul at a relative disadvantage. However, in the above examples, we would envisage introducing alternative pricing *options* for CPs where, for instance, they could choose to pay the higher rentals given their requirements for reduced – or even zero – connection charges. There can be no need to "protect" customers from the availability of such pricing options.

Furthermore, we cannot see why such pricing would have a negative effect on competing providers of the relevant AI services. Recovering costs across connection and rental charges combined would surely be an option for any competitor. It is also important to note that where any pricing proposal did have an anti-competitive effect, Ofcom's other powers could be used to address these.

Overall, therefore, we see the sub-baskets as providing an unwarranted barrier to pricing that could be of benefit for customers.

Our proposed way forward

Given the above concerns, we propose an alternative framework which:

- Retains a **single broad RPI-X controlled basket**[17] for all core AI connection and rental services, but one which is assessed by reference to movements in the overall average charges paid in each year for the services demanded from Openreach; and

- Places **price guarantees** on the price list entries for the existing suite of WES and BES products to provide comfort to customers that charges for existing services would not materially increase.

[17] Subject to our comments on the modelling and appropriate value of X elsewhere in this response

(1) A single basket for all AI connection and rental services

We fully agree with Ofcom's reasoning for proposing to apply the charge control to a broad basket of AI services. A broad basket would, by itself and within the context of overall regulation of average charges, provide flexibility in setting individual AI service charges to meet the evolving and uncertain needs of customers. It is only the interworking of Ofcom's proposed general basket control, the safeguard caps and the approach to cost orientation that limits this flexibility.

(2) Monitoring compliance with the broad basket control

Note: this subsection effectively answers Question 6.1 but is included here as it is an integral part of our proposed approach to dealing with flexibility within the charge control framework.

We support Ofcom's intention to allow the benefits of migrating away from existing services to new lower priced services to contribute towards the meeting of the AI charge control. Without such an approach, Openreach would be required to implement reductions on existing services only which could then discourage migration to the newer services, undermining the very investment that the "technology neutral" approach is supposed to deliver. This would ultimately result in a more limited product set for customers at relatively higher costs of provision to CPs – i.e. we believe that CPs would in the long run receive greater benefits from migrating to lower priced new services than from seeing RPI-X reductions on existing services.

However, we believe that Ofcom's proposals for calculating the effective reductions in charges resulting from migrations from legacy to new services are unnecessarily complex and therefore potentially unworkable.

As we understand it, Ofcom's proposed basket formula in SMP condition HH4.3 would work as follows:

- A source (legacy) product and destination (new) product combination would be "mapped" together – e.g. BES 1000 would be the source product and EBD 1000 and BTL 1000 would be the associated destination products.

- For the purpose of identifying the effects of migrations on the basket formula, the revenue for the relevant source and destination product combination would be divided by the volume so as to give the average price for the source and destination product combination.

- Weights determined in a migration matrix would be used to determine the appropriate volumes of the destination products that should be mapped with a given source product – i.e. to ensure a 1:1 mapping of a given volume of demand in situations where more than one new product may replace one legacy product.

To implement this approach, Ofcom has set out a broad proposal for the migration matrix in HH4.13 which maps source and destination products. Ofcom has invited comments on the practicalities of implementing such an approach and on how to set appropriate weightings. We have considered this matrix and concluded that to ultimately populate such a matrix with a degree of accuracy would require:

- Inclusion of additional products to reflect all relevant migration paths – e.g. WES to WES Aggregation.

- Inclusion of product variants to both the source and destination products (eg BTL initial circuit, as opposed to BTL subsequent circuits which have a different price).

- A clear set of assumptions of how customers will choose to migrate from the existing product set to new products – given the uncertainties we have referred to throughout our response, this will be complex.

- Allowance for the fact that where a customer migrates from a single source product to multiple destination products, they may not then – in reality – buy all the destination products identified in the Ofcom matrix. For example, a customer may purchase the new access component, but moving forward may self-supply the backhaul element of the circuit.

- A clear set of assumptions on "typical" fill rates for BTLs to ensure an appropriate proportion of a BTL maps onto the relevant source product.

- Allowance for the possibility that where a product is identified as a destination product in the matrix – e.g. EBD – its revenues are not double counted in situations where it would map onto more than one source product.

We are concerned with the practicalities – and associated administrative burdens – of producing a reliable matrix and monitoring ongoing compliance using such an approach.

In this context, we believe a much more straightforward approach would be to simply calculate an average charge for AI services in each year based on appropriate revenue and volume information for ***all*** relevant legacy and new services – i.e. under our approach, the

average charge would not be weighted in any way against revenue or volume by particular bandwidth, etc, but simply be an arithmetic average of total revenue for applicable AI services (legacy and new) divided by an appropriate measure of the total volume of services provided. Such an approach would significantly reduce the need to make detailed assumptions around how existing products may or may not migrate to new products and would therefore be relatively straightforward to measure and monitor.

