



## BT's response to Ofcom's consultation document

*“LLCC PPC Points of Handover pricing review: Proposal for modification of SMP Conditions”*

23 March 2011

BT welcomes comments on the content of this document, which is available electronically at <http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Consultativeresponses/Ofcom/index.htm>

Comments can be addressed via e-mail to John Morden ([john.morden@bt.com](mailto:john.morden@bt.com))

# Contents

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## **Section**

1. Executive summary	3
2. Ofcom's proposals	5
3. Answers to Ofcom's consultation questions	12

## **Annexes**

Annex 1 – Commentary on Ofcom's Point of Handover model	16
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## 1. Executive summary

Ofcom summarises the objectives of the project to examine the specific Point of Handover (POH) issues remitted by the Competition Appeal Tribunal (CAT) as:

- assessing the reasonableness of BT's estimate for additional POH costs;
- assessing various regulatory options for the recovery of these costs;
- assessing the appropriateness of BT's current charging structure; and
- deciding how these costs should be recovered going forward and setting the level of the additional POH charges.<sup>1</sup>

In summary, BT considers that Ofcom's Option 1, cost recovery on a FAC basis, aligns most closely with Ofcom's cost recovery principles and is superior to, and a more proportionate response than, the proposed LRIC approach (Option 4). It is also consistent with the Competition Commission's direction. Option 1 is superior because:

- It is based on recorded costs which are derived from BT's regulatory costing system, making it the most reliable approach. These costs are consistent with those used by Ofcom to set the leased lines charge control so ensuring consistency across the regulated product base. The data are public and have been reconciled to the regulatory financial statements. Using fully cost-reflective charges also ensures that competition is not founded on special protection for a particular type of entrant, or service user, and hence is likely to be superior for dynamic efficiency.
- By contrast, Ofcom's bottom up cost model is a theoretical construct and risks introducing error and downward bias. If the common costs of Points of Handover are not recovered through POH charges, they will have to be recovered through other products or services which could create distortions elsewhere.

If, however, a bottom up model is to be used (and Ofcom acknowledges that the total amount of cost to be recovered remains unchanged under any of the options), then BT urges Ofcom to make some adjustments to it.

- Bottom up models are incremental in nature so should not additionally have LRIC ratios applied as this will bias costs downwards. BT has found examples of costs being omitted and the wrong prices being used (see Annex 1).
- If a LRIC ratio is to be applied, it should not be based on prices and Ofcom's choice of 70% is unreliable. This ratio has been highly volatile over recent years. By contrast, BT's LRIC:FAC ratio for 2Mbit/s links of 85% to 90% is stable and is based on the established LRIC model. BT recommends its use.
- Ofcom has omitted any network management costs for the PPC Type I Points of Handover. The maintenance costs for PPC Type I handovers are only included within the equipment rental charge insofar as they relate to direct maintenance costs such as the equipment supplier's maintenance contract. The network management costs are specifically excluded from the equipment rental charge. This approach dates back to Oftel's PPC Phase II determination<sup>2</sup> when

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<sup>1</sup> Paragraph 2.13 of Ofcom's consultation document

<sup>2</sup> Oftel, PPC Phase II Determination, 23 December 2002, Sections 3.31 to 3.48  
[http://www.ofcom.org.uk/static/archive/oftel/publications/broadband/leased\\_lines/ppc1202/ch3.htm](http://www.ofcom.org.uk/static/archive/oftel/publications/broadband/leased_lines/ppc1202/ch3.htm)

the network management costs were included within “network overheads” recovered via the Local End uplift. These costs should therefore be included.

- Ofcom’s choice of the LLU hostel rental product as the increment for its LRIC model is not a good proxy for Points of Handover. Instead, BT proposes that Ofcom uses a 2Mbit link as the closest network proxy given it uses exactly the same network equipment as Points of Handover.
- No allowance has been made for the efficiency gains BT has made since 2007/8, amounting to a re-opening of the leased lines charge control.

Once these corrections have been made, Ofcom’s bottom-up model gives an overall annual cost estimate for Points of Handover similar to the adjusted models BT has provided to Ofcom for calculating POH costs (see 4.18 to 4.19 of the consultation) BT agrees that Ofcom’s Options 2 and 3 are not supported by the cost recovery principles and have other disadvantages. BT’s response on Ofcom’s proposed level of the Weighted Average Cost of Capital (WACC) will follow in our responses to Ofcom’s consultations on wholesale charge controls.

