Review of the applicability of Ofcom's proposed changes to cost attribution methods

Ernst & Young LLP

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1. Executive Summary

1.1 Background

In May 2014, Ofcom introduced a new set of Regulatory Accounting Principles which BT's Regulatory Financial Statements ("RFS") need to comply with. As part of this, Ofcom determined that it would review BT's existing attribution rules against the new Regulatory Accounting Principles, and consult on its findings with the intention of reflecting any proposed changes in the price control for the Business Connectivity Market Review. In June 2015, Ofcom published its 'Review of BT's cost attribution methodologies'[1] ("CAR") which set out Ofcom's proposals for changes to the way that BT attributes its costs to services, and invited stakeholders' views on these proposals.

In June 2015, It also published the 'Business Connectivity Market Review: Leased lines charge controls and dark fibre pricing'[2] ("LLCC") which sets out the pricing remedies, in the form of a charge control, for leased line services and guidance for the pricing of dark fibre. As part of its consultation, Ofcom is proposing to apply a number of starting charge adjustments to the Ethernet and TI baskets to reflect the consequence of a number of changes to cost attributions made by BT. Ofcom is also inviting stakeholders' views on its initial findings as part of its consultation.

1.2 Scope of work

In the context of Ofcom's CAR and the LLCC, BT has commissioned EY to set out the findings of our work to support BT's responses in relation to:

- Ofcom's overarching application of cost allocations principles in the context of charge control modelling and the use of starting charge versus glide path adjustments; and
- BT has commissioned FTI Consulting ("FTI") to review Ofcom's approach to reviewing BT's cost attribution methodologies and its proposed changes and have commissioned EY to review FTI's analysis and conclusions and provide a critique where required.

1.3 Ofcom's Proposals for Starting Charge Adjustments

In the LLCC, Ofcom highlights two particular areas where it is considering whether it would be appropriate to make starting charge adjustments, namely (i) pricing in excess of costs and (ii) distorted pricing signals.

For distorted pricing signals, although Ofcom considers it appropriate to make starting adjustments where charges are significantly above DSAC or below DLRIC, in this case Ofcom has not proposed starting charge adjustments due to price distortion.

However, for pricing in excess of costs, Ofcom identifies a number of products for which BT's return on assets for business connectivity services in 2013/14 was above its cost of capital and it has identified three main drivers for this: incentive effects i.e., efficiency and volume outperformance; changes in BT's RFS treatment of business connectivity costs; and changes in Ofcom's modelling approach.

Ofcom assesses all three drivers and proposes to make starting charge adjustments for changes in direct common cost allocations and accounting errors between regulated and unregulated markets.

[1] http://stakeholders.ofcom.org.uk/consultations/cost-attribution-review/
[2] http://stakeholders.ofcom.org.uk/consultations/llcc-dark-fibre/

Based on this overarching approach, Ofcom identifies three broad areas where it considers starting charge adjustments to be appropriate: Access cards; changes in cost attribution by BT and changes in cost attribution proposed in the June 2015 Cost Attribution Review – General Overheads.

1.4 Regulatory Principles and Objectives

There exists a broad set of regulatory principles that need to be considered in reviewing the approach Ofcom has taken for both the LLCC Consultation and CAR.

As Ofcom discusses in the LLCC there are a number of ways in which common costs can be apportioned and that, *"economic analysis would typically suggest that there is no singularly 'correct' way of apportioning them[3]".* As such, there are likely to be a number of suitable methods and any decision to adopt one method of allocation over another requires the weighing of a number of – sometimes conflicting – objectives.

However, the results of two appeals before the Competition Commission ("CC"): Cable & Wireless UK ("C&W") v Ofcom: Leased Line Charge Control appeal[4] and the Carphone Warehouse Group v Ofcom: Local Loop Unbundling Price Control appeal[5], where the CC stated that in neither case had the plaintiff put forward a more "appropriate" method of allocation, suggest that the CC supported the cost attribution methodology used by Ofcom of 'Pay and return on assets', as an appropriate methodology. Given that the current methodologies have been considered appropriate by both Ofcom and considered reasonable by the CC this suggests that BT's attributions of costs are not "*clearly inappropriate"*[6].

We consider that the burden of proof should be proportionate to the magnitude of impact. Ofcom estimates in the CAR that £226m of costs should be transferred into residual markets from regulated markets. For the LLCC Ofcom states that of this £226m, £55m[7] relate to the business connectivity markets. For the LLCC Ofcom proposes to make starting charge adjustments amounting to £83m[8] for cost attribution methodological changes, which includes the changes proposed in the CAR and those made by BT. This represents approx. 9%[9] of the total costs for Ethernet and TI markets. The materiality of all of these proposed changes suggests a higher burden of proof is required.

Clarity and certainty help to promote dynamic efficiency and ensure continued private sector investment and it is clear from Ofcom's current Strategic Review of Digital Communications[10] ("DCR") that a key objective is to provide the right incentives for private sector investment and ensure that the UK is properly served by communication services. This is particularly important where a lack of consistency risks being fed through into adverse effects on consumers, as regulatory uncertainty drives an increase in the risk and cost of capital for regulated entities, resulting in higher prices and/or dampening investment incentives. As Ofcom acknowledges in the DCR, price regulation plays a key role in influencing the right investment incentives and that, "*whatever approach is adopted, its success or failure depends significantly on the trust investors place in the regulator. Investors value predictable*

[3] Ofcom (2015) LLCC paragraph 4.105
[4] Competition Commission, Determination, The Cable & Wireless UK V Ofcom, Case 1112/3/3/09 https://www.gov.uk/cma-cases/cable-wireless-uk-v-ofcom-leased-lines-charge-control-price-control-appeal
[5] Competition Commission, Determination, The Carphone Warehouse Group plc V Ofcom, Case 1111/3/3/09 https://assets.digital.cabinet-office.gov.uk/media/55194c4d40f0b614040003b6/llu_determination.pdf
[6] Ofcom (2015) Cost Attribution Review, paragraph 4.15 http://stakeholders.ofcom.org.uk/consultations/cost-attribution-review/
[7] Ofcom (2015) LLCC tables A7.6 & A7.7
[8] This has been calculated by summing the £53m of base year starting charge adjustments resulting from changes set out in the CAR and £30m of starting charge adjustments set out in paragraphs 6.129 & 7.92 of the LLCC Consultation.
[9] This is based on the total RFS 13/14 numbers set out in Table A7.1 in Annex 7 of the LLCC Consultation, where total costs, before any base year adjustments are made, are £560m (Ethernet) and £338m (TI)
[10] Ofcom (July 2015) Strategic Review of Digital Communications ("DCR discussion document")

and stable policy interventions: significant and poorly signalled changes of policy can damage investor confidence, and may increase the risk associated with new investments."[11]

We also consider that Ofcom should recognise the asymmetric nature of the regulatory risk involved in making changes to cost attribution methodologies. The trade-off between different types of economic efficiency – allocative, productive and dynamic – needs to be balanced. In the case of starting charge adjustments, there is a risk of "getting it wrong" by setting prices too low, in order to achieve allocative efficiency, but which would have the effect of dampening investment incentives and diluting future benefits for consumers. Recognising the importance of dynamic efficiency can yield benefits for consumer in terms of further investment in the network, e.g., faster speeds for broadband, innovative products, and investment in addressing the "*digital divide*".

Starting charge adjustments

As Ofcom notes in the LLCC, it has a general preference for making adjustments to costs and regulated prices via a "glide path" approach which can, "*provide stronger incentives for productive[12] and dynamic[13] efficiency improvements than one-off starting charge adjustments"*[14], and which is particularly relevant to the current DCR process in terms of the benefits of dynamic efficiency in creating the right incentives for investment. However, despite the duration of this approach, Ofcom is now proposing to make starting charge adjustments in the LLCC consultation. Given this, we consider that there is a tension between Ofcom's approach to the LLCC consultation and its strategic objectives as set out in the DCR, as it has the potential to create regulatory uncertainty thus increasing regulatory risk at a time, which Ofcom recognises through the DCR, is a key time for infrastructure investment.

Further, we note that there is no discussion about the inclusion of charge adjustments where changes to cost allocation methodologies would result in moving costs into regulated markets from non-regulated markets. As such, it is unclear what approach Ofcom would adopt for these costs. For completeness, we consider that the allocation of all costs – particularly those between regulated and un-regulated markets – should follow the same approach in terms of making starting charge adjustments.

We also note that Ofcom does not propose to make starting charge adjustments to changes to modelling approaches. As Ofcom discusses, *"it is also appropriate to refine and review our modelling approach over time and between market reviews where we believe it will improve the accuracy of our models and forecasts"*[15]. However, whilst Ofcom considers that modelling approaches evolve and so changes to cost allocations based on these types of changes should not be subject to starting charge adjustments, we consider that this should also apply to systems and data sources, where better data is fed into gradual model improvement and to this end the current process should be considered as part of that same process of evolution.

As such, we do not consider that Ofcom provides the appropriate level of analysis to demonstrate that its proposals: (i) clearly show that BT's cost attribution methodologies for general overheads are "clearly inappropriate"; (ii) that unintended consequences have been fully reflected; (iii) that efficiency measures have been appropriately balanced; and (iv) relatedly, that Ofcom's objective of creating an environment to provide the right incentives for private sector investment has been met.

[11] Ofcom (2015) DCR paragraph 10.12
[12] Productive efficiency following a glide path can give better incentives for BT to pursue improvements and grow volumes than a one-off starting adjustment. The use of the glide path reduces the firm's incentives to delay efficiency improvements
[13] Dynamic efficiency following a glide path avoids discontinuities in charges over time leading to more stable and predictable background to make investment decisions
[14] Ofcom (2015) LLCC Consultation paragraph 4.76
[15] *ibid* paragraph 4.115

1.5 Review of FTI's cost allocation methodology analysis

FTI has prepared a report for BT which reviews Ofcom's approach to reviewing BT's cost attribution methodologies and its proposed changes. We summarise below our review of FTI's analysis and conclusions.