The key requirement for such an approach to be implemented would be to establish a clear framework for assessing comparable volumes of legacy and new products. However, the "mapping" required for this exercise would be much simpler than our reading of the requirements of Ofcom's approach. The focus of any mapping should be limited to those cases where more than one new AI service may replace an existing AI service. In these circumstances, some "discount" would need to be made to the volumes counted against new services so that a unit of volume for demand for a legacy service could be considered comparable with a unit of volume for demand for a new service.

We believe there are two broad areas where potential volume issues may arise. The first relates to volumes of BTL services. As these would be bought alongside other services – e.g. EBDs – as replacements for legacy services, then our proposal is that while revenues for BTLs would be counted within the total revenue figure, volumes would not count ensuring that prior year and current year average charges were suitably comparable. The second potential area of concern relates to situations where EBDs may be purchased along with EADs to replace existing WES services. Again, allowance may need to be made to EBD volumes to ensure that one unit of volume in the prior year is not compared with two units of volume in the current year. We have reviewed our forecast information and believe that the majority of EBD circuits would be straight 1:1 replacements for existing BES circuits. In these circumstances, no adjustment to volume data would be required. For the remainder of the EBD circuits, we suggest that we share our more detailed volume forecast information with Ofcom to assess the potential scale of any "overcounting" of volumes and identify straightforward options for allowing for this. Overall, we think that such analysis would be more straightforward than that required to make Ofcom's proposal workable.

(3) Price Guarantees on existing WES and BES products

We propose individual "price guarantees" on all WES and BES connection and rental products (eg on WES 10 connection, BES rental etc.) whereby charges for existing services would not increase by more than RPI+5% each year. We note this is consistent with Ofcom's proposed approach to the regulation of LLU ancillary services in the Financial Framework Review. It would also be high enough to accommodate the pricing flexibility implied in Ofcom's original sub-basket proposals.

Our proposal here would offer a clear assurance to customers purchasing existing services that their charges would not rise materially whilst the need for Openreach to deliver actual RPI-X savings over the average charge for AI services would provide clear incentives for Openreach to actively promote migration to the newer lower priced services. Furthermore, the proposal would remove the constraints on future pricing flexibility as Openreach would be able to launch product variants and/or completely new products priced in such a way as to meet customer demand alongside the price guaranteed existing services.

Question 5.2 Do respondents agree with Ofcom's proposal of linking the regulation of the Ethernet accommodation and LLU accommodation products in the manner described and the overall price of RPI-X% (with X probably close to zero) proposed on the Ethernet accommodation products?

We agree with Ofcom's proposals for the regulation of the Ethernet accommodation products as documented in the consultation document, subject to the following points that are further detailed below:

- The controls that Ofcom will impose on BT under the Financial Framework Review for the LLU co-mingling services should underpin the controls for the Ethernet accommodation products.
- Issues related to the duration of the proposed controls under both the Financial Framework Review and the Leased Line Charge Control need to be addressed.
- Access Locate Plus should be excluded from the Ethernet Accommodation services basket.

We accept that there is a need for consistent treatment across the two product sets as most of the charges are common to both (i.e. LLU co-mingling and Access Locate / Access Locate Plus). The proposals, and ultimately the controls, that Ofcom will impose on us under the Financial Framework Review for the LLU Co-mingling services will underpin the controls for the Ethernet accommodation products and should ultimately determine what these controls should be with the exception of the Ethernet accommodation (currently the Access Locate contract conversion administration charge) and Access Locate Plus (currently the space licence fee) specific charges which are excluded from the LLU Co-mingling services basket. Ofcom is proposing a separate safety cap of RPI – 0% applicable to the Access Locate contract conversion administration charge.

We note that the proposed new SMP Condition HH4 does not include a definition of the accommodation services to which the proposed charge controls would apply. We assume that these services will be those LLU Co-mingling accommodation and power charges (as

specified in Part 3 of the proposed new SMP condition FA3(A) included at Annex 8 of the second consultation of the Financial Framework Review) that would be applicable to AI services.

We also note that the duration of the proposed controls is different across markets. Ofcom is proposing a 3 year price control for Ethernet including Ethernet Accommodation Services for 12 month periods beginning on 1st October 2009 and ending on 30th September 2012, whereas Ofcom is only proposing controls on LLU Co-mingling services for 2 years starting on 1st April 2009 and ending on 31st March 2011. The difference in applicable relevant years across the 2 controls may lead to practical issues related to our ability to demonstrate its compliance with the price controls. In addition, the proposed LLU Co-mingling services price control will initially be set for 2 years and will be subsequently reviewed through a planned Wholesale Local Access market review. Any changes that may result from this market review could also impact on the Ethernet Accommodation services price controls. Ofcom should consider making provisions for such an outcome.

To ensure consistency in the treatment of all accommodation related charges, Ofcom will need to ensure that the value of X that Ofcom will determine for the LLU Co-mingling services also applies to the Ethernet accommodation specific charges.