BT urges Ofcom not to asymmetrically implement price reductions immediately on publication of the Statement and to phase in price increases. There’s no evidence that PPC operators who consume a mix of different types of POH will be worse off overall from the proposed price changes. However, some will gain much more than others under Ofcom’s approach. Hence such an asymmetric approach would be disproportionate and discriminate in favour of certain players. BT cannot recover the shortfall in costs through adjusting charges for other services in the TI basket, as Ofcom suggests. This is because the 90 day price notification obligation rules out price changes this charge control year (given Ofcom’s POH Statement will be published close to this date). The price increases and decreases should be made at the same time.

BT agrees with Ofcom’s proposal for the notification periods to be waived for Type I and II POH. Yet Ofcom should additionally waive the 90 day notification period and RPI-0% sub caps for the Traditional Interface (TI) basket to avoid a shortfall in common cost recovery. This is the only way to satisfy Ofcom’s statement in the consultation that “BT will be able to recover the shortfall by adjusting its charges for other services within the TI basket.” Such waivers would have a minimal competitive effect whilst mitigating the risks of distortions. This is justified as Ofcom is proposing a change to the regulatory regime very late in the charge control’s financial year, the level of which could not have been foreseen at the start of the year.

Ofcom asks for views on the assumptions and analysis set out in sections 3 and 4 in the consultation (paragraph 1.20). BT’s response focuses on this, and the remainder of this response is structured as follows:

- Section 2 is an assessment of Ofcom’s proposals, their underlying principles and implications, and BT’s proposed alternatives.
- Section 3 responds to Ofcom’s consultation questions.
- Annex 1 comments on Ofcom’s Point of Handover model, in particular on errors and omissions.

## 2. Ofcom's proposals

### 2 Introduction

When the CAT disposed of the Leased Lines Charge Control (LLCC) appeal, it directed Ofcom to assess the reasonableness of the revised BT estimated costs and determine the appropriate figure for the new POH charges, along with assessing the regulatory options for implementing new POH charges and how they should be recovered in the light of the Commission's assessment.<sup>3</sup> None of this precluded Ofcom from using a suitably adjusted version of BT's cost models for POH.

By contrast, Ofcom's proposed approach departs from other methods of charging. BT believes there should be very strong reasons for departing from a top down approach for the reasons set out in the following sections, including the loss of regulatory certainty from switching to a bottom up approach. This is underlined by the fact that, as Ofcom acknowledges, the proposed approach does not change the overall amount of cost to be recovered.<sup>4</sup> But in practice this is not feasible due to Ofcom's price notification and sub-cap requirements in the TI basket. The switch to a bottom up approach also conflicts with one of Ofcom's own policy objectives, "Our specific policy objectives in reviewing the PPC POH charges are...to provide regulatory certainty for BT and its customers and to avoid undue disruption."<sup>5</sup>

Sections 2.1 to 2.5 set out BT's comments on Ofcom's approach to costs, followed by Section 2.6 on the lack of evidence to support the proposal for asymmetric prices changes.

### Costs

#### **2.1 BT's cost estimates are based on actual costs and point to the adoption of Option 1**

BT's costs are derived from our regulatory costing system. Where models are based on actual, incurred costs they will be the most robust and reliable. These costs are consistent with the costs Ofcom has used to set the leased line charge control and, by using these costs, Ofcom will ensure consistency across the regulated product base. Top down cost estimates tend to be higher than bottom up cost models as they include all costs, which bottom up models invariably fail to do (see section 2.2 below). In a recent consultation to set charge controls for Wholesale Broadband Access, Ofcom has concluded in favour of using a Fully Allocated Cost approach:

"CCA FAC has had the benefit of greater transparency to enable us to map more easily BT's audited regulatory financial statements to relevant base year costs. CCA FAC is also consistent with the other charge controls currently being determined by Ofcom for other areas of BT's business such as leased lines and Openreach. This ensures that all common costs are properly accounted for."<sup>6</sup>

Ofcom notes this approach was supported by the Competition Commission:

"In addition, we are mindful that our use of CCA FAC to set the current controls was scrutinised by the Competition Commission ("CC") in the appeal of the current LLU. In its determination, the CC found

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<sup>3</sup> Paragraph 2.11 of consultation

<sup>4</sup> Paragraph 1.15 says "...BT will be able to recover the shortfall by adjusting its charges for other services within the TI basket."

