

Final Report for Oftel

Review of Retail Cost  
Attributions for NTS  
Retail Uplift

Non-Confidential version

Analysys

13 January 2004



# Review of retail cost attributions for NTS retail uplift

Final Report

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## Contents

0	Executive summary	i
1	Introduction	1
2	Guiding principals of cost attribution	7
3	Summary of results of analysis	9
3.1	Costs analysed	9
3.2	Alternative attribution methodologies	11
3.3	Impact analysis	13
4	Marketing and sales	15
4.1	Attribution methodology revised	16
4.2	Brand Finance review	17
4.3	Analysys review	19
4.4	Impact analysis	28
5	Finance and billing	31
5.1	Attribution methodology revised	32
5.2	Existing attribution methodology appropriate	36
5.3	Impact analysis	41
6	Computing	43
6.1	Attribution methodology revised	44
6.2	Existing attribution methodology appropriate	49
6.3	Impact analysis	51

7	General management and other	53
7.1	Attribution methodology revised	54
7.2	Existing attribution methodology appropriate	56
7.3	Impact analysis	57
8	Accommodation	59
8.1	Attribution methodology revised	59
8.2	Existing attribution methodology appropriate	60
8.3	Impact analysis	62
9	Customer service	63
9.1	Attribution methodology revised	64
9.2	Impact analysis	68
10	Depreciation	69
10.1	Attribution methodology revised	69
10.2	Existing attribution methodology appropriate	70
10.3	Impact analysis	70
11	Planning and development	71
11.1	Attribution methodology revised	71
11.2	Existing attribution methodology appropriate	72
11.3	Impact analysis	72
12	General support	73
12.1	Impact analysis	73
13	Other sectors	75
13.1	Attribution methodology revised	76
13.2	Existing attribution methodology appropriate	77
13.3	Impact analysis	77
14	Cost transfer	79
15	Summary of proposed changes	81

15.1	Marketing & Sales	81
15.2	Finance & Billing	82
15.3	Computing	82
15.4	General Management & Other	83
15.5	Accommodation	83
15.6	Customer service	83
15.7	Depreciation	83
15.8	Planning & Development	84
15.9	General Support	84
15.10	Other sectors	84
16	Freephone	85
16.1	Marketing and sales	85
16.2	Finance and billing	86
16.3	Computing	87
16.4	General management	88
16.5	Accommodation	88
16.6	Customer service	89
16.7	Depreciation	89
16.8	Planning and development, general support and other	90
16.9	Summary	90
17	Capital employed	91
17.1	Attribution methodologies	92
	Annex A: Detailed breakdown of costs	A1
A.1	Marketing and sales	A2
A.2	Finance and billing	A3
A.3	Computing	A4
A.4	General management and other	A5
A.5	Accommodation	A6
A.6	Customer service	A7
A.7	Depreciation	A8
A.8	Planning and development	A9
A.9	General support	A10

A.10	Internal cost transfer	A11
A.11	Other sectors	A12
<b>Annex B: Summary of attribution methodologies</b>		<b>B1</b>
B.1	Marketing and sales	B1
B.2	Finance and billing	B1
B.3	Computing	B1
B.4	General management and other	B2
B.5	Accommodation	B3
B.6	Customer service	B4
B.7	Depreciation	B4
B.8	Planning and development	B4
B.9	General support	B4
B.10	Other sectors	B4

## 0 Executive summary

BT undertakes the retailing of NTS calls on behalf of terminating operators and passes the retail revenue, net of a retention, to the terminating operator. These charges comprise a charge for the conveyance of calls on its network and a charge for associated retail services (e.g. billing, marketing, customer care) undertaken on behalf of the terminating operator. This second charge is known as the “**NTS retail uplift**”<sup>1</sup>.

Oftel has proposed that the basis of this NTS retail uplift charge should be reasonably derived from the costs incurred by BT from retailing these calls. Oftel have further proposed that the NTS retail uplift be controlled using an RPI-X charge control for 4 years, to move from the retail uplift currently in effect to ‘target year’ charges based on costs calculated using **Fully Allocated Costs** (FAC). It was initially intended that these ‘target year’ costs were to be forecasted based on the FAC attribution for BT-OLO NTS calls in BT’s 2001/02 regulatory financial statements, however, the 2002/03 financial statements have been released during the course of the review and so it is expected that the 2002/03 costs will be used as the base for the forecast.