Ofcom proposes changes to the allocation bases for two corporate overhead cost categories, AG112 'corporate overheads' and AG103 'BT TSO support services' as set out in the CAR. Ofcom proposes to disaggregate AG112 and AG103 into twenty-one and ten cost lines respectively and to allocate them according to one of seven new allocation methodologies.

The current basis of attribution is "Factorised Pay plus return on assets". This includes the number of employees weighted by average pay and mean capital employed multiplied by the cost of capital. Therefore the current base incorporates a combined driver that reflects the workforce and the cost of capital.

Ofcom contends that it is *"clearly inappropriate"* for such "large"[16] cost items to have a single combined base. BT has commissioned FTI to review Ofcom's proposals and the contents of the cost categories within the two activity groups and it concluded that Ofcom's assessment and resulting proposals are flawed.

We agree with FTI that the current basis for apportionment for corporate overheads is not *"clearly inappropriate."* We accept that capital and workforce management are both important functions of corporate overhead activity and therefore that capital costs should be included in any attribution base for general corporate overheads. The prevailing base reflects both of these functions. FTI also notes the impact of payments to other licenced operators (as included in Ofcom's proposed allocation base) as this will potentially outweigh the small margin on transit services and distort BT's incentives to compete in these markets.

Ofcom's specific proposals can be separated into three broad groups:

- **Corporate overheads which both Ofcom and FTI consider to be "unattributable" but for which FTI disagrees with Ofcom on the most appropriate cost driver** - For seven of the corporate overhead cost categories and three of the TSO support cost categories, Ofcom's proposal (to use previously allocated total costs) is equivalent to the use of a 'combined' cost driver to allocate general corporate overheads. FTI criticises Ofcom's proposed methodology and recommend that the prevailing methodology is retained for these cost items.

- **Corporate overheads which FTI considers to be "unattributable" and disagrees with Ofcom's proposals** - For six of the corporate overhead cost categories and four of the TSO support cost categories for which Ofcom proposes alternative attribution methods FTI argues that a consistent treatment using a single combined driver is more appropriate. FTI recommends the retention of the prevailing methodology for these cost categories as the underlying costs and activities are general in nature and should be considered as supporting the business as a whole.

  FTI proposes disaggregation of one corporate overheads category whereby the Ofcom administration charge could be separated from the Strategy, Policy and Portfolio cost category and treated with a specific driver – as per Ofcom's proposal, but the remainder should be treated as a general corporate overhead under the prevailing corporate overhead allocation methodology.

[16] Ofcom (2015) CAR paragraph 8.34

- **Corporate overheads for which FTI and Ofcom agree that attribution is possible but where FTI has proposed alternative allocation methodologies** - For six insurance costs within corporate overheads FTI agrees with Ofcom that a specific driver that reflects the cause of costs can be found, however it proposes alternative data and methodologies that could be considered to be developed into allocation bases.

- For the remaining two TSO support functions cost categories[17], along with the Ofcom administration fee, FTI is in broad agreement with Ofcom's proposals that a revised cost attribution methodology is appropriate.

For reasons of regulatory consistency we consider that, apart from the small number of areas identified by FTI, there is no compelling case to change the prevailing methodology. We note that for many of these cost categories it is likely that more detailed analysis could identify specific costs or staff functions that could be causally attributed, however we consider they proportionality and materiality should be applied to such an approach given the size and complexity of both the BT Group and the regulatory cost allocation system.

We note some improvements in terms of transparency which could be made, e.g. by creating a cost allocation base and its underlying parameters which is clear to understand and further, we note that some corporate overheads that FTI proposes to treat according to the current basis, could justifiably be allocated according to a 'factorised pay' base.

We also recommend that BT investigates the anomalies identified by FTI with a view to making future improvements to these bases.

[17] These are BT Fleet and TSO Redundancy Payments

2. Introduction, Scope and Structure of Report

2.1 Introduction

In May 2014, Ofcom introduced a new set of Regulatory Accounting Principles and determined that BT's RFS should comply with these. As part of this, Ofcom determined that it would review BT's existing attribution rules against the new Regulatory Accounting Principles, and then consult on its findings with the intention of reflecting any proposed changes in the price control for the Business Connectivity Market Review. In June 2015, Ofcom published its 'Review of BT's cost attribution methodologies'[18] ("CAR") which set out Ofcom's proposals for changes to the way that BT attributes its costs to services, and invited stakeholders' views on these proposals.

In June 2015, Ofcom also published the 'Business Connectivity Market Review: Leased lines charge controls and dark fibre pricing'[19] ("LLCC") which sets out the pricing remedies, in the form of a charge control, for leased line services and guidance for the pricing of dark fibre. As part of its consultation, Ofcom is proposing to apply a number of starting charge adjustments to the Ethernet and Traditional Interface ("TI") baskets to reflect the consequence of a number of changes to cost attributions made by BT. Ofcom has also invited stakeholders' views on its initial findings as part of its consultation.

2.2 Scope of work

In the context of Ofcom's CAR and the LLCC, BT has commissioned EY to set out the findings of our work to support BT's responses in relation to:

- Ofcom's overarching application of cost allocations principles in the context of charge control modelling and the use of starting charge versus glide path adjustments; and
- BT has commissioned FTI Consulting to review Ofcom's approach to reviewing BT's cost attribution methodologies and its proposed changes and have commissioned EY to review FTI's analysis[20] and conclusions and provide a critique where required.

2.3 Structure of this report

The remainder of this report is structured as follows:

- In Section 3 we summarise Ofcom's proposals for starting charge adjustments as set out in the LLCC;
- In Section 4 we discuss the regulatory principles and objectives that should be applied when considering making fundamental changes to cost allocation methodologies and also consider Ofcom's proposed approach to implement starting charge adjustments;
- In Section 5 we review the FTI cost allocation methodology analysis; and
- In Annex one, we discuss the limitations of Ofcom's estimates.

[18] http://stakeholders.ofcom.org.uk/consultations/cost-attribution-review/
[19] http://stakeholders.ofcom.org.uk/consultations/llcc-dark-fibre/
[20] FTI (2015) "Ofcom's consultation on BT's cost attribution methodologies – a report for BT"

3. Summary of Ofcom's Proposals for Starting Charge Adjustments

3.1 Ofcom's proposed approach to starting charge adjustments

In the LLCC, Ofcom highlights two particular areas where it is considering as to whether it would be appropriate to make starting charge adjustments, namely (i) pricing in excess of costs, which we consider in further depth below, and (ii) distorted pricing signals.

Ofcom does not propose to make any starting charge adjustments to Ethernet and Traditional Interface ("TI") services for distorted pricing signals as its analysis has not found any Ethernet or TI services which are priced above DSAC[21] (or double FAC[22]) and whilst Ofcom finds some services are priced below DLRIC[23], Ofcom does not intend to make adjustments due to these services being in declining markets. We have no specific comments on this approach as such we have not considered these further.

Prices significantly above cost for reasons other than efficiency or volume growth

Ofcom identifies a number of products for which BT's return on assets for business connectivity services in 2013/14 was above its cost of capital. Ofcom identifies three main drivers for this:

- Incentive effects, i.e., efficiency and volume outperformance;
- Changes in BT's RFS treatment of business connectivity costs; and
- Changes in Ofcom's modelling approach.

Ofcom does not consider that excess returns that are driven by efficiency and volume improvements should be subject to a starting charge adjustment, and neither does it consider that starting adjustments are appropriate for changes to modelling approaches. We consider these conclusions to be reasonable and in keeping with the incentive properties of charge control price regulation.

<u>Changes in BT's RFS treatment of business connectivity costs</u>

In respect of changes to the RFS for business connectivity costs, Ofcom considers that starting charge adjustments to changes to these costs may be justified, if the change results in costs moving from regulated to unregulated services.

Common versus incremental cost allocation

For changes to BT's treatment of business connectivity costs in the RFS, Ofcom focuses on the importance of being able to distinguish between common and incremental costs. Ofcom states that such a distinction can be difficult, particularly where costs are relevant to more than one service – for instance in relation to overheads. Here it discusses that such costs often appear to be common, but strictly a proportion may actually be incremental to individual services, particularly in the long-run and as such, it may be possible to identify an objective cost driver that can be used to measure the relationship between the output of a service and the incremental costs incurred.

[21] DSAC – Distributed Stand Alone Cost for a component is equal to its LRIC plus an allocation of the SAC of the broad increment

[22] FAC – Fully Allocated Cost is an accounting method for attributing all the costs of the company to defined activities such as products and services

[23] DLRIC – Distributed Long Run Incremental Costs is a cost measure related to the LRIC of a component. The DLRIC component is equal to the LRIC of a cost component plus a share of the costs that are common within the broad increment

As Ofcom notes, BT's CCA[24] FAC service costs are based on an activity-based approach to costing which does not specifically identify long-run incremental and common costs. Under this approach, some costs are identified as being directly relevant to services while others are apportioned to services.

BT's method of cost accounting is based on a number of principles, particularly objectivity and causality. When attributing costs to a particular component or product/service, BT either allocates the cost directly, which Ofcom says could be regarded as incremental; or apportions the cost as it cannot be directly associated to a single category and so needs to be spilt across several categories via the use of a cost allocation driver.

However, as Ofcom discusses, the manner by which BT attributes these costs may change over time if, for example, BT is able to identify a more suitable cost driver or is able to improve the data used to define the current cost driver. Ofcom states that one reason why BT's return on capital was higher than that forecast in the 2013 LLCC was because a significant amount of costs were reattributed from TI and Ethernet to other markets following changes to BT's cost attribution approaches.