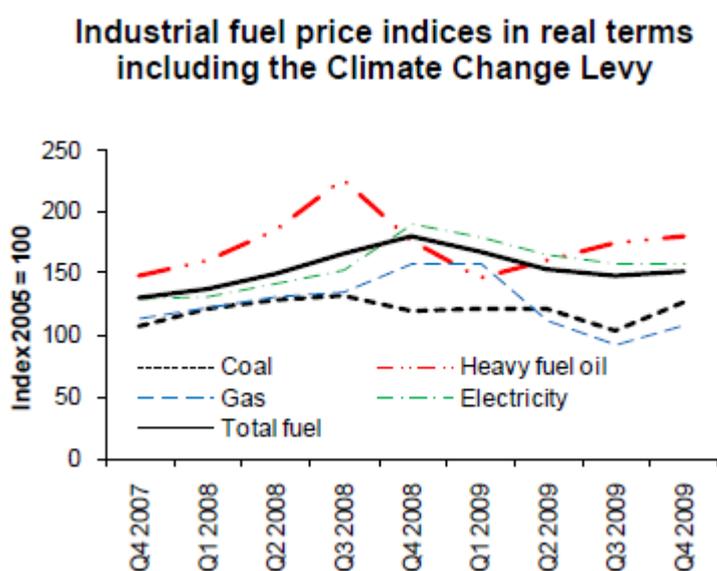
<sup>5</sup> Paragraph 2.18 of consultation

<sup>6</sup> Paragraph 5.59 in "Proposals for WBA charge control", Consultation document, Ofcom, 20 January 2011

that we were not in error in our use of CCA FAC to check that the price differentials between MPF and SMPF+WLR were at least equal to LRIC differentials.”<sup>7</sup>

Ofcom concludes that some remaining unexplained fluctuation in BT’s costs indicates that our cost model is not sufficiently reliable.<sup>8</sup> Yet year to year variability in costs is a natural, expected feature of a total absorption costing system and does not mean that the underlying costs are unreliable. There are sound economic reasons for variability in costs, and the interactions between the variables mean that it is not always possible to pinpoint the reasons for such cost changes. Variability is driven by:

- (a) **Volatility in input costs:** For example, fuel prices, a key input to the power costs of Points of Handover, are highly volatile. The following chart shows fuel price changes over the two year period ending December 2009, highlighting this volatility. In one year, total fuel prices changed over 15% on a year earlier.



Fuel prices index in real terms <sup>(1)</sup> , 2005=100	2009 Q4	Percentage change on a year earlier
Coal	126.0	+5.9
Heavy fuel oil	180.0	+2.0
Gas	107.6	-32.0
Electricity	156.7	-17.3
Total fuel	151.8	-15.6

(1) Deflated using the GDP implied deflator. Includes estimates of the average Climate Change Levy paid.

Source: Department of Energy & Climate Change, “Quarterly Energy Prices,” March 2010

<sup>7</sup> Paragraph 5.58, *op cit*

<sup>8</sup> Paragraph 4.15 of consultation

- (b) **Changes in the incurred cost levels:** As BT continues to become more efficient, some costs will fall over time. Some costs are linked to network activity, such as new provisions, rearrangements and circuit ceases. BT has undergone an exchange rationalisation programme, the costs of which were incurred in one year, with the benefits accruing through lower costs in later years. Cost efficiency programmes can lead to variability in costs where there are up-front costs followed by savings in later years.
- (c) **Volume and mix variances:** Costs allocated at a granular level depend not only on the volume of the product in question, but also on the volumes of *other* products sharing the platform. This can cause changes from year to year in the percentage of costs allocated to POH, and hence in total POH costs, and are driven by changes *outside* the specific POH market. For example, the SDH transmission network carries PSTN voice, private circuits and broadband traffic. Changes in the volumes of broadband and voice traffic will influence the proportion of the SDH costs attributable to private circuits, even if the volume of private circuits remains unchanged.
- (d) **Changes in the allocation basis and in accounting practices:** BT continually reviews its allocation methodologies, and these changes can influence the level of costs shown against an individual product or product set. As some assets start to approach the end of their useful economic life, costs that were allocated based on the depreciation values will be impacted. This has affected both PDH and SDH assets in recent years.
- (e) **Changes in realisation of efficiency gains:** The speed with which efficiency gains are made varies from year to year, which will impact on total costs.

Variability of costs is inherent to any business. The fact that costs vary from year to year does not itself mean the cost estimates are unreliable.

## 2.2 Bottom up cost models under estimate total costs

Ofcom has chosen to build a bottom up cost model. One argument in favour of such an approach is that it may be more transparent to other PPC operators. BT, however, has a number of concerns with this approach. Bottom up models invariably omit some costs, therefore providing a cost estimate that is biased downwards. This is because such models are a theoretical construct and rest on the premise that there is an absolute level of costs attributable to a product. But there is no absolute level of costs. In any business, costs vary and move around from year to year (see the previous section). The use of a bottom up model does not change the fact that all costs have to be recovered. For example, new equipment may take up less space in an exchange than the previous technology. But the exchange space released cannot be immediately re-used. In a bottom up model, costings based on the space requirements of new equipment do not take account of such a lag and therefore fail to reflect actual costs incurred.