It is therefore important that the costs attributed to BT-OLO NTS calls in BT’s financial statements reflect the relevant costs incurred in retailing these calls. Oftel have therefore commissioned Analysys to **review the attribution methodologies used for retail costs relevant to the NTS retail uplift**<sup>2</sup>.

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<sup>1</sup> Costs are actually recovered through a pence per minute “retail uplift” together with, for PRS calls, a surcharge for PRS bad debt

<sup>2</sup> Review is of 2001/02 attribution methodologies. Any recommended changes in attribution methodology will be applied to the 2002/03 costs in order to forecast target year costs

Two versions of this report have been produced; a confidential version supplied to OfTel containing actual costs information and a non-confidential version where costs are assigned to a number of 'bands'. The bands used are:

- >5% of total retail cost for product (e.g. P313, 314, 315)<sup>3</sup>
- 1-5% of total cost for product (e.g. P313, 314, 315)
- 0.1-1% of total cost for product (e.g. P313, 314, 315)
- <0.1% of total cost for product (e.g. P313, 314, 315)

The banding is intended to give the an indication of the scale of any particular cost, without revealing confidential information on BT's costs by activity / category.

Analysys has undertaken a review of total of 71%<sup>4</sup> of the operating costs comprising the retail NTS uplift, with 55% of costs (the largest items) analysed in detail (including reviewing BT's working documents/spreadsheets used to calculate the attribution to NTS calls and their input data) and a further 16% analysed initially at a higher (less detailed) level and then in detail for attributions where Analysys had questions, or concerns regarding the current methodology (internal BT documents provided in response to specific queries).

The top-level results of this analysis are:

- Only a very small proportion (4%) of costs currently allocated to NTS calls were viewed by Analysys as not relevant to NTS calls (and so should be removed from the FACs)
- Analysys are of the opinion that a further 48% of the FACs are accounted for by cost items where it is appropriate for costs to be allocated to BT-OLO NTS calls, but Analysys has reservations about the current methodology used and has recommended that an alternative approach is utilised/investigated (dominated by marketing costs). This includes marketing costs where Analysys are of the opinion that only a proportion of the costs (campaigns) were applicable to NTS calls and had reservations on the current attribution methodology for the costs that were relevant

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<sup>3</sup> P313, P314 and P315 are local, national and premium rate BT-OLO NTS calls respectively

<sup>4</sup> In absolute (negatives treated as positive) terms 75% of costs have been analysed as a number of 'costs' are in fact negative



- The impact of implementing changes to the attribution methodologies as recommended by Analysys would be to reduce the FACs by 20% (21% for P313, 28% for P314 and 17% for P315) , with changes to Marketing & Sales attributions accounting for 80% of this impact

The costs that were viewed as not relevant to BT-OLO calls were very low in number and followed no set pattern, the main costs were:

- Compensation payments made by BT to customers against Customer Service Guarantee Scheme
- Concert SG&A (sales, general, admin) charges, which will no longer be relevant following the dissolution of the Concert joint venture
- Charges providing a provision for loss of revenue from auto-diallers to NTS calls (BT had already reversed this item)

Costs where Analysys recommend a change in the current attribution methodology fall into a few major categories, the most significant of which are marketing, publicity and sales:

- Marketing and Publicity costs are currently attributed direct to product where practical, however, a significant proportion of BT's spend in this area is not product specific and thus is allocated across all products based on revenues. The result of this is that products with a relatively high revenue, but which have only a very weak cost causal link e.g. BT-OLO NTS calls, pick up a disproportionate sum of marketing costs. The proposed solution is to attribute general marketing spend to products based on NET revenues (i.e. net of payments to OLOs) to BT instead of GROSS revenue. Spend on 'campaigns' that have only a very weak cost causal link to NTS products should not warrant any cost attribution. This is also the case for 'market research' (see Brand Finance report for details)
- Sales costs are currently attributed based on revenue (weighted by channel), however, there is only a weak cost causal link since, since BT-OLO NTS calls are not actively sold and so the recommendation is that attribution to products should be based on NET revenues to BT (to reflect weak cost causal link)
- Bad debt costs are currently attributed based on weighted revenue (separate weightings for call, connections and rentals). The current methodology assumes that all products generate an equal incidence of bad debt, which Analysys believe will not be the case. Analysys have recommended that attribution should ideally be direct from the billing system, however, if this proves to be impossible a sample based approach should be utilised