We disagree with Ofcom's proposal to include Access Locate Plus in the Ethernet Accommodation services basket for the purpose of imposing a price control. As Ofcom states in its Consultation Document, Access Locate Plus will supersede the current BT Netlocate product which was launched in response to Clause 7.2 of the BT Undertakings. This product is provided on reasonable commercial terms (in accordance with BT's Undertakings) and enables a CP to house a defined, but fairly wide, range of equipment beyond what is required for LLU or Backhaul purposes (as per Annex 4 of the BT Undertakings). It is Access Locate that is the product Openreach launched to meet the need of Ethernet CPs for accommodation and which meets the relevant SMP obligations in the BCMR.

Question 5.3 Do respondents agree with Ofcom's proposal to include ancillary charges in a basket of their own subject to RPI-0%?

It is our view that Ancillary service charges (particularly ECCs) should continue to be controlled via a cost orientation obligation. Furthermore, Time Related Charges (TRCs) should be excluded from price control regulation altogether as a significant proportion of TRC work is on the customer-side of the NTE and therefore not part of the regulated product set. In the event that Ofcom do proceed with a separate basket for ancillary services, it should clearly be limited only to those TRCs which relate to the regulated SMP product set.

Question 5.4 Do respondents agree with Ofcom's proposal not to take the RAV adjustment into consideration when adjusting Openreach's base year costs for 2006/07?

We support Ofcom's proposal not to apply the RAV adjustments to AI services when adjusting Openreach's base year costs for 2006/07, given that future investment is most likely to be in this area and there is a risk that this investment could be deterred. We also agree with the supporting points made by Ofcom that an adjustment in relation to copper access cable is not relevant to Ethernet services over fibre.

Question 5.5 Do respondents agree with Ofcom's proposal to exclude 21 CN "direct" costs from Openreach's base year costs for 2006/07?

We agree in principle with Ofcom's proposal to exclude 21CN "direct" costs from Openreach's base year costs for 2006/07 as this is consistent with technology neutral cost modelling. We have already provided detailed arguments on this matter in our response to questions 3.4 and 3.9. As we mention there, we believe that the 21CN direct costs that will be excluded from Openreach's base year costs for 2006/07 need to be replaced by an equivalent legacy investment that would otherwise have taken place "but for" Openreach's strategy of investing in EBD.

We would also reiterate our argument that indirect costs should be included in the cost model as we will incur these costs regardless of the technology used to deliver services. Such costs are allocated to 21CN components in the Regulatory Financial Statements based on the relative levels of activity. In a technology neutral environment, these costs would be allocated to legacy components and so should therefore be included in the technology neutral approach being adopted.

Question 5.6 Do respondents agree with Ofcom's proposal to amend debtors when adjusting Openreach's base year costs for 2006/07?

We do not agree that debtor days should be amended to reflect strict contractual terms, but rather that they should reflect the actual experience of dealing with customers. The figure for debtor days included in Ofcom's modelling should continue to reflect a realistic view of what can be achieved in practice by BT or by another CP. By using the strict contractual terms, Ofcom is understating the costs we realistically face, actually incur and cannot reasonably avoid or control. Charges based on strict contractual terms will not therefore allow BT to recover its efficiently-incurred costs.

As discussed in our answer to Q4.10, Ofcom should take out account of monthly billing cycles and of disputed invoices. Overall, Ofcom should use 40 debtor days for modelling the costs of AI services.

Question 5.7 Do respondents agree that there should be no further one off adjustments to the start charges for services in scope of the AI basket and that prices should be brought within the DLRIC floors and DSAC ceilings within 12 months of implementation?

We support Ofcom's view that there should be no one-off adjustments to AI start charges on the basis of the recent significant price reductions already introduced by Openreach.

Turning to the cost orientation question, we understand Ofcom's intention here, and accept the need for some form of indicative cost orientation test. However, a number of issues arise with this proposal as set out in **Annex 1**. We have a particular concern that a rigid application of the test would effectively disincentivise any form of commercial development and dynamism. If the context were the regulation of an early/mid-life basic utility service, we could better understand Ofcom's rationale, but the AI product set represents a dynamic, evolving and complex portfolio involving considerable investment and operational risk. It is disproportionate to apply prescriptive regulation in such circumstances.

In addition, for new services the unit costs shown in the Regulatory Financial Statements may not be particularly meaningful as utilisation rates can be low, and investment levels high, for a number of periods. Over time, utilisation rates should reach their expected level and so the RFS cost data will then begin to provide a much better indicator of the long run costs of service provision.

We therefore believe that if a cost orientation test is justifiable, then a more reasonable and pragmatic approach would be to apply any test only after proper consideration of the appropriate market or product service level to which it should apply, and after consideration of the particular circumstances which pertain. This is consistent with the fact that we do not have separate markets for rentals and connections and recognises that customers cannot take connection without rental; and that reported costs may not always indicate the underlying long term costs over the life of the product. This approach would allow Openreach more flexibility to respond to customer needs and market requirements and would, for example, allow for flexibility in terms of pricing for migrations between old and new technology were this necessary. In other words, we believe that a proper dialogue with Ofcom and CPs is preferable to the mechanical application of a test which has up to this point always been recognised by Ofcom as being "first order" (as set out in further detail in **Annex 1** below.)