Annex 1 sets out costs that Ofcom has omitted in its bottom up model, including network management costs for Type I Points of Handover, transport costs, tie cables and AC power supply rental. There are also costs where the values used by Ofcom in the model are too low, including hourly engineering costs and power rental costs that exclude back-up power. Ofcom should make

these corrections to its model. Once these corrections have been made, Ofcom's bottom-up model gives an overall annual cost estimate for Points of Handover similar to BT's adjusted models.

In contrast to a bottom up model:

- Use of a FAC model is a widely understood concept and has been adopted in many previous price controls.
- A FAC model is based on public data which has been reconciled to the regulatory financial statements. The derivation of these figures is explained in detail in BT's published Detailed Attribution Methodology (DAM) available on BT's website.
- In terms of static efficiency, charges which are set in line with suitably adjusted CCA costs across the portfolio will avoid creating competitive distortions.
- Fully cost-reflective charges also ensure that competition is not founded on special protection for a particular type of entrant, or service user, and hence is likely to be superior for dynamic efficiency. If the common costs of Points of Handover are not recovered through POH charges, they will have to be recovered through other products or services which could create distortions elsewhere.

In short, it is not in our view appropriate to use a simple bottom up model to determine costs due to the risk of introducing error into the calculations.

### **2.3. Bottom up cost models are incremental so should not additionally have a LRIC ratio applied**

Ofcom's uses an incremental cost model based on a proxy of the costs incurred in supporting Points of Handover. Ofcom then applies a LRIC ratio to certain costs as it says it has relied, in part, on charges from BT's Carrier Price List (CPL) for some key inputs and these may include some overheads. However:

- As many costs are already measured on an incremental basis, BT does not consider there is any justification for additionally applying a LRIC ratio. For example, the power usage charge represents the power consumed by the equipment. Applying a LRIC ratio of 70% to power costs will lead to an underestimate of total costs (see Annex 1). Annex 1 sets out other areas where application of a LRIC:Price ratio is inappropriate, including accommodation (where Ofcom's footprint factor does not include any allowance for cable runs, common space areas etc), air conditioning, DC power (based on the cost of batteries) and security and service.
- Specifically in relation to the hostel rental proxy that Ofcom has chosen, the price is impacted by the recovery of site clearance and preparation costs. These costs are incurred up front but recovered via a rental charge. This distorts the LRIC:Price ratio and makes it unreliable as a basis for estimating incremental costs.

In addition, Ofcom's choice of 70% as the level for the LRIC ratio is unreliable. This ratio has been highly volatile over recent years. The following table shows how the LRIC:FAC ratios are considerably more stable than the LRIC:Price ratio, which varies very significantly year on year, and is therefore

less reliable than a LRIC:FAC ratio.

	2006/7	2007/8	2008/9	2009/10
<b>2Mbit/s Link</b>				
LRIC	264	285	319	221
FAC	291	339	359	256
LRIC:FAC	<b>90.6%</b>	<b>84.0%</b>	<b>88.9%</b>	<b>86.5%</b>
<b>Hostel Rentals</b>				
LRIC	4,352	2,917	3,871	3,604
Price	3,042	5,160	5,076	5,191
FAC	4,758	3,462	4,442	4,217
LRIC:Price	143%	57%	76%	69%
LRIC:FAC	<b>91%</b>	<b>84%</b>	<b>87%</b>	<b>85%</b>

Source: BT calculations based on Regulatory Financial Statements

Ofcom's bottom-up model includes a number of items estimated on an incremental basis, such as the accommodation footprint, the power usage and equipment maintenance costs and the network management costs. Adjustments to this model are required when estimating the Fully Allocated Costs so that account is taken of the incremental approach used in Ofcom's model. Once Ofcom's model is adjusted to a Fully Allocated Cost basis and the errors and omissions (as outlined in Annex 1) are corrected, the total FAC for Point of Handover is around £5.7m using this bottom up approach.

#### 2.4. Ofcom's proxy product is not comparable to POH and BT proposes an alternative

Ofcom's has chosen LLU hostel rental as the increment for its LRIC model. However, this is not a reliable proxy as it does not cover all relevant costs. For example, there are no equipment, maintenance, network overhead or bearer costs included within the product.