Ofcom distinguishes these "reattribution costs" between those which are incremental (allocated directly) and those which are common (apportioned). Ofcom states that for common costs there is no singularly 'correct' way of apportioning them and, as such, Ofcom does not believe that it is appropriate to make starting charge adjustments in relation to common costs.

However, for these "reattribution costs" which <u>are</u> allocated and which Ofcom therefore considers to be incremental, Ofcom states that these should be subject to a starting charge adjustment, as otherwise the margin on the service would increase in a manner that is unrelated to improved efficiency or volume growth, and hence the starting charge change will result in improved allocative efficiency.

Reattribution of costs between markets

Ofcom considers there to be a distinction between costs reattributed between regulated markets and costs reattributed between regulated and unregulated markets.

For movements between regulated markets, Ofcom does <u>not</u> propose to make starting charge adjustments, as it considers there would be risks to BT's opportunity to recover its efficiently incurred costs due to the fact that charge controls for all BT's regulated products are not carried out simultaneously. However, for changes which result in a reallocation of costs from regulated to unregulated markets, Ofcom believes that there would be a significant risk of competition being distorted if prices do not respond quickly to improved cost allocations, and therefore considers that starting charge adjustments may be appropriate because a glide path would result in the competitive distortion persisting for a longer period. Moreover, Ofcom considers that such an approach incentivises BT to continue making inappropriate cost attributions going forward. As such, Ofcom believes that a starting charge adjustment would be appropriate in these circumstances.

In summary, Ofcom is proposing only to make starting charge adjustments for changes in direct common cost allocations and accounting errors between regulated and unregulated markets. Whilst it considers it appropriate to make starting adjustments where charges are significantly above DSAC or below DLRIC, in this case Ofcom is not proposing starting charge adjustments due to price distortion.

[24] CCA – Current Cost Accounting is an accounting convention, where assets are valued and depreciated according to their current replacement cost whilst maintaining the operating or financial capital of the business entity

3.2 Application of Ofcom's proposed approach

Based on the above overarching approach, Ofcom identifies three broad areas where it considers starting charge adjustments to be appropriate:

- Access cards

  In the 2013 BCMR Statement[25], Ofcom made a partial adjustment to remove Access card costs (components CN881 and CN901), but did not remove the associated unavoidable costs. For this Charge Control, we understand that Ofcom is proposing to remove the unavoidable costs associated with these two components, because these include costs of Ethernet Switches and other equipment which is not used to provide CISBO[26] services, but which is used in the provision of services downstream of wholesale leased lines. Further this is also in line with Ofcom's March 2015 Direction Statement where it concluded that, *"we do not consider that BT's future benefits approach is an appropriate way to allocate costs for 21CN services"*[27].

  BT has stated that it will reflect these changes set out in the March 2015 Methodology Review in its 2014/15 RFS, which is the proposed base year for the LLCC. As such Ofcom is proposing to make the adjustment to the 2013/14 data to reflect this change.

- Changes in cost attribution by BT

  Ofcom states that one of the reasons for BT's returns on wholesale Ethernet services in 2013/14 being significantly above its cost of capital was due to changes in the apportionment and attribution of various costs, the majority of which related to changes in BT's cost accounting methodology in 2012/13, where a number of costs were reattributed to fixed access markets. However as set out above, because these costs are being reattributed across regulated markets, Ofcom is not considering making any starting adjustments for these costs.

  However, BT also made changes to its cost attribution methodology in 2013/14 to reflect improvements in the methods set out in its Accounting Documents. These improvements result in the transfer of over £30m of costs from the CISBO and TI markets to unregulated wholesale markets. Ofcom believes that all such costs are incremental to unregulated services and so should not have been previously attributable to Ethernet and TI services, as such Ofcom proposes that these are included in the starting charge adjustment.

- Changes in cost attribution proposed in the June 2015 Cost Attribution Review – General Overheads

  Ofcom states that it does not believe that the way BT attributes a significant amount of General Overheads to regulated and unregulated services is appropriate. Ofcom considers that these methods – for example allocating costs on the basis of pay and return on assets – do not follow the principles of Causality and Objectivity. Ofcom has, in the CAR, proposed alternative attribution methodologies, and in so doing proposes to reallocate £226m from regulated to unregulated markets. Of this, £55m relates to Business Connectivity markets. Ofcom states that these costs are incremental to unregulated services, and because they were previously allocated to (regulated) leased lines Ofcom proposes to apply a starting charge adjustment, although only to those costs where a specific cost driver has been applied.

[25] BCMR March 2013 Statement http://stakeholders.ofcom.org.uk/consultations/business-connectivity-mr/final-statement/
[26] CISBO - Contemporary Interface Symmetric Broadband Origination
[27] Ofcom (2015) March Directions Statement paragraph 4.214

We set out our assessment of Ofcom's approach to implementing starting charge adjustments for changes in cost attribution by BT in section 4, and in section 5 our critique of FTI's analysis and conclusions.

4. Regulatory Principles and Objectives

We consider that there exist a set of broad regulatory principles that should be considered when reviewing the approach Ofcom has taken for both the LLCC Consultation and CAR. In particular, we consider the following principles need to be analysed and applied before changes to cost allocations or the implementation of starting charge adjustments are considered:

- Appropriateness of current allocation methodology;
- Burden of Proof;
- Balancing of Objectives; and
- Completeness of Approach.

4.1 Appropriateness of current allocation methodology

As Ofcom discusses in the LLCC Consultation, for common costs, *"there are a number of ways in which these can be reasonably apportioned and economic analysis would typically suggest that there is no singularly 'correct' way of apportioning them[28]"*. As such, given that there is no definitive objective approach to common cost allocation, there are likely to be a number of suitable methods. However, any decision to adopt one method of allocating over another requires an assessment of why that particular approach is preferable.

In the Cable & Wireless ("C&W") UK v Ofcom: Leased Line Charge Control Appeal[29] to the Competition Commission ("CC"), the CC noted that C&W had not demonstrated that its proposed methodology for allocating corporate overheads to overseas operations would produce a more appropriate result.

Similarly, in the Carphone Warehouse Group ("CPW") v Ofcom: Local loop unbundling price control appeal[30] to the CC, the CC as part of its assessment of whether corporate overheads were correctly allocated in the price control, states that, *"while we acknowledge that the method of allocation is not perfect, we are not satisfied that CPW has established that an alternative method of allocation is better"*.

It is clear that in both of these appeals the CC supported Ofcom's approach and acceptance of BT's cost allocation methodologies for corporate overheads, suggesting that this is an appropriate methodology.

In the CAR, Ofcom considers whether BT's attribution methodologies were *"clearly inappropriate"* [31] and it has based this position on a two-stage process. Firstly, it considers whether BT's cost attribution rule was appropriate, and if not, then considered what alternative cost attribution rule BT should employ. However, it is not clear in the analysis provided by Ofcom that it has demonstrated that BT's attribution methodologies are "*clearly inappropriate"* i.e., that the first stage of the process has been met, given that, for the past 20 years, these methodologies have been considered appropriate both by Ofcom and considered reasonable by the CC, as set out in response to the two appeals set out above.

[28] Ofcom (2015) LLCC paragraph 4.105

[29] Competition Commission, Determination, The Cable & Wireless UK V Ofcom, Case 1112/3/3/09 https://www.gov.uk/cma-cases/cable-wireless-uk-v-ofcom-leased-lines-charge-control-price-control-appeal - paragraphs 4.91-4.94

[30] Competition Commission, Determination, The Carphone Warehouse Group plc V Ofcom, Case 1111/3/3/09 https://assets.digital.cabinet-office.gov.uk/media/55194c4d40f0b614040003b6/llu_determination.pdf - paragraph 2.589

[31] Ofcom (2015) CAR paragraph 4.15

4.2 Burden of Proof on Ofcom

We consider that the burden of proof should be proportionate to the magnitude of impact. Ofcom estimates in the CAR that £226m of costs should be transferred into residual markets from regulated markets. For the LLCC Ofcom states that of this £226m, £55m[32] relate to the business connectivity markets. For the LLCC Ofcom proposes to make starting charge adjustments amounting to £83m[33] for cost attribution methodological changes, which includes the changes proposed in the CAR and those made by BT. This represents approx. 9%[34] of the total costs for Ethernet and TI markets. The materiality of all of these proposed changes suggests a higher burden of proof is required.

This is particularly important as lack of consistency of treatment over time risks feeding through into adverse effects on consumers, as regulatory uncertainty drives an increase in risk and cost of capital for regulated entities, thereby resulting in higher prices and/or a dampening of investment incentives. Clarity and certainty are therefore required, in order to continue to promote dynamic efficiency and to ensure continued private sector investment.

However, we consider that Ofcom has not fully demonstrated that the proposal for making, in this case, starting charge adjustments, does not, *"undermine the stability and predictability of the regulatory regime"*[35], thus causing regulatory uncertainty.

4.3 Asymmetric Regulatory Risk

Further to the high burden of proof which we consider appropriate in this case, we also consider that Ofcom should bear in mind the asymmetric nature of the regulatory risk involved in making changes to cost attribution methodologies and the implementation of them in terms of changes, other things equal, to relative and absolute prices of regulated services.

As Ofcom discusses in the LLCC Consultation, regulators need to weigh several – sometimes conflicting – factors in respect of economic efficiency when considering the appropriate form and stringency of regulatory intervention. In particular, regulators need to consider:

- **Allocative efficiency:** allocative efficiency is promoted by setting prices which reflect the cost of providing each product or service. An important feature of allocative efficiency is the extent to which prices are determined in line with the principle of cost causality (whereby costs are attributed to products or components in a way that reflects the way that products cause or drive the costs to be incurred);

- **Productive efficiency:** productive efficiency refers to minimising the costs of production. Productive efficiency is maximised when products or services are produced at minimum average total cost; and

- **Dynamic efficiency:** dynamic efficiency refers to efficiency improvements over time, as innovation drives the development of new products and services, and as technological advances and investment allows the production of current and future products and services at lower cost.