Question 5.8 Do respondents agree with the volume forecasts used in the LLCC model for AI basket of services? If not, please provide your views on the future volume forecasts of wholesale services in scope of the charge control

Openreach has provided Ofcom with forecast volumes for Ethernet services in advance of the Consultation Document. By its very nature, forecasting is not an exact science and involves many variables which typically characterise a dynamic market place. In the case of the AI market, we are in the process of moving from legacy to new products based on more efficient technology and the rate of this change has to be predicted for forecasting purposes. The current economic downturn introduces further risks stemming from factors outside of the control of Openreach, the UK telecommunications industry or Ofcom. Indeed, a year ago it would have been impossible to predict the depth of economic uncertainty that now faces the UK in the short to medium term and possibly beyond.

Given the progressively declining outlook for the economy there are clearly significant risks associated with forecasting and the "downside risks" to volume forecasts are now considerably greater than the upside. The impact of "uncontrollable events" are likely to remain during the early years of the proposed charge control at least and, as such, we would urge Ofcom to consider these points when using volume forecasts as this uncertainty depresses new demand, increases loss from existing business and potentially slows the migration to new networks.

Turning to the application of the forecast data supplied by Openreach, we are concerned that the forecast figures used by Ofcom in the LLCC model for the AI basket of services are incorrect. By the end of the period being modelled, the forecasts being used by Ofcom are higher than Openreach's own forecast by 5,500 circuits. The technical reasons for this discrepancy have been explored with Ofcom. We understand that our explanation has been accepted and therefore the Ofcom model should be revised accordingly.

Question 5.9 Do respondents agree with our proposed forward looking efficiency range of 1% to 3% to apply to services within the scope of the AI basket?

We note that your question is framed in the context of total costs whereas the approach Ofcom is appropriately taking in the FFR is in the context of compressible costs, where Ofcom has agreed Openreach's definition of prospective efficiencies.

In addition to the Deloitte study we have provided to Ofcom separately, Openreach has commented extensively on this issue in its Response to the Openreach Financial Framework Review. The discussion there has been in terms of gains likely from savings in compressible costs, where Openreach has savings targets for the periods under review. As we make clear

in that response, the savings rates in compressible costs made in 2007/8 and being sought in 2008/9 are not sustainable year on year over the whole of the forecast period and compressible costs form approx 70% of all Openreach's costs. Efficiency gains on total costs are therefore not likely to be more than at the bottom of the range suggested by Ofcom in the Consultation Document, which would make them in line with those which BT considers are possible for TI services, as described above in response to **Question 4.15**.

Question 5.10 Do respondents agree with the range of WACC proposed for services within scope of the AI basket?

As discussed in the answer to **Question 3.11**, we consider that the range proposed by Ofcom for the WACC is too narrow and that the use of the mid-point of that range is not in keeping with the practice of the Competition Commission, nor with Ofcom's previous practice. We urge Ofcom to give thorough consideration to the evidence described in BT's response to the Financial Framework Review justifying a WACC considerably above the mid-point of the range proposed for services within the scope of the AI basket.

Question 5.11 Do respondents agree with our proposed AVEs/CVEs for Ethernet services?

These parameters are a hugely important determinant of the extent of a price control on AI services and we do not consider that these estimates are robust for the AI services. Ofcom states they are using AVE and CVE data from the 2004 PPC Charge Control Statement which would have been based on data taken for Regulatory Financial Statements 2003/04. We believe that use of such out-dated information is inappropriate given the relative infancy of this market - BES services were only launched April 2003, WES services in November 2004 and Openreach was only created in January 2006. Our own cost model suggests that the AVEs and CVEs are significantly higher than those used by Ofcom, and therefore that use of the proposed AVEs/CVEs will significantly under-estimate the actual cost of increasing capacity and volumes.

Updating the 2004 data using OFCOM's model also suggests the assumed parameter values are too low as show below.

Table 4

	LLCC Methodology using 2004 data	LLCC Methodology using 2007 data	Percentage increase
Asset Volume Elasticities			
Wholesale and LAN extension services electronics	0.64	0.73	+16%
Wholesale and LAN extension services fibre etc.	0.19	0.18	-5%
Backhaul extension services electronics	0.64	0.73	+16%
Backhaul extension services fibre etc.	0.19	0.24	+26%
Cost Volume Elasticities			
Opex – Pay	0.24	0.27	+12%
Opex Non-pay	0.24	0.27	+12%

LLCC methodology using 2004 data – BT has replicated Ofcom's calculation at component level

LLCC methodology using 2007 data – BT has replicated Ofcom's calculation but used AVE/CVE data taken from the information provided in the 2006/07 Regulatory Financial Statements.

Further, Ofcom's starting adjustments have the impact of distorting the manner in which this data can be used. In particular Ofcom's adjustment No. 4 (page 182 of the Consultation Document) whereby equipment costs are removed from capital (assumed AVE of 0.64) and added to costs (assumed CVE of 0.24) is material. This warrants an adjustment to AVEs/CVEs. We have provided information to Ofcom on this point.