Instead, there are good reasons for Ofcom to use a 2Mbit link, as BT has previously proposed. These reasons include:

- **A 2Mbit link is the closest network proxy:** The 2Mbit Link component uses exactly the same network equipment as the Point of Handover.
- **BT has only used the cost elements within the 2Mbit Link that relate to the Point of Handover costs:** The LRIC model calculates the LRIC of the 2Mbit link as a separate increment, so concerns that it is derived from the larger "core increment" are misplaced. BT has also used the "pure LRICs" in its calculations so concerns about recovery of intra-core fixed common costs are equally misplaced. BT has calculated figures at a very granular level.
- **A 2Mbit link is a reliable proxy:** The size of the costs used in BT's original estimate of the Point of Handover costs were £11.7m which has been subsequently reduced to £6.7m. The proxy calculation used the *operating costs* only of 2Mbit Link component. These are substantially lower than the FAC and revenue of this component. Yet Ofcom compares costs with a figure that

includes both depreciation and the Return on Capital employed, neither of which is relevant for estimating the Point of Handover *operating* costs.<sup>9</sup> The operating costs *within* the 2Mbit/s Link component are of a similar order of magnitude to the Point of Handover costs and so remain a reliable proxy.

- **BT has used a LRIC:FAC ratio** which is based on objective evidence as it is derived from the established LRIC model. The ratio has remained stable in the 85% to 90% range over the past four years (see table above).

## 2.5 Removal of BT's gains in efficiency

Ofcom's approach to charge controls is to set a level of X within an RPI-X control against which the regulated firm is incentivised to perform. The incentives flow from the controlled firm bearing the risks of cost increases reducing profitability below that assumed in the control, or conversely gaining the benefits if realised cost savings (efficiency improvements) are greater than those assumed.

However, in this case, Ofcom has taken the latest estimate of costs and applied these as prices. This means no allowance has been made for the efficiency gains BT has made since 2007/8. This amounts to a re-opening of the charge control by confiscating the relevant efficiency gains over the period.

## Asymmetric price changes and waivers

### 2.6 Asymmetric price changes

Ofcom is proposing that the price decrease in Type I POH charges are implemented immediately on publication of the Statement, whilst Type II POH charges would be increased in two phases. Ofcom's reasoning for this asymmetric treatment is that it will give PPC operators time to respond to the planned changes and that BT can recover any shortfall within the TI basket.<sup>10</sup>

BT urges Ofcom to reconsider such an asymmetric approach, which is not underpinned by any regulatory principles, is discriminatory and disproportionate. Indeed, it would indiscriminately hand a competitive advantage to certain players, at the expense of other players, including smaller players. Such an asymmetric approach is inappropriate:

- **BT can find no evidence that there will be bill shock for PPC operators:** There's no evidence that PPC operators who have both Type I and Type II POHs will be worse off from the proposed price changes.
- **BT cannot recover the shortfall in costs:** The implication of Ofcom's approach is that BT will be pricing Type II POH below LRIC costs.<sup>11</sup> Despite Ofcom's statement that "BT will be able to recover the shortfall by adjusting its charges for other services within the TI basket" (paragraph 1.15), the 90 day price notification obligation rules out price changes this charge control year

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<sup>9</sup> Paragraph 4.19 of consultation

<sup>10</sup> Paragraph 5.12 of consultation

<sup>11</sup> Paragraph 5.12 Ofcom says "We recognise that this approach will mean that, for a period of several months (from publication of the statement until 1<sup>st</sup> April 2012), the charges for additional POH services will not, in aggregate, be sufficient to cover the LRIC of providing these services."

(which ends on 30th September). In addition, the tight sub caps in the TI basket covering the majority of revenue effectively rule out any room for manoeuvre. BT considers that Ofcom should, in addition to its proposed POH waivers, waive the 90 day notification period for the TI basket and the application of the sub caps to avoid a shortfall in common cost recovery (see the response to question 17 below).

- **The rebalancing of prices has been well signalled to the market:** PPC operators have been aware that prices are to be rebalanced for a considerable period, with lower prices for circuits handed over on Type I Points of Handover since July 2010. PPC operators have had the incentive to migrate to Type I POH since BT announced the new pricing structure following the industry consultation.
- **Pricing Type II handovers below costs bakes in inefficiency:** Delaying the price rises delays the move to a more efficient pricing structure and will further delay efficient migration.

### 3. Answers to Ofcom's consultation questions

#### 3.1 Questions on Section 4: Assessment of regulatory options

Question 1: Do respondents agree that Options 1 and 4 are consistent with cost causation whilst Options 2 and 3 are not?

BT agrees that Options 2 and 3 are not consistent with cost causation. Option 4 is, however, only partially consistent with cost causation as no contribution is made to the recovery of common costs despite the fact that common resources are used in the provision on Points of Handover. Compared with Option 4, Option 1 is more consistent with the cost causation principle as it allows for the recovery of common costs associated with the consumption of POH. Option 1, therefore, is a more proportionate solution.

Question 2: Do respondents agree with our analysis of cost minimisation and with our view that we should give more weight to cost causation?