As Ofcom notes, *"historically we have typically attached higher weight to productive and dynamic efficiency considerations for wholesale leased lines, rather than trying to achieve allocative efficiency at every point in time"*[36].

[32] Ofcom (2015) LLCC tables A7.6 & A7.7
[33] This has been calculated by summing the £53m of base year starting charge adjustments resulting from changes set out in the CAR and £30m of starting charge adjustments set out in paragraphs 6.129 & 7.92 of the LLCC Consultation.
[34] This is based on the total RFS 13/14 numbers set out in Table A7.1 in Annex 7 of the LLCC Consultation, where total costs, before any base year adjustments are made, are £560m (Ethernet) and £338m (TI)
[35] Ofcom (2015) LLCC paragraph 4.80

In the case of starting charge adjustments, there is a risk of "getting it wrong" by setting prices too low, in order to achieve allocative efficiency, which would dampen investment incentives and dilute any future benefits for consumers. However, if Ofcom errs on the side of caution in recognising the importance of dynamic efficiency then this can yield benefits for consumers in terms of further investment in the network e.g. faster speeds for broadband; innovative products; investment in the "digital divide".

4.4 Balancing of Objectives

Ofcom has a number of strategic and regulatory objectives which it seeks to balance, along with reflecting the regulatory principles used in setting regulation. As discussed above the principles of supporting efficient investment in telecom networks and the requirement for consistency are key.

DCR – Investment Incentives

These key principles have been reiterated in Ofcom's current DCR, where one of the primary goals is to provide appropriate incentives for private sector investment, so as to ensure that the UK is properly served by communication services. Moreover, as Ofcom itself acknowledges in the DCR, regulatory stability and certainty are critical in creating the right environment for investment.

"*The key goal of our strategy is to make sure that the UK's citizens and businesses are served by high-quality, widely available telecoms, both fixed and mobile. This brings substantial benefits both to individual users and to citizens and society more broadly*."[37]

The DCR sets out four strategic challenges for regulation, the first of which is: 'Investment and innovation delivering widespread availability of services' and, in keeping with this, Ofcom states, "*our strategy must provide the right incentives for private sector investment and innovation, so that the full range of services is widely available*."[38]

In this context, we suggest that Ofcom should determine an approach to cost allocation and pricing that continues to promote efficient investment and innovation. As Ofcom itself acknowledges in the DCR, pricing regulation plays a key role in providing the right investment incentives:

"*Whatever approach is adopted, its success or failure depends significantly on the trust investors place in the regulator. Investors value predictable and stable policy interventions: significant and poorly signalled changes of policy can damage investor confidence, and may increase the risk associated with new investments.*"[39]

Further, the DCR discusses the Government announcement in March 2015 that its intention is to implement a Universal Service Obligation ("USO") from dial-up speeds to 5Mbit/s, and the DCR also discusses the need to consider what more can be done to improve mobile coverage, particularly in rural areas. Both of these are likely to require significant private sector investment, demonstrating how important dynamic efficiency is in the telecoms sector – particularly at this stage in the sector's development – and how material the regulatory risk impact could be if the proposed changes are not rigorously assessed to fully understand the total impact they could have across all telecom markets.

The objective of promoting investment incentives has been most evident in the recent June 2014 Fixed Access Market Review ("FAMR")[40]. Here, Ofcom looked at the impact on

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[36] *ibid* paragraph 4.77
[37] Ofcom (2015) DCR discussion document paragraph 1.14
[38] *ibid* bullets under paragraph 1.12
[39] *ibid* paragraph 10.12
[40] Ofcom (2014) FAMR http://stakeholders.ofcom.org.uk/binaries/telecoms/ga/fixed-access-market-reviews-2014/statement-june-2014/volume1.pdf

investment incentives of imposing a cost-based cap on VULA[41] prices, demonstrating the need to balance risks of excessive pricing – and so reduced customer benefits – against the risk of regulatory failure and the potential impact on investment that a cost-based charge control might bring[42].

Ofcom states that, *"given the importance of taking into account the risks incurred by BT when it invested in fibre and given the importance of adopting a consistent regulatory position, we have concerns about the potential negative impacts of regulating the level of wholesale VULA prices using a cost-based charge control at this time"*[43].

Further, Ofcom was also clear that, *"it is important to note that this investment was made in the light of the regulatory position previously set out by Ofcom. Adopting a consistent and predictable regulatory approach is important in order to support future investment more generally (not just in fibre)"*[44].

This clearly demonstrates how important consistency, predictability and investment incentives are in creating a market which can promote investment and innovation and create the predictable and stable environment that this requires.

Ofcom's previous practice in relation to charge adjustments

Prior to the current consultations, Ofcom has been clear in its preference for avoiding starting (or "P0") adjustments in charge controls. Ofcom's view[45] has been that:

"the main benefit of this approach is that it has greater incentives for efficiency improvement as it allows the firm to retain the benefits of cost reductions made under a previous charge control for longer. One-off adjustments to prices would reduce the effective regulatory lag, and hence the incentives to reduce costs."

Further, Ofcom considers that this approach more closely approximates outcomes in a competitive market *"in which excess profits tend to be gradually eroded rather than sudden movements in prices"*.

Ofcom's preference for making adjustments to costs and regulated prices is therefore via a 'glide path', where there is a gradual convergence of charges from the level at the start of the control period to the forecast efficient level of costs at the end of the control period.

In the current LLCC consultation, Ofcom states that, *"glide paths can provide stronger incentives for productive*[46] *and dynamic*[47] *efficiency improvements than one-off starting charge adjustments"*[48], although this may be at the expense of short run allocative efficiency. Ofcom also states that it has typically attached higher weight to productive and dynamic efficiency over allocative efficiency as these, *"improvements are likely to generate benefits to consumers over time; as the firm becomes more efficient and increases investment and innovation, this should ultimately result in lower prices and better services for consumers"*[49]. As noted above, this is particularly relevant to the current DCR process in terms of the benefits of dynamic efficiency in creating the right incentives for investment.

[41] VULA – Virtual Unbundled Local Access - provides a connection from the nearest 'local' aggregation point to the customer premises
[42] These are the issues Ofcom considered in assessing whether it would be appropriate to set specific controls on the pricing of VULA. Ofcom (2014) FAMR paragraph 11.131
[43] *ibid* paragraph 12.147
[44] *ibid* paragraph 12.142
[45] Ofcom (2013) LLU WLR charge control paragraph 3.141 – 3.145
[46] Productive efficiency following a glide path can give better incentives for BT to pursue improvements and grow volumes that a one-off starting adjustment. The use of the glide path reduces the firm's incentives to delay efficiency improvements
[47] Dynamic efficiency following a glide path avoids discontinuities in charges over time leading to more stable and predictable background to make investment decisions
[48] Ofcom (2015) LLCC paragraph 4.76
[49] *ibid* paragraph 4.77

However, despite clearly recognising the benefits of glide path adjustments, Ofcom proposes to make some starting charge adjustments accelerating the process of alignment, even though the final outcome is the same i.e., that these distortions have been removed over the period of the control. As set out above, the reasoning behind Ofcom's proposal relates to areas where Ofcom considers there to be risks to economic efficiency or competition from distorted pricing signals which outweigh the benefits of a glide path approach or where prices are significantly above or below costs for reasons other than efficiency or volume growth. However, there is also an asymmetry of risk here which Ofcom has not considered. As discussed above the effect of setting prices too low is to dampen investment incentives and risk future benefits to consumers.

That said, Ofcom notes[50] that, if the stability and predictability of the regulatory regime were compromised – including any negative implications for future investment – then Ofcom may continue with a glide path approach. In our view, this comment should be read in combination with Ofcom's statement in the DCR discussion document (cited above) about investors' need for regulatory stability.

We therefore consider that there is a tension between Ofcom's proposal to use starting price adjustments described above and its strategic objectives as set out in the DCR specifically:

- The DCR states that Ofcom is seeking to promote investment, and that regulatory instability can impede investment;
- Furthermore Ofcom acknowledges in the LLCC consultation that it may not consider it appropriate to impose starting charge adjustments if it would, *"undermine the stability and predictability of the regulatory regime*[51]

This tension appears to give Ofcom a significant degree of discretion in its approach to charge adjustments – in such a way that risks creating ambiguity (and therefore regulatory uncertainty) for industry. This in turn risks feeding through into an adverse effect on consumers, as regulatory uncertainty drives an increase in risk and so cost of capital for regulated entities, pushing up prices and/or a dampening of investment incentives.

In addition to the above starting charge adjustments, Ofcom is also proposing, *"to require BT to price Dark Fibre Access by reference to its EAD 1Gbit/s active products less the long run incremental costs (LRIC) of the active elements of those products"*[52]. This has the effect of introducing further uncertainty around the regulatory environment creating increasing regulatory risk at a time, which Ofcom recognises – through the DCR – as a key time for infrastructure investment.

4.5 Completeness of Approach

In the LLCC Consultation, Ofcom discusses the appropriateness of making starting charge adjustments resulting from cost allocation changes between regulated markets as compared with between regulated and unregulated markets.

However, while Ofcom explains that it would not make starting charge adjustments in this case, due to the fact that charge controls are conducted at different points in time, it is clear that if no changes are made to these charge controls, this would run contrary to the cost allocation principles and would have the effect of continuing any existing distortions, which may have the effect of continuing to distort pricing signals. We consider that for completeness, Ofcom explains what the plans for these changes are so that all changes can be considered together to fully understand the overall impact.