Question 5.12 Do respondents agree with our proposed use of the average historic five year trend in the real asset price changes when forecasting the costs of AI services?

Using the historic five year average in the trend of real asset price changes is a sensible methodology as it is transparent and unambiguous. It is important these calculations disaggregate between access fibre cable and copper cable.

As discussed in our answer to **Question 4.7**, when estimating the five year average of past asset price changes it is important to include not only the holding gains /losses but also relevant elements of "other CCA adjustments".

BT's proposed 5 year average trends are shown in the Table in **Question 4.7**.

Section 7: Answers to Ofcom's Section 6 Questions

Question 6.1 Do stakeholders agree with our proposed charge control formulae for AI services? We would welcome stakeholder views on our proposed mapping of existing products on to Openreach's new products set.

These issues are dealt with in our response to question 5.1.

Question 6.2: Do stakeholders agree that the required notification period should be waived in respect of the proposed starting charge adjustments to some TI services?

The previous charge controls on TI services expired at the end of September 2008, but, given delays in the consultation process, we agreed with Ofcom that amended charges for TI services would be applied with effect from 1 October 2008. We therefore expect Ofcom to apply the new TI charges from this date and agree that the notification period should be waived to ensure this happens.

Section 8: Answers to Ofcom's Section 7 Questions

Question 7.1 Do respondents agree that the charge controls on AISBO services should run from the introduction of the new proposed controls to 30 September 2012?

We agree with Ofcom's proposals in relation to the start date for the RPI-X control for AI Services. Unlike TI, a charge control is being introduced for the first time for AI. BT also agrees with Ofcom's view that the significant price reductions already implemented by Openreach for its Ethernet products means that there is no need to make starting price adjustments on 1 April 2009, in light of the recent significant price reductions that Openreach has already introduced.

Annex 1: Cost Floors and Ceilings

In addition to the need for average prices to be limited by both the TI and AI broad baskets, and for sub-sets of these services to be compliant with relevant controls, Ofcom also suggests that the "cost orientation" SMP obligation should impose additional requirements:

[4.88] "The prices of all the services in the TI basket are [required to be] brought within the appropriately measured DLRIC floors and DSAC ceilings, within 12 months of the implementation of the charge control. BTW should review its charges during 2009/10 in the light of the latest available DSAC/DLRIC information, and rebalance prices where required to bring them within the appropriately measured floors and ceilings...."

[5.49] "That the prices of all the services in the AI basket are [required to be] brought within the DLRIC floors and DSAC ceilings, within 12 months of the implementation of the charge control. Openreach should review its charges during 2009/10 in the light of the latest available DSAC/DLRIC information, and rebalance prices where required to bring them within the floors and ceilings, appropriately measured..."

BT has provided a detailed response to this question as we see a number of problems with the proposal as it stands. In general terms, we accept Ofcom's proposition that charges should usually be expected to fall between the LRIC floors and SAC ceilings levels to be cost orientated. We also accept that the appropriately measured DLRIC/DSAC cost range can be used as an approximation of the LRIC/SAC test. However, we do not consider that any such requirement can be absolute as this would mean that no objective justification can be given for prices to be outside the range when these may exist. In addition, in using the LRIC/SAC approach to cost orientation, Ofcom should recognise that the published DLRIC and DSAC measures are not synonymous with the concepts of LRIC and SAC. Ofcom should also recognise that the appropriate level of granularity of the test must be one which is meaningful and appropriate in the circumstances.

BT's full response on this issue

BT accepts the principle that a price cap imposes an average control on prices but does not deal with the variation of margins within an overall cap. We also accept that "cost orientation" is not a precise term and that appropriate guidance as to what is likely to be cost orientated in normal circumstances, and what is not, is useful for BT and for CPs. However, we do not consider that there is justification for an absolute requirement that prices should always be kept rigidly within the boundaries given by the DLRIC and DSAC measures which are required to be published in BT's Regulatory Accounts. We have therefore set out our reasons

for this, and then move on to suggestions about what might be a more appropriate form of interpretation of cost orientation.

BT has five main reasons which we consider justify Ofcom revising its proposals in paragraphs 4.88 and 5.49 quoted above.

1. "Distributed" LRICs and SACs

First, DSACs and DLRICs are not true LRIC and SAC measures, including as they do a distribution of fixed and common costs (and thus the "D"). Indeed, a DSAC is only a measure of the standalone cost of an activity *when this activity is provided with other services.* This means that DSACs are informative in the following ways:

- if all Prices exceed DSACs, then the SAC test for the services which share the fixed and common costs will be failed;
- if all Prices are below their DSAC, then the aggregate SAC test is passed; and
- if one or more prices exceed DSAC, then the aggregate SAC might be failed or might be passed. This will ultimately depend on the prices of other products sharing the relevant fixed and common costs.

A single DSAC becomes more meaningful in this regard the larger the revenue of the service in question is compared with the total revenues of the services which share fixed and common costs. In addition, BT accepts that revenue above a DSAC means that the activity in question could well be making more than the average contribution required to cover fixed and common costs assessed on a standalone basis.[18] In effect, its margin is relatively high.