- Billing costs (running/development) are currently allocated by effort (time spent) to products where practical, although in general this is not possible, so the final apportionment is based on revenues. However, billing costs are not driven by revenue, but by the complexity of the billing process required to bill for each product. For example, connections and rental are generally easier to bill than calls (do not require a complex rating engine) and long / expensive calls are generally no more complex to bill than short, cheap local calls. Analysys have recommended that BT investigate the practicality of utilising a base derived from ‘billing events’ / CDRs instead of revenue and the impact that this change would have.
- PRS call barring costs are allocated direct to PRS products, however, the methodology employed by BT appears to also be allocating other call barring costs to PRS products. Analysys recommend this methodology is changed, so that only PRS call barring costs are attributed to PRS calls
- Talktime costs cover ‘translation’ costs between verbal and text communication provided by Royal National Institute for the Deaf. This is currently attributed to products by total revenue. Analysys recommend that volume (minutes) specific to this service is used as the base for this product instead as it more closely reflects the costs incurred

BT-OLO **Freephone** calls do not currently have any retail cost attributed to them in BT’s regulatory financial statements, although BT does incur costs ‘retailing’ these services for OLOs. BT were not able to provide a statement of retail costs for this service, because although the direction of traffic is BT to OLO, the interconnection payment is made from the OLO to BT. Therefore, in BT’s accounting separation system, such calls have for some years been classified as a wholesale product, and part of the Network regulatory business. As such, it has not attracted retail costs and thus determining a ‘retail uplift’ from BT’s FACs is not currently straightforward. During the review of the current attribution methodologies for other NTS calls Analysys also reviewed whether they were appropriate for Freephone calls and outlined a suitable attribution method.

It will not be possible to estimate with a high degree of confidence the impact of attributing retail costs to BT-OLO freephone calls until BT does a full accounting separation costing run in order to populate its regulatory Financial Statements with BT-OLO freephone calls treated as a retail product, or undertakes significant off-line analysis. This is due to the granular nature of many of the attribution methods that are based on activity surveys, or have costs for individual projects or buildings allocated on an individual basis, the requirement to utilise a ‘new base’ (e.g. marketing), or utilising a ‘general overhead’ base (which requires calculation of initial base first).

The general cost types for which Analysys believe it is appropriate for retail costs to be attributed to BT-OLO Freephone calls are:

- General marketing expenditure (as per other NTS calls)
- General sales costs (as per other NTS calls)
- Computing costs driven from 'YE' cost base
- General management costs, including 'Talktime'
- Accommodation costs driven from 'R' cost base
- Customer service
- Depreciation / other



# 1 Introduction

BT is required to sell NTS calls<sup>5</sup> on behalf of the terminating operator and pass on the retail revenue, net of a retention, to the terminating operator. These charges comprise a cost for the conveyance of calls on its network and a cost for associated retail services (e.g. billing, marketing, customer care) provided on behalf of the terminating operator. This second charge is known as the “**NTS retail uplift**” and is the focus of this report.

Oftel has proposed that the basis of this NTS retail uplift charge should be reasonably derived from the costs incurred by BT from selling BT-OLO<sup>6</sup> NTS calls. Oftel has further proposed that the NTS retail uplift be controlled using an RPI-X charge control for four years, moving from the retail uplift currently in effect to a system of ‘target year’ charges based on costs calculated using **Fully Allocated Costs (FAC)**. It was initially intended that these ‘target year’ costs be forecast based on the FAC attribution for BT-OLO NTS calls in BT’s 2001/2 regulatory financial statements. However, the 2002/3 financial statements were released during the course of the review, and so it is expected that the 2002/3 costs will be used as the basis of the forecast.

It is, therefore, important that the costs attributed to BT-OLO NTS calls in BT’s financial statements reflect the relevant costs incurred in retailing these calls. Oftel has, therefore, commissioned Analysys to **review the attribution methodologies used for retail costs relevant to the NTS retail uplift**.<sup>7</sup> The key aims of this review of attribution methodologies is to:

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<sup>5</sup> NTS calls refer to special service numbers, including freephone. Local rate (e.g. 0845), national rate (e.g. 0870) and premium rate services (e.g.090 and 091)

<sup>6</sup> BT-OLO NTS calls refer to NTS calls which are originated by BT and terminated by Other Licensed Operators (OLOs) (Communication Providers)

<sup>7</sup> Review is of 2001/02 attribution methodologies. Any recommended changes in attribution methodology is expected to be applied to the 2002/03 costs in order to forecast target year costs

- review attribution methodologies used by BT in its 2001/2 regulatory financial statements against the regulatory accounting principles (RAPs) established by OfTel, the most relevant being **cost causality**. This includes reviewing whether the cost in question is relevant to the retailing of NTS calls (if not, no costs should be attributed) and subsequently reviewing the attribution methodology used
- where the attribution methodology currently employed does not appear to be appropriate (or an alternative may be better), propose clearly specified alternative methodologies
- assess the impact on retail uplift of any alternative attribution method if applied by BT.