BT believes that the use of FAC (Option 1) within a charge control is just as effective an incentive for cost minimisation as an approach based on LRIC. Indeed, the recovery of common costs from *other* products weakens the cost minimisation incentives under Option 4. Ofcom says it considers that the differences between Options 1 and 4 may be small in terms of incentives to minimise costs (paragraph 3.40). Ofcom also says it places more weight on cost causation compared with cost minimisation (paragraph 3.41). This points towards the adoption of Option 1 over Option 4 for the reasons set out in the response to the previous question.

Question 3: Do respondents agree that Option 4 is most consistent with the distribution of benefits principle?

No. Option 1 more closely aligns with the distribution of benefits principle. This is because it ensures that those who benefit from a Point of Handover pay the full cost of its provision. By contrast, Ofcom has not made a clear case for the distribution of benefits principle to favour Option 4 over Option 1 as:

- Ofcom's conclusion elevates one type of benefit, enhanced competition (which is described as a "potential" rather than a direct benefit<sup>12</sup>) over the direct beneficiaries, i.e. users of POH themselves.
- Ofcom itself is tentative about its conclusion, saying Option 4 "may be somewhat more clearly consistent" with this principle (paragraph 3.49). But under Option 4, as these direct beneficiaries - POH users - are relieved of their contribution to common cost, it follows that others are faced with a larger burden.

Question 4: Do respondents agree that Option 4 is most consistent with the effective competition principle?

Both Options 1 & 4, where properly implemented, are consistent with effective competition as they do not encourage inefficient entry.

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<sup>12</sup> Paragraph 3.42

Question 5: Do respondents agree with our analysis of practicability?

Yes, Option 1 is the most practical. We agree with Ofcom that Option 3 is not practical. A number of questions remain over the appropriateness of Ofcom's calculation of LRIC costs, which BT sets out in section 2 and Annex 1 of this response.

Question 6: Do respondents agree with our analysis of the four options?

BT agrees that Options 1 and 4 are the most appropriate approaches, but considers that Option 1 represents a superior approach. It most closely aligns with the principle that the recovery of costs should be based on cost causality, with the efficiently incurred Fully Allocated Cost standard being a well established approach to the setting of interconnection charges. Option 1 is more consistent with Ofcom's other principles taken together as Ofcom has not taken a balanced view of the distribution of benefits, or cost minimisation and Ofcom acknowledges that the weight placed on the impact on increasing effective competition from its approach is small. Section 2 of this response sets out other reasons underpinning the superiority of Option 1 over Option 4.

### **3.2 Questions on section 5: Additional POH cost estimates and proposed new charges**

Question 7: Do respondents agree with our proposed method for converting published charges into LRIC estimates, for use in our LRIC model? If not please explain why and propose an alternative approach including relevant LRIC/Price ratios we could use.

No. Ofcom's model suffers from a number of omissions and inappropriately applies a LRIC ratio to a number of costs which are incremental in nature. For example, whilst a network overhead has been included, this is limited to the Type II Points of Handover whereas this should also be included for Type I POHs. The issues BT has identified with the model are set out in Annex 1.

The use of a LRIC:Price ratio is not consistent with measuring that the costs are caused by consuming POH (costs are under estimated) and Ofcom's choice of LRIC:Price ratio is unstable (see section 2.3). If, however, this approach is to be used, BT believes that the 2Mbit/s Link component is a reliable proxy for Points of Handover, whose LRIC:FAC ratio has been consistently between 85% and 90% for the last 4 years.

Question 8: Do respondents agree with the inputs we have used to estimate the annual rental charge for the duct and fibre used in the provision of POHs? If not, please explain why and provide alternative data.

Yes. Ofcom's figures are also consistent with BT's calculations, albeit Ofcom has used a different basis.

Question 9: Do respondents agree with the inputs we have used to estimate the operational costs associated with POHs, especially in relation to network management costs? If not, please explain why and provide alternative data.

No, BT does not agree with Ofcom's approach. Network management costs have not been applied across the entire costing model. Only Type II POHs have had a network cost overhead included. Ofcom has omitted any network management costs for the PPC Type I Points of Handover. Maintenance costs for PPC Type I handovers are only included within the equipment rental charge insofar as they relate to direct maintenance costs such as the equipment supplier's maintenance contract. The network management costs are specifically excluded from the equipment rental charge. This approach dates back to Oftel's PPC Phase II determination in December 2002.<sup>13</sup> This established that network management costs should be included within "network overheads" recovered via the Local End uplift. Ofcom's proposed approach would exclude these costs. This should be corrected with the overhead applied to both types of POH.

Question 10: Do respondents agree with the inputs we have used to estimate the support costs associated with POHs? If not, please explain why and provide alternative data.