In earlier Guidance on Floors and Ceilings[19], Ofcom made two points which BT considers are still relevant:

- that the Floors and Ceilings test was a "first order" one, with this term meaning that there might, at times, be other considerations which are relevant in considering compliance with the obligation to set cost oriented prices;[20] and

[18] That is, unless other activities earn a margin lower than that implied by their DSACs then revenues will typically exceed SAC.

[19] Annex B of "Guidelines on the Operation of the Network Charge Controls from 2001" published by Oftel.

[20] In paragraph 3.128 of the Consultation Document, Ofcom also describes the LRIC/SAC test as being "first order".

- that Ofcom would take into account the fact that DSAC is lower than SAC (and DLRIC is higher than LRIC) in investigating complaints into whether BT's charges were reasonably derived from costs and hence anti-competitive.

In this way, the 2001 Guidelines are themselves consistent with earlier Oftel positioning. For example, in 1997 Oftel stated that it did not favour a mechanistic implementation of floors (and, by implication, ceilings).[21]

There is no explanation in the Consultation Document why the existing Floors and Ceilings test should be rejected, and should now instead become an absolute one, as opposed to one which determines where the burden of proof should lie, or why account is no longer to be taken of the fact that DSAC and SAC are different cost measures.

2. Alignment of the test with the underlying rationale

Ofcom explains that the origins of SAC as a cost ceiling derives from the theory of contestable markets:

"The highest price that a multi-product firm could charge for any individual good or service in a contestable market is given by the efficient SAC of that good or service. This is because a price above this level would attract entry by a single product firm which would compete the price down to this level."[22]

There might be a note here on terminology. For the concept of a SAC to have meaning, a firm must have other services and costs, otherwise SAC would be the same as Total Cost. The quote above therefore compares the SAC of a multi-product firm (where SAC as a concept has meaning) with a hypothetical entrant which has a smaller portfolio. The hypothetical entrant does not, however, literally need to be a "single product firm" but a firm with a more limited portfolio than the multi-product firm.

This is important because it implies that the DSAC/SAC test ought to be applied at a level of granularity which matches that of a *realistic* hypothetical entrant. In the terminology of the 2001 Guidelines, this would mean that consideration is given to the relevant "combinatorial" and that this choice of service portfolio for a hypothetical entrant has some basis in market reality. CPs do not, for example, try and enter telecommunications by offering only one service but a variety of services, such as a number of leased lines at various bandwidths. Communications networks are not built with only one use in mind.

[21] Paragraph 5.49, Pricing Of Telecommunications Services From 1997: Controls and Consultative Document on BT Price Interconnection Charging
[22] Paragraph 3.130 of the Consultation Document

If the test were applied to rentals and connections separately, for example, it would prohibit connection charges below cost even if these were recovered through the subsequent rental (customers cannot take connection without rental, so no hypothetical entrant would just offer connections). A requirement that every service is priced below its DSAC is one which takes a valid theoretical idea (the price which should induce entry) but attempts implementation in such a way that the basic idea has itself been forgotten. Put another way, DSAC does not reflect the costs which a single product entrant would incur because, being a distributed cost, it reflects the fact that the entrant must be providing other services (otherwise, why would any costs need to be distributed?) The hypothetical entrant must therefore itself have other services – pointing to the use of a combinatorial test - or the DSAC test should be recognised as being an imprecise one and hence not a valid basis for an absolute requirement.

3. Number of Floors and Ceilings / "Each and every price"

There is a related issue which needs clarification in any Guidelines on cost orientation going forward. The Consultation Document refers to charges for individual services, but it is unclear what precise level of granularity Ofcom would expect any DLRIC/DSAC obligation to apply. BT's 2007/8 Regulatory Accounts show for 34 DLRICs and DSACs for TI services and 17 for AI services. In contrast, there are over 600 separate prices on the Carrier Price List, most of which are for services with very small volumes.

BT has described above reasons why DSACs do not provide a strict ceiling on BT's pricing. There are other practical issues which support this argument. As a service 'increment' becomes vanishingly small it becomes impractical to produce meaningful and stable DSACs and DLRICs. BT consider that it is neither plausible that services with very small revenues need to be cost regulated in order to provide market stability, nor that it can be maintained that BT has significant incentives to favour itself and distort competition. Furthermore, there will not be a "hypothetical entrant" offering only those services.[23] There is therefore a clear need for pragmatism in the interpretation of the cost orientation requirement. Without this, the proposals add a level of micro-regulation under which there is the possibility (and likelihood) of technical breaches of regulations that have no adverse effect on competition. We consider that this would not be the hallmark of "good regulation".

