

# Leased line charge control

RESPONSE TO THE NOVEMBER CONSULTATION  
PREPARED FOR THE PASSIVE ACCESS GROUP (PAG)

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## Introduction

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- 1.1 This response, provided on behalf of the Passive Access Group (Colt, Sky, TalkTalk, Vodafone, Three UK or 'PAG'), considers two important issues arising from Ofcom's proposals in its second 2015 leased line charge control consultation '*BCMR – Update on the proposed leased line charge controls*'<sup>1</sup> and the second cost attribution review consultation published by Ofcom on 13 November 2015.<sup>2</sup>
- 1.2 Many of the changes proposed by Ofcom appear to be driven by BT's detailed responses to the original consultations published in June 2015.<sup>3</sup> The PAG is generally concerned that:
  - 1.2.1 BT is in a unique position with regards to many of the issues discussed since they relate to detailed cost modelling assumptions concerning BT's network and therefore much of what Ofcom has taken into account is not transparent to industry; and
  - 1.2.2 Many of the proposed changes appear to work in BT's favour.
- 1.3 The PAG has focussed its comments on two aspects of the proposed approach to cost forecasting. In part, this reflects the limited ability to engage in the finer detail of the proposals which are realistically only visible to BT. The two issues are:
  - 1.3.1 The ambiguity of circuit volume measures which are used to allocate duct costs; and
  - 1.3.2 The proposal to model changes in elasticities for cost volume relationships over time.
- 1.4 The overall impact of the proposed methodological changes decreases the value of X on the TI charge control which will ultimately result in significant additional revenues to BT. Though the impact is less dramatic on the value of X in relation to the AI charge control, the greater volumes of AI circuits make up for this and will therefore also represent a significant windfall to BT. The lower values of X for AI circuits will inevitably have adverse flow on effects for customers purchasing dark fibre given Ofcom's 'active minus' approach to dark fibre pricing.
- 1.5 In this submission the PAG sets out why the proposed adoption of dynamic cost volume elasticities is not justified. The changes are purely methodological and are not based on new evidence. Cost volume relationships cannot be observed in the real world. The proposed change is, therefore, not driven by new evidence which indicates a flaw in the assumed cost volume relationship, but by an outcome of the existing forecasting process which suggests that future total costs will be below current fixed and common costs.
- 1.6 As Ofcom has stressed in this exercise, and in the past, its forecasts are intended for the purpose of setting a charge control. Charge controls should be used as incentive based

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<sup>1</sup> [http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr-update-proposed-leased-lines-charge-controls/summary/BCMR\\_LLCC\\_Consultation.pdf](http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr-update-proposed-leased-lines-charge-controls/summary/BCMR_LLCC_Consultation.pdf)

<sup>2</sup> [http://stakeholders.ofcom.org.uk/binaries/consultations/BT-cost-attribution-review-second-consultation/summary/BT\\_Cost\\_Attribution\\_Review\\_Second\\_Consultation.pdf](http://stakeholders.ofcom.org.uk/binaries/consultations/BT-cost-attribution-review-second-consultation/summary/BT_Cost_Attribution_Review_Second_Consultation.pdf)

<sup>3</sup> <http://stakeholders.ofcom.org.uk/consultations/cost-attribution-review/>;  
<http://stakeholders.ofcom.org.uk/consultations/llcc-dark-fibre/>

regulation designed to encourage efficient behaviour. This contrasts with rate-of-return regulation where the primary concern is to limit the profits of the incumbent.

- 1.7 Rate-of-return is concerned with the incumbent's actual costs, and therefore a forecast model outcome which predicted future total costs to be below current fixed and common costs would represent a genuine issue. However, Ofcom does not operate rate-of-return regulation, and the apparent inconsistency is not relevant in this context. As such, it does not justify the change in methodology.
- 1.8 It is also important to note that the change introduces additional complexity, and makes the outcome of the model more sensitive to an input that is derived from BT's unaudited LRIC model. Therefore, we consider that the introduction of a more complex approach that is more prone to forecasting errors is outweighed by the benefits of the greater certainty and transparency provided by the existing methodology.
- 1.9 Given the real and serious doubt about the robustness of the proposed changes, the PAG considers it is not appropriate for Ofcom to be changing its approach to cost allocation in relation to these matters at this late stage in the process. The underlying issue is a question of the appropriate treatment of costs for a mature product with declining volumes. This is a question of fundamental policy importance that Ofcom should address as a distinct issue, taking account of all the relevant factors, rather than trying to adjust the established approach to charge controls in a piecemeal fashion to address isolated individual concerns raised by BT. This is particularly necessary given the interdependence of cost allocation across multiple charge controls – Ofcom's last minute tweaking has multiple flow on effects which are wrong to ignore.
- 1.10 In any event, BT's recent history of cost (mis)allocation and multiple recovery of costs suggests that Ofcom should not adopt an approach that provides even more generous returns to BT, based on an untested and methodology absent compelling evidence for why it should do so. A position Ofcom also shared in the June LLCC but now abandons without explanation:  
  