No. As explained in section 2, BT's calculations are based on actual incurred costs, whereas Ofcom has taken a theoretical approach to costing. Therefore, inevitably some elements of costs have been excluded. Annex 1 sets out costs that BT considers Ofcom has omitted, used the wrong price, and costs which are incremental yet where Ofcom has inappropriately applied a LRIC ratio.

Question 11: Do respondents agree that we should use our own bottom-up model to set the level of the additional POH costs to be recovered?

No, for the reasons set out in section 2 above. BT believes the use of a bottom up model risks the introduction of errors and a downward bias to costs. BT believes there should be very strong reasons for departing from a top down approach, including consideration of the impact on regulatory certainty (regulatory certainty is one of Ofcom's policy objectives for this review), which we do not consider Ofcom to have demonstrated.

It is also inappropriate to use current costs to set POH charges as this undermines efficiency incentives. That is, to extent that costs of Point of Handover have been reduced, using current costs removes an allowance for efficiency gains BT has made since 2007/8, amounting to a re-opening of the price control.

Question 12: Do respondents agree that we should not differentiate Type II POH charges between SDH and PDH technology?

Yes. Ofcom needs to avoid making charges overly complex. The important point is to have a price differential between Type II and Type I POH to give the incentive to migrate onto the more efficient Point of Handover. The option exists for operators to re-nominate a Type I SDH POH to a PPC POH.

Question 13: Do respondents agree that we should not set a single charge per SDH POH by capacity (irrespective of whether they are Type I or Type II)?

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<sup>13</sup> Oftel, PPC Phase II Determination, 23 December 2002, Sections 3.31 to 3.48  
[http://www.ofcom.org.uk/static/archive/oftel/publications/broadband/leased\\_lines/ppc1202/ch3.htm](http://www.ofcom.org.uk/static/archive/oftel/publications/broadband/leased_lines/ppc1202/ch3.htm)

Yes, BT agrees that the POH charge should vary to reflect the size of the POH as the network management and exchange based costs are dependent on the capacity of the Handover.

Question 14: Do respondents agree that we should not disaggregate the current bearer charge for Type I POHs further?

Yes. It is important not to add extra complexity to pricing.

Question 15: Do respondents agree that we should implement the additional POH charges as set out under Option C1, where we have proposed a one-off decrease in Type I POH charges to LRIC, whilst Type II POH charges are increased to LRIC in two phases?

No, for the reasons set out in section 2.6. There is no justification for introducing the lower charges for Type I POH immediately but to delay the price increases. There's no evidence that PPC operators who have both Type I and Type II POHs will be worse off from the proposed price changes, removing the risk of bill shock. But some will gain more than others. Hence by delaying price increases, certain operators are being handed a competitive advantage by Ofcom. Ofcom's approach means that the Type II POHs will be priced below their LRIC cost for longer than necessary, which reduces the incentive for operators to improve efficiency by migrating circuits. It is unreasonable that the customers who will gain the most from the re-pricing of the Type I Points of Handover should also benefit from the delay in bringing charges into line with costs for the Type II Points of Handover.

Question 16: Do respondents agree that BT should be allowed to increase Type I POH charges by RPI-0% (between 1st October 2011 and 30 September 2012), whilst it is required not to exceed the Type II POH charge levels proposed by Ofcom?

Yes. As BT believes that the price changes to inefficient POHs should be implemented at the same time as the price decreases in Type I POHs, then BT should be able to change Type I POH prices by an amount consistent with the price control constraints. However, Ofcom should waive the sub-cap for the terminating Traditional Interface (TI) sub basket to allow for recovery of costs that will be excluded by this determination.

Question 17 Do stakeholders agree that the required notification period should be waived in respect of the proposed changes to Type I and Type II POH charges?

Yes, this is a reasonable approach. However, BT also believes that the notification period and TI terminating basket sub caps should also be waived for the TI basket to ensure that the introduction of the price changes is revenue neutral across the market. This is the only way that Ofcom's statement can be satisfied that "BT will be able to recover the shortfall by adjusting its charges for other services within the TI basket." Such waivers would have a minimal competitive effect whilst mitigating the risks of distortions. Waivers are justified as Ofcom is proposing a change to the regulatory regime very late in the charge control's financial year, the level of which could not have been foreseen at the start of the year.

## **Annex 1: Commentary on Ofcom's Point of Handover Model**

### **1. Inappropriate application of a LRIC ratio**

Where a LRIC:FAC ratio is to be used, it should be 87% based on the 2Mbit link proxy (see table in section 2.3). Ofcom has applied a LRIC:FAC ratio of 70% to a number of cost lines, which BT believes is inappropriate.

#### **Accommodation**

The rack footprint is multiplied by a factor of 3.85 to derive the total operational space required by the equipment. This factor includes operational space only, and a factor is needed to ensure there is space for cable-runs, and also space between racks to allow for access. There is also no inclusion within this factor for common space areas, such as entrances, corridors between rooms and welfare facilities. As the footprint factor does not include any allowance for fixed common costs, the accommodation costs should be treated as incremental.