Finally, on a very practical matter, BT wishes to point out that DLRICs and DSACs are only ever published *after* the period in question has closed. For example, the 2008/9 Regulatory Accounts should be published in July 2009. The First Basket Year is to run from 1 October 2008 to 31 September 2009, thus only 2 months of the Year will remain when the costs will be

[23] Even if, exceptionally, there were such a competitor there would need to be the further consideration as to whether such a supplier was necessary for competition if there were also many other suppliers with broader portfolios also in the market. That is, a competition assessment would be warranted.

known. Given a 90-day notification period for any changes, prices can therefore only be based on cost information which pre-dates the period in question. Again, this suggests that an absolute and literal interpretation of the proposal would be wrong. This is because the prices and the cost information for the test itself can never be contemporaneous and movements in current costs may occur, particularly in the current economic climate which are completely legitimate and appropriate to be taken into account – but which would not be reflected in the DLRCs/DSACs relating to the previous years. This would therefore result in a price appearing to not be cost-oriented, when in fact it is.

4. Conflict between sub-baskets and "floors and ceilings"

Ofcom's proposals are for price increases to be limited to RPI+0 for sub-baskets, which are sometimes comprised of narrow ranges of services. Because of this, any absolute DLRIC floors might result in the obligation to make price increases which BT would be unable to make because of the sub-basket restrictions. For example, 2Mbit/s connections account for 93% of the TI connections sub-basket. Were these prices required to change materially – we comment on the reasons for cost volatility which might easily bring this about further below - then there could well be insufficient flexibility in the connections sub-basket to make the required change. That is, it is quite possible for the RPI+0 sub basket control to be inconsistent with an absolute Floors and Ceilings rule (or even with a pragmatically applied Floors and Ceilings rule).

At the level of the overall basket, it is also possible that an absolute cost orientation rule could require price reductions which, in combination with the restriction of RPI+0 on sub-baskets, force the overall (average) level of charges beneath that required by the price control. This would come about if the DSAC ceilings fell sharply and there was insufficient scope for increases to off-set, to the extent permitted by the overall price control, the required decreases. It could also then prove impossible to reverse such price decreases due to the RPI+0 restrictions, should costs increase in future years, when the volatility of annual costs may be an issue. As a result, BT might not be able to price at the ceiling permitted by the control and hence that the overall costs assessed by Ofcom as being incurred in delivering AI or TI services as a whole might not be recovered, when in fact full and appropriate recovery of BT's efficiently incurred costs is a key objective for both BT and Ofcom.

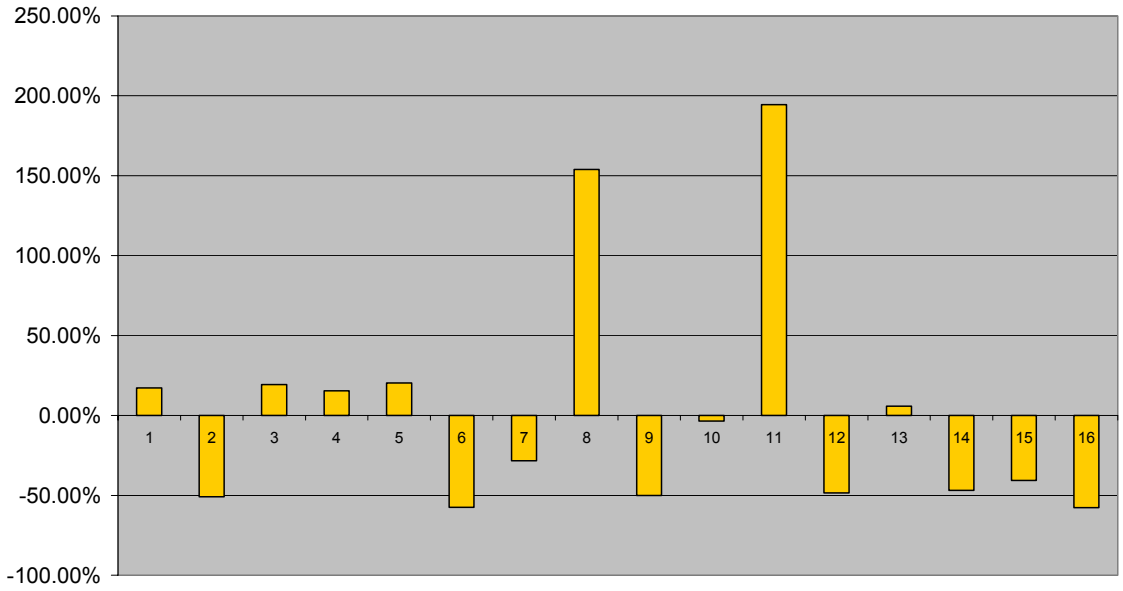
The inter-action of the set of proposed controls is simply so uncertain that, again, we believe it would be inappropriate for a Floors and Ceilings test to be an absolute one. Between indicative "floors and ceilings" and "X" we feel is clear that the absolute control ought to be the price control which has itself been assessed with as much precision as possible.

5. Cost volatility

As Ofcom explains in the Consultation Document, BT prepares its regulatory financial statements under current cost accounting (CCA) principles. Costs therefore reflect the level of asset inflation experienced in the year and the impact of any changes to the methodologies used to value assets. In addition, whatever accounting convention used, unit costs also change with volume changes, and sometimes because new reporting systems are brought into use. All these factors combine to make the reported DSACs volatile over time. As such, a single period's financial costs will not usually provide an accurate measure of actual unit costs incurred over the long term or over the life of a product.