[50] Ofcom (2015) paragraph 4.80
[51] *ibid* paragraph 4.80
[52] *ibid* paragraph 1.13

In addition, we note that Ofcom does not discuss its approach in respect of price adjustments where changes to cost allocation methodologies would result in moving costs *into* regulated markets *from* non-regulated markets (as opposed to moving costs *into* un-regulated markets *from* regulated which it does address). As such, it is unclear what approach Ofcom would adopt for these costs. For completeness, we consider that the allocation of all costs – particularly those between regulated and un-regulated markets – should follow the same approach.

4.6 Adoption of Starting Charge Adjustments

Below we assess Ofcom's proposed approach to starting adjustments, in light of the assessment criteria and regulatory objectives outlined above. We recognise the rationale for Ofcom's approach – which seeks to apply starting charge adjustments where Ofcom considers that errors and material changes in cost allocation approaches require the reallocation of costs from regulated to unregulated markets. However, as noted above, we consider that regulatory certainty and the importance of consistency in regulatory decisions are important.

In light of the above, we make the following observations:

- We note that Ofcom does not propose to make starting charge adjustments to changes to modelling approaches. As Ofcom discusses, *"it is also appropriate to refine and review our modelling approach over time and between market reviews where we believe it will improve the accuracy of our models and forecasts"*[53]. However, whilst Ofcom (rightly, in our view) considers that modelling approaches evolve and so changes to cost allocations based on these types of changes should not be subject to starting charge adjustments, we consider that this should also apply to systems and data sources, where better data is fed into gradual model improvement and to this end the current process should be considered as part of that same process of evolution.

- Determining appropriate market intervention is an inherently difficult exercise, and inappropriate regulation or applications of it can have serious negative unintended consequences, particularly in markets which are dynamic in nature. As such, we consider it imperative that Ofcom properly assesses the impact that making these starting adjustments will have, not just on regulated markets but on the competitive and investment effects that are impacted in unregulated markets. This is particularly relevant given the DCR objective to ensure that incentives for efficient private sector investment and innovation are maintained and strengthened, in order to ensure widespread availability and high quality of services in both regulated and unregulated services. As a result, the proposed starting adjustments appear misaligned with Ofcom's key DCR objective, due to their likely negative effect on investment incentives.

- Further, we consider that Ofcom should ensure it gives proper account to the potential asymmetric risk in relation to regulatory decisions. If Ofcom adopts an inappropriately severe approach, and as a result sets regulated prices below the efficient level, the effect of this would be negative impact on investment incentives and potentially inefficient market exit. In contrast, erring on the side of caution might mean higher short term prices, but it would also place an emphasis on dynamic efficiency and continued incentives for investment. In this regard, we consider there to be greater risk from a starting adjustment approach than from a gradual glide path approach to pricing changes.

- Ofcom states[54] that making starting charge adjustments, for changes in cost attributions made by BT sends the most appropriate signals to BT, because adopting a glide path approach to take proposed cost allocation changes into account would give BT an

[53] Ofcom (2015) LLCC paragraph 4.115
[54] Ofcom (2015) LLCC paragraph 4.111

incentive to continue making inappropriate cost attributions going forward. However, we consider that this does not fully reflect the potential for unintended consequences of Ofcom's proposed approach. Given the magnitude of the changes and the effects that could occur both in regulated and unregulated markets, we would expect Ofcom to assess each of the changes to the cost attribution methodology against a set of criteria which took into account the possible competitive and investment effects a starting charge adjustment would have. Further we consider that by making starting charge adjustments more likely to occur in any future charge controls, this could dis-incentivise BT to consider superior methods that may move costs from regulated to unregulated services, particularly if the approach to starting charge adjustments is only reflected one way.

- As Ofcom discusses in the Consultation, it does not allow changes to the allocation of costs to be reflected in prices over during the charge control period. This inevitably means that any changes BT makes to cost allocations based on better cost driver information will accumulate over the course of a three year charge control. Establishing a precedent for one-off price adjustments resulting from improved modelling information can result in an increase in regulatory risk. This is because a move to prior expectation of starting charge adjustments becomes "the norm" and so investors see increasing risk associated with investing, which increases the cost of capital raising prices and dampening investment incentives.

4.7 Conclusions

In conclusion, we consider that Ofcom's proposed approach to starting charge adjustments:

- Create clear tensions between Ofcom's proposed approach and its overarching DCR objective to promote investment incentives and these tensions run the risk of creating regulatory uncertainty and could result in a dampening of investment incentives;

- Would establish a prior expectation of starting charge adjustments which investors could see as increasing the risk associated with investing, increasing the costs of capital, raising prices and dampening investment incentives; and

- Means that, in the event Ofcom considers it appropriate to conduct a review of BT's cost allocation approaches, it should ensure this review is comprehensive considering the impact that all the changes will have on all affected markets, including regulated and unregulated.

5. Review of FTI's cost allocation methodology analysis

5.1 Introduction

This section sets out our approach, analysis and conclusions in respect of our review of FTI's detailed analysis of Ofcom's proposals in relation to "*Attribution by Pay and return on assets*"[55] and should be read in conjunction with FTI's report.

BT has requested that we comment on FTI's analysis and conclusions and, relatedly, consider whether further analysis or alternative allocation methodologies would be appropriate.

This section begins with an overview of Ofcom's proposals and FTI's analysis of those proposals. It then sets out the principles that we use to consider each of the proposed and prevailing cost allocation methodologies in detail and our interpretation of and commentary on FTI's main findings with a detailed review of the items covered by FTI's engagement.

This section of our report should be read in conjunction with FTI's report[56]. The FTI report contains greater detail on Ofcom's proposals, FTI's analysis and its reasoning. Our comments herein should be considered in addition to FTI's findings, except in those cases where we disagree with FTI's conclusions, which we clearly indicate in this document.

5.2 Overview of Ofcom's proposals

Ofcom has proposed changes to the methodology for the attribution of two 'Activity Groups' following a review by its consultants Cartesian[57]:

- AG112 'Corporate overheads' [✂£500m-£1,000m]
- AG103 'BT TSO Support Functions' [✂£100m-£250m]

Ofcom gives three reasons why it believes the prevailing cost allocation methodology, that is, to allocate costs on the basis of 'factorised pay plus return on assets', do not "*follow the principles of Causality and Objectivity*":

- "*The use of a single allocation methodology for such a large cost category does not provide an objective or causal basis for cost allocation".*
- *The use of a "combination" allocation methodology does not provide an objective or causal base for cost allocation.*
- *The rules included within the combination allocation methodology may not provide an objective or causal basis for cost allocation*."[58]

As a consequence Ofcom proposes to disaggregate AG112 and AG103 into twenty-one and ten cost lines respectively and to allocate them according to one of seven new allocation methodologies, as summarised in table one below.

[55] Ofcom (2015) CAR Section 8
[56] FTI (August 2015) "Ofcom's consultation on BT's cost attribution methodologies – a report for BT"
[57] Ofcom commissioned Cartesian to review BT's cost attribution methodologies as part of its review. http://stakeholders.ofcom.org.uk/binaries/consultations/cost-attribution-review/annexes/Ofcom_BT_Cost_Attribution_Review_Final_Report.pdf
[58] Ofcom (2015) CAR paragraph 8.34

Table 1: Ofcom's proposed cost allocation methodologies changes

Proposed new allocation basis	Number of cost items (AG112)	Number of cost items (AG103)	Total cost to be apportioned 2013/14
Previously allocated total costs	9	5	[✂ £250m - £500m]
The number of employees	6		[✂ £100m - £250m]
Previously allocated pay costs	2	2	[✂ £50m - £100m]
Previously allocated property costs	1		[✂ £10m - £50m]
Previously allocated Fleet costs	1	1	[✂ £10m - £50m]
Previously allocated IT costs	1	2	[✂ £50m - £100m]
Relevant revenue	1		[✂ £10m - £50m]
Total	**21**	**10**	**[✂ £500m - £1000m]**

Source: Ofcom and BT

Ofcom estimates the impact of these changes would be to transfer around £226m from regulated markets to (unregulated) residual markets[59]. This results from changing the basis of allocation from the prevailing methodology for corporate overheads and TSO support functions from 'factorised pay plus return on assets' to one of seven new bases set out in the table below. We set out in Annex one our review of the limitations of these estimates and the implications of FTI's findings for the strength of the evidence presented in the CAR.

5.3 Overview of FTI's review of Ofcom's proposals

FTI has reviewed Ofcom's objections to the prevailing allocation methodology and conducted a detailed review of each of the proposed allocation methodologies including discussions with stakeholders within BT and the analysis of underlying cost data. FTI's review reached the following conclusions:

- FTI disagrees with each of Ofcom's criticisms of the prevailing methodology[60], and conclude that the prevailing methodology represents the "*most appropriate treatment*" of these categories[61].

- Ofcom's proposals can be separated into three broad groups:

  - **Corporate overheads which both Ofcom and FTI consider to be "unattributable" but for which FTI disagrees with Ofcom on the most appropriate cost driver** - For seven of the corporate overhead cost categories and three of the TSO support cost categories, Ofcom's proposal (to use previously allocated total costs) is equivalent to the use of a 'combined' cost driver to allocate general corporate overheads. FTI criticises Ofcom's proposed methodology and recommends that the prevailing methodology is retained for these cost items.

  - **Corporate overheads which FTI considers to be "unattributable" and disagree with Ofcom's proposals** - For six of the corporate overhead cost categories and four of the TSO support cost categories for which Ofcom proposes alternative attribution methods, FTI argues that a consistent treatment using a single combined driver is more appropriate. FTI recommends the retention of the prevailing methodology for these cost categories as the underlying costs and activities are general in nature and should be considered as supporting the business as a whole.

[59] Ofcom (2015) CAR table 8.1, page 53
[60] FTI (2015) paragraph 4.10
[61] *ibid* paragraph 5.11

FTI proposes disaggregation of one corporate overheads category whereby the Ofcom administration charge could be separated from the Strategy, Policy and Portfolio cost category and treated with a specific driver – as per Ofcom's proposal, but the remainder should be treated as a general corporate overhead under the prevailing corporate overhead allocation methodology.