#### **Air conditioning**

This charge is payable based on the energy consumption. On this basis, there is no justification for the use of a LRIC factor, as the calculation is based on the power used by the equipment.

#### **DC Power**

These costs relate to the cost of batteries required. Costs based on the number of batteries required are clearly incremental.

#### **Power Usage**

This is the cost of the energy consumed that is essentially a recharge to the operators for the energy consumed by their equipment. Again, these costs are incremental.

#### **Security and service**

These costs are based on the footprint within the exchange. The 3.85 factor applied to the equipment physical footprint does not include any allowance for common costs, consequently a LRIC ratio should not be applied to these costs.

### **2. Omitted or incorrect use of costs**

Ofcom has also omitted a number of costs within the bottom up model or, in some cases, used an estimated value that is too low.

#### **Transport Costs**

The equipment maintenance costs include no allowance for the cost of motor transport and vehicles necessary for the engineering staff to travel to the equipment site in order to carry out the maintenance activity.

#### **Tie Cables**

There appears to be no cost included within Ofcom's model for the tie cables connecting the Point of Handover muxes to the third party equipment. This is included in the cost for CSH and ISH extension

muxes only, as part of the bearer cost. There is clearly the cost within the exchange for the ISH muxes.

### **AC power supply rental**

The cost of an AC Power Supply rental (shown on the Openreach price list as £348 per 10kW) is required to deliver a power supply from the mains supply to the operational room. This cost is proportional to power rating, therefore it should be considered to be incremental.<sup>14</sup>

### **Network management costs for Type 1 Points of Handover**

The Type I Points of Handover do not have any maintenance costs or network management costs included in Ofcom's model. BT believes that this reflects a misunderstanding that the equipment rental costs already recover these costs. However, the equipment rental charges only include the cost of the first line maintenance costs (based on the contract with the equipment supplier) and none of the network overhead costs are included. This dates back to Ofcom's Phase II determination in 2002 when network management costs were specifically excluded from the equipment rental costs and were to be recovered through the Local End Point of Handover uplift.<sup>15</sup>

### **Power Rental Charge: Back-up power option should be used**

BT provides back-up power to generate its own power within the exchanges should there be a supply failure from the National Grid. An estimate of this cost can be obtained by using the relevant Openreach price. As there are fixed common costs associated with the provision of back-up power capability, a LRIC ratio can be applied to this cost. Ofcom has used an Openreach price which excludes back-up power. The power rental cost of £13.20 per kW should be replaced with a cost of £162 per kW.<sup>16</sup>

### **Engineering cost per hour (for equipment maintenance)**

Ofcom has underestimated the hourly engineering cost. BT's price list shows the total cost per hour more than twice the estimate made by Ofcom. This may be because Ofcom has not included any cost for supervision, training, annual leave or may not have included costs such as national insurance and pension contributions. For example, the cost of a 4 hour call out would be c. £440, giving an hourly rate of c£110 (more at weekends and bank holidays).<sup>17</sup>

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<sup>14</sup> See the Openreach LLU price list, sections 2.1.1 "Accommodation AC Final Distribution Rental per 10kw increment per annum" (Charges will appear in billed units of decawatts (10W))

<sup>15</sup> This was set out in section 3.31 to 3.48 of Ofcom's Phase II Determination of December 2002 at: [http://www.ofcom.org.uk/static/archive/oftel/publications/broadband/leased\\_lines/ppc1202/ch3.htm](http://www.ofcom.org.uk/static/archive/oftel/publications/broadband/leased_lines/ppc1202/ch3.htm)

<sup>16</sup> See the entry for back-up power in Openreach's LLU price list, in section 2.1.2 on "Power" under the heading "Provision of Standby Epower (ESS) (Note 1)." The product name is "Rental of existing capacity per kW per annum (Note 2, charges will appear in billed units of decawatts (10W))" at <http://www.openreach.co.uk/orpg/home/products/pricing/loadProductPriceDetails.do?data=5aGuTJ%2Bu7bjhXjKH3sW9KvqqAFdbfkJJvFIM9%2FNj42QIMnGHsqdC0vzO163bJmh34D91D7M0q8u%2F%0AllSqtIFAKw%3D%3D>

<sup>17</sup> See the entry on "Engineering Call out prices" for work on private, data and telex networks in section 15 part 8(b) of BT's price list at [http://www.bt.com/pricing/current/Misc\\_boo/2-1393\\_d0e1.htm](http://www.bt.com/pricing/current/Misc_boo/2-1393_d0e1.htm)