The extent of volatility can be seen in the Figure below (some annual changes are even bigger than the examples shown in the Figure). Indeed, in some cases a price could be at the DSAC in one year but would be below the DLRIC floor in the next year.

Percentage change in DSACs, 2006/7 to 2008/9



1. Main link (links) 64kb/s	9. Distribution (km) - 34/45M
2. Transmission (km) 64kb/s	10. Local end (local ends) – 34/45M
3. Local end (local ends) 64kb/s	11. Main link (links) - 140/155M
4. Connection (circuits) 1-2M	12. Distribution (km) - 140/155
5. Main link (links) 1-2M	13. Local end (local ends) - 140/155
6. Transmission (km) 1-2M	14. 1/2Mbit/s (km) Trunk
7. Local end (local ends) 1-2M	15. 34/45Mbit/s (km) Trunk
8. Main link (links) - 34/45M	16. 140/155Mbit/s (km) Trunk

In such circumstances, having to track cost movements (even assuming this was possible, which it may not be due to the other constraints) between years would be likely to have an adverse impact on price certainty for BT's wholesale customers.

A proposal that prices be set between any particular year's reported DLRIC and DSAC seems to BT to gloss over such issues. Indeed, it is largely for this reason that Ofcom substituted its own estimates of future asset price inflation in estimating 2006/7 costs for price cap purposes.[24] The fact that Ofcom has given great thought to, and consulted on, adjustments to CCA costs at the start of the control does not seem to be consistent with then using "unadjusted" results in terms of applying a rule going forwards.

BT's proposal

BT suggests that, if Ofcom does intend to change its policy regarding the "Floors and Ceilings" test from previous Guidelines and align these more closely to the SMP cost orientation obligation, then this warrants a further consultation on a new set of Guidelines which addresses the above points.

Alternatively, we suggest that the following process is adopted as it strikes an appropriate balance between a certain process and the need for flexibility:

a) prices are compared with DLRIC and DSACs and any of those outside the range are considered further by BT. In doing this, some form of long term averaging of the DLRIC and DSAC information can be applied to remove any problems caused by the volatility of costs from year to year. We consider this is implicit in the wording "*appropriately measured"* in the Ofcom proposals;

b) where prices are outside of the range after the long term averaging of costs, then consideration is given as to what combination of services are relevant (for example, connections and rentals combined) and the test re-applied on this combinatorial basis; and

c) where such service revenues are outside the range, then the presumption should be that BT will move the prices in the way required to comply with the test *unless* (i) in view of the specific considerations that apply, it is economically more efficient not to comply with the test or (ii) that other valid reasons exist to set aside the results of the test in that specific case.

[24] See Table 8.2 of the December 2008 Consultation Document

Such a process would, we appreciate, sometimes involve Ofcom in consideration of the long term averaging applied by BT to smooth out annual costs; in the choice of the “services combination” which is appropriate; and also in deciding whether or not valid reasons exists why prices should be permitted to be outside the cost range. Whilst this may appear to create an additional administrative task, these issues seem to BT all to constitute legitimate regulatory consideration into the meaning and objectives of “cost orientation”, and to be no more than necessary if the test is not to be “mechanical”.

Annex 2: SMP Conditions G4, GG4, GH4 and H4

Were Ofcom to accept BT's proposals for a simplified basket structure as detailed in our responses to Questions 4.1 - 4.3, the draft SMP Conditions G4, GG4, GH4 and H4 contained in Annex 10 to the Consultation Document would need to be amended as appropriate to reflect our suggestions.

Notwithstanding these issues, if Ofcom continues with its proposed basket structure it would appear that Condition G4.1(b) is unnecessary. As drafted, this Condition requires BT to comply with a charge control of RPI-X% on a combined basket of connection and rental services relating to PPC terminating segments. Conditions G4.1(c) and G4.1(d) then require BT to comply with individual charge controls of RPI-X% for the aggregate of (i) the same connection services; and (ii) the same rental services.

This is overly complex given that if we were compliant with the individual controls then it follows that we would be compliant with the combined controls, thereby making Condition G4.1(b) redundant. This same principle applies equally to Conditions GG4.1 and GH4.1 as currently drafted.

Condition H4.1, which relates to Trunk services, also contains paragraphs (b) and (c) which refer to terminating segment services and which should be removed for the sake of clarity and simplicity. H4.1(e) and (f) then refer out to Annex B, which is marked as "not used", and so would appear to be surplus to requirements."

Point of Handover Charges

The newly separated-out per circuit POH charges (as discussed in paragraphs 4.74-4.83 of the Con Doc) should also be broken out in the list of services in the Annexes to the relevant Schedules.

Drafting Points

The various Annex Bs under Part 1(a) (i) bullets 5 & 6 and Part 1(a) (ii) bullets 5 & 6 refer to "single fibre working". This same misspelling is carried through into Part 1(a) (ii) bullets 5 & 6 only in the Annex Bs to GG4 and GH4.