- **Corporate overheads for which FTI and Ofcom agree that attribution is possible but where FTI has proposed alternative allocation methodologies** - For six insurance costs within corporate overheads FTI agrees with Ofcom that a specific driver that reflects the cause of costs can be found, however it proposes alternative data and methodologies that could be considered to be developed into allocation bases.

- For the remaining two TSO support functions cost categories[62], along with the Ofcom administration fee, FTI is in broad agreement with Ofcom's proposals that a revised cost attribution methodology is appropriate.

5.4 Principles of cost attribution

Our approach has been to identify the broad themes within FTI's analysis and to consider the current and proposed allocation methodologies from the perspective of each of the five cost attribution principles that BT follows and which are described below. These are used to determine how to allocate common costs across services, with cost causality being the primary driver.

These principles have been referred to by Ofcom[63] and BT[64], as well as the International Telecommunications Union ("ITU")[65]. Ofcom has also used the principles of Causality and Objectivity to inform the current CAR process.

Table 2: Principles of cost attribution

Principle	Definition
Cost Causality	Costs (including appropriate transfer charges), shall be attributed to cost components, services and businesses, e.g., network components, wholesale services and retail products, in accordance with the activities which cause the costs to be incurred.
Objectivity	Cost allocations are not intended to benefit any particular product, service, business, sector or activity. The attribution shall be objective and not intended to benefit either BT or any other Operator, or any product, service or network component. The cost drivers must be objective and quantifiable.
Consistency	There shall be consistency of treatment from year to year to make the results comparable. Where there are material changes to the attribution methods or to the accounting policies that have a material effect on the information provided, detailed explanation of the changes will be provided and if necessary BT will have to restate parts of the previous year's statements affected by the changes. Appropriate data has to be available to ensure this can be achieved. This also covers cross-allocation consistency (within a given accounting period) in terms of both the breadth of the proposed amendments and our general knowledge of BT's other, existing allocations.
Transparency	Sufficient information must be in place for a third party to be able to gain a clear understanding of all the material, methodologies and processes and make their own judgement as to the reasonableness of these methodologies, the driver data and any changes to them. There should be a clear distinction between direct and apportioned costs. The costs allocated to different services must have their own activity cost centre and internal transfer costs must be separately identified.

[62] These are BT Fleet and TSO Redundancy Payments
[63] Licence and Administration Fees – Statement of Principles for Broadcasting Act Licences and Telecommunications Regulation, Consultation document, Ofcom
[64] Primary Account Documents, Regulatory Accounting Principles, BT
[65] Regulatory Accounting Guide, ITU, http://www.itu.int/ITU-D/finance/Studies/Regulatory_accounting_guide-final1.1.pdf

Principle	Definition
Accuracy	The data source needs to be fit for purpose, i.e., the underlying data needs to be reliable and readily available within the business. Additionally if sampling is used to derive the attribution of costs, it shall be based either on generally accepted statistical techniques or other methods which should result in the accurate attribution of costs. Our assessment of methodologies against this principle is based upon discussions between FTI, BT and ourselves along with our general knowledge of BT data sources. We have not formally verified the information provided by FTI and BT in respect of data sources.

Source: Ofcom

We consider that these principles should apply not only to BT's cost allocation methodologies, but also to any review thereof. To this end, we consider that Cartesian's proposed adjustments to BT's cost attribution methodology should also be assessed against the above principles, and we use these in considering FTI's cost allocation methodology analysis for BT.

In addition to the specific cost allocation criteria, we consider that a broader set of regulatory principles also need to be considered when reviewing Ofcom's approach to the LLCC and CAR and which we set out in more detail in section 4. In particular, we consider that Ofcom has a number of strategic and regulatory objectives which it seeks to balance, along with reflecting the regulatory principles used in setting price regulation, and that these are key in supporting efficient investment in telecoms networks.

5.5 Our review of FTI's analysis

In this sub-section we comment on FTI's review of Ofcom's proposed overhead cost allocation methodologies. This sub-section begins with a review of the FTI critique of Ofcom's analysis of the pre-existing bases then discusses the cost items within AG112 and AG103 in three categories in turn:

- "Unattributable" corporate overheads for which Ofcom proposes a combined cost driver;
- Other "unattributable" corporate overheads for which Ofcom proposes a single cost driver; and
- Attributable corporate overheads for which Ofcom proposes a single cost driver and FTI has proposed another allocation methodology.

5.5.1 FTI's review of Ofcom's criticisms of the prevailing methodology

Ofcom makes three criticisms[66] of the prevailing methodology which FTI address in turn.

"The use of a single allocation methodology for such a large cost category does not provide an objective of causal basis for cost allocation"

FTI argues that some corporate costs are intrinsically "unattributable" and that it is more objective, transparent and consistent to aggregate all "unattributable" and use a single basis of allocation.

We agree with this assessment by FTI and note that the current definition of corporate costs (AG112) constitutes less than 4% of BT's total operating costs[67].

[66] Ofcom (2015) CAR paragraph 8.34
[67] FTI (2015) paragraph 4.7

"The use of a "combination" allocation methodology does not provide an objective or causal base for cost allocation"

FTI argues that Ofcom's characterisation of BT's rationale is incorrect in that BT does not argue that some costs are driven by people and others by assets, and that BT does not argue that causality is equal. FTI describes BT's prevailing methodology as "*simply applying a common base that reflects the dual purpose of head office activities*".[68]

FTI concludes that Ofcom fails to demonstrate why the use of a combination driver is clearly inappropriate.

We agree with FTI's conclusions and note that all businesses have some degree of common overhead costs, in particular strategic functions that determine the optimal mix and organisation of inputs and methods of production clearly have a dual role. We also note that in proposing a "total costs" driver for several activities Ofcom appears to accept a role for a "combination driver", however as discussed later we have some concerns about the "combination driver" proposed by Ofcom.

"The rules included within the combination allocation methodology may not provide an objective of causal basis for cost allocation."

FTI argues that it would be spurious to try to identify a causal cost driver for "unattributable" corporate overheads and note that Ofcom has not demonstrated how the current methodology contradicts the objectivity principle.[69]

We note that Ofcom argues that the factorised pay plus return on assets base currently used by BT has an element that is not objective for two reasons; Ofcom quotes Cartesian as follows:

- "*The methodology is not objective because it uses an arbitrary weighting factor. A WACC of 10.8% is used to effectively weight the importance of pay and asset values in the apportionment. Whilst this value may be reasonable, we understand that this is not directly driven by BT's actual WACC. This arbitrary factor therefore raises concerns regarding objectivity.*"

- "*The use of factorised pay may not be objective. As the methodology uses factorised pay the weights of attribution are skewed heavily towards the business unit that has more employees*"[70].

We understand from BT that "*this percentage is determined by Ofcom*". [71]

We do not consider the pay factorisation and WACC[72] methodology to be arbitrary. We consider the use of the WACC to be a reasonable method for establishing the annual cost of capital employed and that pay factorisation represents a reasonable basis for capturing the differences in pay between the individual BT Lines of Business ("LoB"). The specific WACC parameter used should be consistent with the WACC agreed with Ofcom. We recommend that if BT is to continue using the prevailing methodology that the WACC used is agreed with Ofcom and kept up to date in order to improve transparency.

[68] FTI (2015) paragraph 4.19
[69] *ibid* paragraphs 4.24-4.25
[70] Ofcom (2015) CAR paragraph 8.31
[71] BT (2014) DAM, page 124
[72] WACC - Weighted Average Cost of Capital

5.5.2 Corporate overheads which both Ofcom and FTI consider to be "unattributable" but for which FTI disagrees with Ofcom on the most appropriate cost driver

FTI categorises each of the cost items shown in table three as "*unattributable corporate overheads"* on the basis that:

- *"The costs incurred relate to all BT Group's activities;*
- *The activities do not relate to specific LoBs, markets or products; and,*
- *There is no single causal basis that could be applied objectively to individual categories".*[73]

FTI proposes no change to the current methodology of using factorised pay plus return on assets. For TSO support function costs the current methodology is to use factorised TSO pay plus return on TSO assets.

For each of the cost categories below Ofcom proposes to use a base of previously allocated total costs, whereas FTI proposes to retain the prevailing method of factorised pay plus return on assets. We note that Ofcom does not specify that the costs of TSO support function should be allocated on the bases of previously apportioned TSO costs.

Table 3: "Unattributable" corporate overheads

Section	Organisational unit / cost item	2013/14 Costs
Corporate Costs		
3.j	Group finance	[✂ £50m - £100m]
3.k	BT TSO Chief Information Office for Group	[✂ £50m - £100m]
3.m	Corporate communications	[✂ £10m - £50m]
3.n	Group legal	[✂ £10m - £50m]
3.o	Group finance – reporting planning and analysis	[✂ £10m - £50m]
3.p	Group finance – corporate special projects	[✂ £10m - £50m]
3.s	TSO Research and Innovation (1)	[✂ £10m - £50m]
TSO Support functions		
4.c	TSO Human Resources and Coordination	[✂ £10m - £50m]
4.d	TSO Service, strategy and operations	[✂ £10m - £50m]
4.e	TSO Finance	[✂ £0m - £10m]
Notes (1)	In the Ofcom Consultation this is described as "BT TSO Chief Information Office for BT Wholesale"	

Our assessment against the principles of cost allocation

Cost causality

Cost causality is a complex principle to apply in this case as "unattributable" corporate overheads are not directly driven by the underlying activity of business units. Instead, they are driven by a range of factors such as Group strategy, shareholder, public and government relations, brand management, or value-for-money business support services. Several of these drivers of corporate overheads may in fact "cause" changes in the organisation of business units or their cost bases.