*"...the analysis we have carried out of BT's profitability in 2013/14 suggests that using our revised CVE and AVE estimates produces results that are reasonably consistent with BT's recent financial performance."*<sup>4</sup>
- 1.11 Finally, in light of the proposed introduction of passive access remedies, it is not appropriate for Ofcom to be trialling new approaches to cost allocation which, though purport to relate to AI and TI only, impact and introduce greater uncertainty to the costing and pricing of a nascent passive remedies market, in BT's favour.
- 1.12 The problems identified with Ofcom's proposals in this submission underscore the problems that the PAG identified in its submissions to Ofcom which arise in relation to 'active minus' pricing and BT's incentives to underestimate variable costs. As set out in those submissions<sup>5</sup>

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<sup>4</sup> A8.136

<sup>5</sup> [http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr-2015/responses/Passive Access Group Annex Frontier Economics report on regulated dark fibre pricing.pdf](http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr-2015/responses/Passive%20Access%20Group%20Annex%20Frontier%20Economics%20report%20on%20regulated%20dark%20fibre%20pricing.pdf)

these problems would have largely been addressed by the 'cost plus' pricing mechanism that the PAG has proposed.

## Duct cost allocation

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- 2.1 As set out in both the June and November cost attribution consultations, BT allocates duct costs between backhaul and core network according to circuit volumes. Ofcom has proposed that this should be changed to account for circuit length as well as volume.
- 2.2 We have a number of concerns with both the existing approach and the new proposal which relate to the use of circuit volumes. As Ofcom knows from its market share calculations in the Business Connectivity Market Review, the measurement of circuit volumes is difficult. Due to the hierarchical nature of telecoms networks, with lower bandwidth circuits running over higher bandwidth bearers, a range of different circuit volume measurements are possible. Unless a very precise definition of circuits is adopted, circuit volume is an ambiguous metric.
- 2.3 The solution adopted in the BCMR was to measure customer circuit ends, and to ignore circuit ends at network sites. In theory this ought to lead to a measure which avoids double counting. It is not clear from any of the consultation documents how BT calculates the circuit volumes which are then used to attribute duct costs.
- 2.4 As traffic moves from the access network towards the core it tends to be aggregated over higher bandwidth circuits. Therefore, a single core network 'circuit' may carry a large number of smaller circuits. From the perspective of the core network, the most likely measure of circuit volume would be the number of high bandwidth bearers being used, such as the number of wavelengths on a DWDM system. However, the number of bearers is less clearly relevant in access and backhaul. In these parts of the network the number of customer circuits, for example those relating to business connectivity products, is a more natural choice.
- 2.5 It is important that a consistent approach is adopted throughout access, backhaul and core. Both are valid measures of circuit volumes, but they would result in different relative proportions of volume in core, backhaul and access, and therefore different cost attributions.
- 2.6 If bearer circuits are used to measure core volumes, but product volumes are used in backhaul, then the volume of circuits in backhaul will be higher relative to an approach where volumes are measured consistently. The risk associated with cost allocations based on circuit volume is, therefore, that too much cost is recovered from backhaul relative to core.
- 2.7 This is an important issue since backhaul sits within regulated markets whereas core network services tend to be more competitive. In addition, the issue may become more prominent as BT rolls out NGA broadband and uses an increasing proportion of duct for backhaul.<sup>6</sup>

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<sup>6</sup> Although it is unclear whether backhaul circuits connecting to the street cabinet would be considered as backhaul or access.