[73] FTI (2015) paragraph 5.10.

An important function of corporate strategy is to optimise the businesses' use of resources, and it is therefore clear that some corporate functions must simultaneously analyse, manage, support and change the mix of both capital and labour employed in operations.

In this regard, both Ofcom and FTI propose a broad "combined" cost base for attributing corporate overheads.

FTI criticises Ofcom's approach to calculating previously allocated costs for two reasons:

- It includes costs of low margin or "pass through costs". FTI gives the example of transit services where BT passes through the charges from a terminating Connection Provider to the originating Connection Provider. The volume of the charge, whilst included in the definition of costs, is not actually reflective of BT's costs. Preserving BT's incentive to provide these services at low margin is an important part of maintaining accessible common network infrastructure[74]; and

- It excludes costs of capital. FTI describes the Equi-Proportionate Mark Up ("EPMU") and a Ramsey pricing approach under which costs are allocated over all costs in order to be consistent with the principles of EPMU and to preserve price and cost signals and allocative efficiency[75].

We agree with FTI's analysis of the Ofcom cost base, which is referred to as "previously allocated total costs", in that it appears to include costs of Payments to Other Licenced Operators ("POLOs") which we consider should be excluded. It also excludes capital costs for which there is a strong case to include, because in the allocation base for "unattributable" corporate overheads, corporate functions provide strategic, operational and financial governance of both the asset base and the workforce. Excluding capital costs could lead to other price distortions (or distortion of the incentives faced by BT) such as shifting costs from rentals to connections.

We do not believe that the full implications of these changes or potential distortions have been modelled in sufficient detail to understand their implications for prices and competition.

Overall, there are a number of potential bases that could be reasonably used to allocate these general overhead costs. We consider that cost causality cannot be used as a clear test and a base should be used that allocates reasonably across all costs, and preserves incentives prices and cost signals for BT. We note that the Ofcom proposal has deficiencies and is not clearly "*more appropriate*" than the prevailing methodology.

Objectivity

We consider both the prevailing methodology and Ofcom's proposal to be objective bases for allocating overheads. Although we note that the exclusion of capital costs may induce biases that skew cost and pricing incentives.

Consistency

The prevailing basis is by definition consistent with current practise and therefore is more consistent overall. FTI also argues for consistent treatment of what it describes as "unattributable" overheads whereas Ofcom proposes a range of different treatments. As discussed in later sections we agree with FTI that a consistent treatment across all "unattributable" overheads is preferable.

As we have argued in this document in order to maintain a stable regulatory framework and investment environment changes to the prevailing regulation should be based on a move to a new base that is clearly a better basis for allocation. In the absence of clear cost-causality

[74] FTI (2015) Paragraph 6.8-6.18
[75] *ibid* Paragraph 6.22-6.30

case we consider that preserving the status quo best protects the integrity of the regulatory regime.

Transparency

We consider both proposals to be transparent, although the transparency of both the calculation of "factorised pay" and the calculation of the WACC used in BT's existing base could be improved with clearer descriptions included in future versions of BT's AMD[76].

Data source / sampling accuracy

We consider both proposed methodologies to take a reasonable approach to using existing readily available data for the allocations, rather than considering costly and potentially volatile activity sampling approaches.

Conclusion

Overall, there is a consistent view from FTI and Ofcom that costs detailed in this section are general corporate overheads and we agree with this assessment.

In this case, we consider that Ofcom's proposed approach fails to apportion costs according to the costs of capital which are an important part of a network infrastructure business. Ofcom's proposed base is not 'clearly more appropriate' and there does not appear to be a convincing case to introduce inconsistency by changing the base of allocation. For this reason, we consider FTI's proposal to be more appropriate.

There are weaknesses with any of the proposed cost attribution methodologies for general overheads. We would contend that neither the proposed nor the prevailing bases are *"clearly inappropriate"* as referenced by Ofcom. We agree with FTI that Ofcom's proposed base could be improved in terms of cost causality.

In considering the importance of demonstrating that the proposed methodology is more appropriate to the current methodology, we do not see a compelling reason to move to a base that is inconsistent with the prevailing methodology, particularly given that Ofcom's proposed bases in some cases have weaknesses and therefore are not more appropriate. For reasons of consistency and in some cases cost causality we would propose not to change the current basis for allocation.

We do note that, for reasons of transparency and objectivity, BT's current calculation could be made clearer and if necessary parameters such as the relevant WACC (or the methodology by which it is to be estimated) could be formally agreed with Ofcom in advance of the preparation of the RFS.

5.5.2.1 Allocation of Group activities in support of non-UK activities

Several Group functions described in the preceding subsection can be considered to support both UK operation and overseas operations. This section presents our view of these costs in respect of the five principles of cost allocation.

BT's current methodology

BT confirmed in its 2015 Change Control Notification ("CCN")[77] the following:

"We intend to attribute a proportion of the costs of the BT Group: Tax, Strategy and Group Financial Control teams to overseas subsidiaries to reflect that an element of the activity of these functions is driven by these overseas subsidiaries."

[76] Accounting Methodology Document 2015, previously BT DAM
[77] BT 2015 Change Control notification (CCN)
http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2015/ChangeControlNotification-31March2015.pdf Section 3.16.

The CCN describes an international headcount base that will be used to allocate a fraction of these costs directly to retail residual markets. However in respect of this methodology BT noted the following:

"We are currently considering the extent of our challenge to this proposal. Our view is that we need to implement the proposal, even though we may challenge it; in light of the fact that should our challenge fail, we would need to comply with the Direction, pending an appeal (should we decide to appeal). Our implementation of this proposal should not be construed as an agreement to it."[78]

BT has informed us that it intends to conduct further analysis of this apportionment methodology and the classification of trans-national services and business units with a view to establishing the appropriate data and apportionment base for this methodology.

Ofcom proposal

Ofcom notes in its analysis of Group Finance costs, that it has not fully considered the implications of BT's methodology change, and therefore has not considered whether headcount represents an appropriate basis for allocating Group Finance costs.

However, Ofcom's proposal (as described in section 5.4) is to treat Group Finance costs according to a total cost allocation base, and do not clearly specify the proposed treatment of costs attributable to overseas operations.

Our assessment

We note that BT's recent change to the allocation of corporate overheads to international divisions appears to use a basis of allocation that is not consistent with the prevailing treatment of corporate overheads. We consider that it would be preferable for BT, if possible, to conduct further analysis and to develop an international weighted average factorised pay plus return on assets base, and use this to apportion these costs.

We also note that, in calculating the apportionment of corporate overheads to international divisions, it is important to recognise that some international costs are directly caused by UK operations, and other UK costs may be directly caused by international operations. As part of any further analysis of this apportionment of corporate overheads to international divisions, we recommend that BT considers which overseas business units, staff (or costs) can be considered to be dedicated to – or provide a fraction of its services to – support UK operations and vice versa.

5.5.3 Corporate overheads which FTI considers to be "unattributable" and disagree with Ofcom's proposals

FTI categorises the costs set out in table four as *"unattributable corporate overheads on the basis that:*

- *The costs incurred relate to all BT Group's activities;*
- *The activities do not relate to specific LoBs, markets or products; and,*
- *There is no single causal basis that could be applied objectively to individual categories".*[79]

FTI disagrees with Ofcom's proposed methodologies and recommends that the prevailing attribution base of factorised pay plus return on assets is retained.

[78] BT 2015 CCN, Section 1.3.

[79] FTI (2015) paragraph 5.10

We agree with FTI's analysis of the underlying costs and purposes of the functions described below. These costs appear to support general corporate activities and should be treated as corporate overheads. In particular they typically relate to provision of policies and procedures, restructuring costs, career transition costs, management skills training and the development of general IT platforms that support the entire business. As discussed in the previous subsection we agree with FTI's view that the prevailing methodology represents an appropriate basis for the allocation of such general corporate overheads.

We note one exception to this point in relation to the employee broadband offer. We consider that BT could investigate, subject to considerations of materiality, whether data on the take up of the scheme is available and whether that could be used to better apportion these costs.

Table 4: Other "unattributable" corporate overheads

Section	Organisational unit / cost item	2013/14 Costs	Ofcom proposed allocation base
Corporate costs			
3.l	Group Human Resources	[✂ £10m - £50m]	Number of staff
3.d	Employee broadband offer	[✂ £10m - £50m]	Number of staff
3.h	BT Group Computing Assets (1)	[✂ £50m - £100m]	Number of staff
3.i	TSO Architecture and Global IT Platform	[✂ £50m - £100m]	IT costs
3.q	Learning academy	[✂ £10m - £50m]	Pay
3.t	BT TSO Chief Information Office for Retail	[✂ £0m - £10m]	Retail total costs
3.r(2)	Strategy Policy and Portfolio (costs other than the Ofcom administration charge only	[✂ £0m - £10m]	Relevant revenues
TSO support functions			
4.b	IT Services Subcon Offshore SGA	[✂ £10m - £50m]	IT costs
4.g	BT TSO General Infrastructure Services	[✂ £0m - £10m]	Pay
4.f	BT TSO Chief Information Office for Global Services	[✂ £0m - £10m]	Total costs
4.i	BT TSO Global Network Services Management and Support	[✂ £0m - £10m]	IT costs
Notes			
(1)	In the Ofcom Consultation this is described as "BT TSO Research & Innovation"		
(2)	This category has been split into two, other part features in Table 6.		

5.5.4 Attributable corporate overheads for which Ofcom proposes a single cost driver and FTI has proposed another allocation methodology

The insurance costs covered in this sub-section are set out in table five.

Table 5: Attributable corporate overheads

Section	Organisational unit / cost item	2013/14 Costs
Group Insurance costs		
3.a	Employer's Liability insurance	[✂ £10m - £50m]
3.b	Employee practice liability insurance	[✂ £0m - £10m]
3.c	Employee healthcare insurance	[✂ £10m - £50m]
3.e	Employee death in service benefit insurance	[✂ £0m - £10m]
3.f	Business interruption support	[✂ £10m - £50m]
3.g	Motor vehicle insurance	[✂ £10m - £50m]

FTI reviews Ofcom's proposed methodology concerning these costs categories and concludes that "[*Ofcom's proposals] would be clearly inappropriate, because it would not reflect the differential in the insurance risk faced by the individual LoBs resulting from the variations in the make-up of their respective workforces*[80]*."*

FTI's analysis has identified that there is *"strong potential for data held by BT Group's Insurance and Risk Financing team to be used to inform the attribution of these categories. This team is responsible for gathering the information required by underwriters to assess the level of BT's risks in respect to the various categories of insurance, and for negotiating these costs with external providers. The team is also responsible for determining the allocation of these premia to each LoB for management accounting purposes. In determining the allocation of premia to the LoBs, where possible the team seeks to simulate the costs that would be incurred by the LoBs if they were to undertake their own insurance and risk financing activities.*[81]*"*

Therefore, FTI considers that an attributable cost allocation for these categories should be based on a recognition of the relative risk faced by the business areas, and that the available data from BT Group's Insurance and Risk Financing team should be considered by BT and Ofcom as providing a basis for this attribution.

Our assessment against the principles of cost allocation

Cost causality

We consider that the allocation of insurance costs on the basis of factorised pay and return on assets does not accurately reflect the origin of these costs, i.e., in these cases other factors such as the type of employee, scheme membership, revenues at stake from business discontinuity, use of vehicles etc., can be considered to cause costs.

FTI's proposed approach appears to offer the most cost reflective allocation, as it mirrors the approach that would be taken by the insurance market towards the LoBs as independent entities. In some cases (e.g., Employment Practice Liability Insurance) this is unlikely to differ significantly from Ofcom's proposal to use headcount (equivalent to factorised pay); however, in others (e.g., Employer's Liability Insurance) FTI's approach better reflects the way in which costs are incurred.

Objectivity

FTI's proposed approach is consistent with our understanding of the typical practice of the insurance industry and thus represents an objective treatment with respect to the allocation to LoBs.

However, as FTI notes, in the case of Employee Liability Insurance, "*the premium associated with clerical and manual members of staff can varying significantly; as a rule of thumb we understand that the weighting for staff classified as 'manual' is approximately five times higher than for a 'clerical' member of staff*[82]*"*. In this respect, Ofcom's proposed methodology may not offer an objective treatment of these costs.

Consistency

Both proposed approaches would not be consistent with previous year financial statements. Therefore, it should be clearly demonstrated that any proposed change is a more appropriate reflection of the cost allocation principles than the existing methodology.

[80] FTI (2015) Table 7 a. Employer's Liability Insurance
[81] *ibid* paragraph 5.40
[82] *ibid* Table 7 a. Employer's Liability Insurance

Transparency

It is our understanding from discussions with BT that both the proposed methodologies and underlying data could be reviewed and understood by third parties and business units, and transfer costs can also be separately identified.

FTI's proposal to use trades data may involve commercially confidential information, although we do not consider this would cause an issue with transparency, as commercially confidential information is used in preparation of other parts of the RFS.

Data source / sampling accuracy

Ofcom's proposals use data that is readily available as it is already used in the preparation of the RFS, which are routinely subjected to independent audit.

The FTI proposal would require additional data that, we are informed, is also readily available however we note that as this data has not previously been used in the preparation of the RFS. BT and Ofcom should ensure that suitable controls are in place regarding the methodology.

Conclusion

Based on the evidence provided, we consider that the changes proposed by FTI for apportioning the insurance costs described in this section better adhere to the cost causality principle, whilst satisfying the other principles of objectivity, transparency and accuracy.

We conclude that there is sufficient evidence relating to the manner in which insurance charges are incurred to justify a change to the basis of allocation.

We note however, that as this data has not previously been used in the preparation of the RFS BT and Ofcom should ensure that controls are in place (and subjected to audit) regarding the methodology and data quality to ensure accuracy and objectivity.

5.6 Other issues

5.6.1 Attributable corporate overheads for which Ofcom and FTI are in broad agreement

Table six set out the three remaining cost categories for which FTI and Ofcom are in broad agreement. In these cases we concur with the assessment of FTI and Ofcom that these costs can be causally attributed.

We note that, as described above, in the case of Strategy, Policy and Portfolio, FTI's proposal is to disaggregate the cost of the Ofcom administration charge, and to treat the remainder of the category as described above.

For redundancy and BT fleet we agree that these should be consistently treated with other redundancy and fleet costs and therefore removed from TSO support functions.

Table 6: Attributable corporate overheads for which Ofcom and FTI are in broad agreement

Section	Organisational unit / cost item	2013/14 Costs
Disaggregated Ofcom administration fee		
3.r (1)	Strategy Policy and Portfolio (Ofcom administration charge only)	[✂ £10m - £50m]
TSO support services		
4.a	TSO Redundancy payments	[✂ £10m - £50m]
4.h	BT fleet	[✂ £0m - £10m]
Notes		
(1)	This category has been split into two, other part features in Table 4.	

Other costs attributable to regulation

We note that in consideration of functions such as Strategy, Policy and Portfolio there are several functions throughout BT Group and other LoBs that incur costs in relation to economic regulation. To the extent that these costs are material and can be clearly identified and separated as dedicated regulatory affairs activity then these could be disaggregated from overhead categories and allocated to regulated markets in order to prevent these costs being recovered from other unregulated markets. Some examples of such costs could be:

- Group Regulatory Finance ("GRF") costs: pay and audit costs as identified by FTI plus any non-pay costs associated with other contract expenses incurred by GRF;
- Legal: any dedicated regulatory resource, in addition to any costs incurred in regulatory disputes. Note that for incentive reasons Ofcom may prefer to restrict this to costs incurred in claims made against BT, rather than any proceedings initiated by BT;
- Dedicated Regulatory affairs personnel/teams throughout BT Global Services or other LoBs; and
- TSO transfer charges for the development of regulatory reporting systems.

For the purposes of this report we have not conducted a detailed investigation into the size and of these costs and the extent to which they can be reliably identified and separated, however this could be considered by BT and/or Ofcom when considering disaggregating corporate overhead costs.

5.6.2 Appropriate calculation of the costs of the employee broadband offer

Ofcom invited further stakeholder views on BT's calculation of the cost of the employee broadband offer. This is calculated on the basis of the retail price of these services and therefore includes costs, margin and tax.

Our commentary

We consider that the current treatment is consistent with standard accounting practice. However, for the purposes of regulatory accounting, we consider that it may be legitimate to question the inclusion of margin within this calculation.

We consider that the costs and tax (including tax on margin) can appropriately be included within the costs of this offer for regulatory purposes. However there is a case for deducting post-tax margin from the cost, as this is caused by BT's profit rather than cost and therefore presents a challenge to the causality principle.

5.6.3 Treatment of proceeds arising from the sale of Keybridge House.

FTI has conducted discussions with BT Group Property and conclude that *"the costs of this building will have been attributed almost entirely, if not exclusively, to residual"*[83].

We have not verified the evidence cited by FTI, however, taking this at face value, we agree with FTI's assessment that the appropriate treatment of the proceeds of the sale should follow the treatment of the costs that were incurred in building and maintaining the property.

[83] FTI (2015) paragraph 5.46

Annex One: Assessment of Ofcom's estimates of the impact of the proposed changes to cost attribution methodologies

Introduction

Ofcom suggests a number of alternative cost attribution methodologies for allocating AG112 and AG103 costs. In section 8 of the CAR by Ofcom, it estimated the impact on markets due to the proposed changes to the attribution methodology. These estimates were calculated using a model developed by Cartesian.

The following section sets out our review of the limitations of these estimates and the impact of FTI's findings on them.

Our assessment of Ofcom's estimates

Ofcom presents estimates that the proposed change in attribution methodology for AG112 and AG103 results in £226m of costs being reattributed to residual markets. This estimation uses "previously allocated costs" as the attribution methodology. As we discuss in section 5.2 the basis of allocation changes from the prevailing methodology of "factorised pay plus return on assets", for all corporate and TSO overheads, to one of seven new bases, of which one is "previously allocated costs".

The table below summarises the impact of this attribution methodology across different markets.

Fixed access markets (£m)	BCMR (£m)	Narrow band markets (£m)	WBA1 and 2 (£m)	Residual markets (£m)
(155)	(55)	(6)	(10)	226

We observe the following in respect of Ofcom's estimates of the impact of the change in attribution methodology:

- These estimates do not represent the actual impact of the change in methodology as they only model the "previously allocated total costs" base, rather than including all the bases proposed by Ofcom and which are set out in table one of this report. As such we would expect that the impact could differ materially from the £226m estimate.

- FTI has attempted to simulate the cost allocations implied by Ofcom's proposals, by using more detailed approximations for some of the allocation bases. Its results showed material changes to the allocation between residual and regulated markets.

- FTI's own simulations also include approximations, however we consider that they show that the limitations identified by the consultation report are significant and call in to question the suitability of the impact analysis for the purposes of understanding the proposed changes.

- As we have described in section 4 of this report we consider that to preserve investment incentives and the stability of the regulatory structure it is important that any proposed changes to allocation methodologies are analysed and considered in detail before they are implemented. It is important that changes are clear, justified and understandable to investors to preserve the stability of the regulatory regime.

- We recommend that the impact of these proposals are modelled in greater detail using a more accurate representation of the proposals and a more appropriate approximation to BT's cost allocation system, in order to arrive at a reasonable estimate of the impacts on markets. We consider such analysis should be undertaken for any changes to cost allocation bases.

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