## Cost allocation by circuit length

- 2.8 The use of circuit length may help remove discrepancies between measures of circuit volume. For example, core network circuits often consist of a number of geographic segments. This gives rise to further ambiguity over the volume measurement since you could count either a single end-to-end circuit, or the number of constituent segments. The use of circuit length will tend to reduce this discrepancy and help produce a more consistent measure of volume.
- 2.9 As such, we support the proposal to include circuit length in the cost attribution methodology. However, as set out above, we have a number of concerns with the inherent ambiguity of the underlying circuit volume measurement. As a result, we recommend that Ofcom should:
- Find out exactly what BT counts as a circuit in its volume measures.
  - Ensure that a consistent approach is adopted across access, backhaul and core.
  - Consider alternatives to the attribution of cost by circuit volumes. These should include measurements of the volume of passive infrastructure since this avoids the inherent difficulties associated with the measurement of activate circuits. For example, the cost attribution could be based on the length of duct routes used for backhaul and core, taking into account the number of duct bores and the depth of the duct since these factors affect the cost of building new duct.

## Dynamic elasticities for cost volume relationships

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- 3.1 The proposed changes to the use of asset and cost volume elasticities would create more complexity, and increase the sensitivity of the cost forecasts to largely unverifiable input assumptions. This damages the transparency of the cost forecasting process and adds an artificial level of precision to the results. Therefore, we do not support the proposed changes.
- 3.2 Our understanding of the proposal is that Ofcom will reassess cost elasticities in each year of the forecast based on the changing proportions of incremental to fixed and common costs. These changing proportions are themselves the product of a forecast which is based on assumptions regarding the expected change in input prices and the required efficiency gain. The final cost forecasts are then produced by applying the elasticities to base year costs and forecast volumes.
- 3.3 The risk with this methodology is that the information contained in the input price assumptions and the efficiency assumptions is used twice. In effect, there is a risk of ‘double counting’ of the factors affecting costs, and this has the potential to skew the forecast. For example, the changes in input prices and the expected achievable gain in efficiency for TI services will inevitably take account of the fact that the use of the technology is declining rapidly. However, these assumptions are applied to a steady state model assuming no change in volume. The volume effect is then calculated using the elasticities, but under the new proposal these elasticities are a function of the input price and efficiency assumptions.
- 3.4 Ideally, the parameters used in modelling dynamic elasticities should be independent of the parameters used in the steady state cost modelling. If they are not independent, then there is a risk that the forecast will be biased by the use of the same information at the two different stages. In relation to TI services we might expect input prices to rise and a relatively limited scope for efficiency gain given the ongoing and expected decline in the relevant products. This leads to a relatively higher cost base in the steady state model.
- 3.5 In turn, this will drive a higher proportion of fixed and common costs which generates a lower cost elasticity. This will drive an even higher cost forecast once declining volumes are taken into account. It is not clear that this second effect is justified by the underlying information – the input price and efficiency assumptions – or merely an artefact of the modelling process which will bias the cost forecast. Ofcom specifically identified these issues in the June LLCC consultation and has not provided any evidence or reasonable basis for moving away from the approach it had already considered reasonable for dealing with them:

*“A8.134 However, we continue to consider that that it is not appropriate to adjust our CVE and AVE estimates to reflect the arguments put forward by BT. We explain above that in setting the charge control our focus is on forecasting how changes in volumes affect BT’s costs in the long run. Our modelling therefore deliberately abstracts from short run lumpiness in costs. At times this can act to BT’s advantage, while on other occasions it may not, but we seek to ensure it is not biased in either direction. We therefore recognise that BT may not be able to remove some transmission and accommodation costs as smoothly as TI volumes decline in the short-run but we do not aim to capture*

*such short term lumpiness in our cost forecasts. As we noted in the 2013 LLCC statement we would expect such lumpiness would be smoothed out over the longer term.”*

- 3.6 For these reasons, we consider that Ofcom should not change its approach, and continue to use static elasticity estimates in the cost forecast model. In addition, we do not believe that Ofcom has justified why it is necessary to depart from the simplifying assumption of constant elasticities that has been used in all other charge controls. As noted in paragraph 5.35:

*“... in our charge control modelling, we do not seek to forecast the outcome of BT’s RFS. Rather we seek to establish as appropriate pattern of common cost recovery. If applied consistently across markets and time, our treatment of fixed and common costs can be consistent with the ‘fair bet’ approach as they are taken into account in one or other of our charge controls, with no bias to under or over recovery of costs.”*

- 3.7 It is not clear why the fair bet principle is not appropriate in this case. As is clear from the its regulatory financial statements, BT has made super-normal profits on the majority of its TI services for many years, including during recent years where the products have already seen dramatic reductions in volume. To move away from the fair bet principle, and to adopt a revised set of proposals to increase BT’s cost recovery as the product platform approaches the end of its life, would introduce a bias towards over-recovery when viewed across the life of the product.