Analysys has undertaken its review of retail cost attribution methodologies based on BT's regulatory accounting principles, the most important being the principle of cost causality. Cost causality is a necessary precondition for assessing what might be an appropriate cost attribution methodology. If no cost causality is considered to exist then there should be no cost attributed.

In order to help with this exercise, Analysys has commissioned Brand Finance to assist with the review of marketing and sales costs relevant to the retail uplift. The full results (and explanations) of the work undertaken by Brand Finance are contained in a separate report, with summaries of Brand Finance's findings contained in the relevant section of this report.

BT currently classifies costs by operating unit (OU), which is the line of business that incurs the cost, and 'F8' code, which provides a code/description of the cost. A single F8 code may be relevant to a number of OUs. The analysis has been conducted at the individual cost level (a unique combination of F8 code and OU code), which can be cross-referenced with BT's current attribution methodologies provided in the detailed attribution methodologies (DAM) document produced by BT.

Two versions of this report have been produced; a confidential version supplied to OfTel containing actual cost information and a non-confidential version where costs are assigned to a number of 'bands'. The bands used are:

- >5% of total cost for product (e.g. P313, 314, 315)
- 1-5% of total cost for product (e.g. P313, 314, 315)
- 0.1-1% of total cost for product (e.g. P313, 314, 315)
- <0.1% of total cost for product (e.g. P313, 314, 315)

The banding is intended to give the an indication of the scale of any particular cost, without revealing confidential information on BT's costs by activity / category.

In undertaking this review, Analysys has analysed costs to two levels of detail:

- Detailed analysis of all costs over ~1% of total costs attributed to retail uplift for NTS calls (39 separate costs), which account for 55% of the total operating costs allocated to the retail uplift. This detailed review included a review of the attribution methodologies in the 2001/2 DAM,<sup>8</sup> a review of the working documents used by BT to calculate the actual attribution (including spreadsheets used to calculate each base, input material to these calculations, such as survey outputs, cost and revenue categories, offline calculations etc.) and a series of meetings/discussions with BT where clarification, or justification of these calculations was required. This was to ensure that Analysys had a complete understanding of which activity was responsible for each of these costs, and could reach an informed decision as to whether this cost was caused by NTS calls and determine whether the current attribution methodology was appropriate (or not).
- A total of 61 operating cost items were initially analysed at a less detailed level, with selected items analysed in full, as described above. Initial analysis was based on information provided in the DAM, cost data provided by BT and relevant calculations/methodologies provided by BT (a number of the attribution methodologies employed were identical or similar to those used for larger cost items). Specific cost items were then raised with BT in more detail (as described above), where the initial data provided was insufficient, or required justification. This meant that over 70% of all operating costs attributed to the retail uplift have been analysed.

The remaining 29% of costs have not been analysed, since there are several thousand different cost items (F8/OU combinations), each of which is small (less than 0.1% of total costs). It is possible that some of the unanalysed costs will, in fact, be using an inappropriate attribution methodology, or not in fact be relevant to NTS calls at all. However, Analysys is of the opinion

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Draft detailed version (not in public domain). 2002/03 DAM (<http://www.btplc.com/Corporateinformation/Regulatory/Financialstatements/Regulatoryfinancialstatements2003.htm>) also consulted as appropriate

that the value of costs involved will be small and thus the impact on retail uplift will be negligible (a few percent at most). The reasons the impact will be small are:

- only 29% of costs have not been analysed. A very significant proportion (>10%, i.e. over one third of these costs) will share an attribution methodology with one of the 100 analysed costs, and so any changes recommended will in fact flow through to a significant proportion of these unanalysed costs
- cost is spread over a large number of different (small) cost items and attribution methodologies. A large number of attribution methodologies would need to be inappropriate to make a significant impact
- attribution methodologies are reviewed as part of BT's audit process; any systematic errors should be uncovered
- impact of any inappropriate attribution methodologies is likely to be small (given overall size of costs)

Unless specifically stated otherwise Analysys is of the opinion that all attribution methodologies should treat all BT-OLO NTS call types, i.e. special local rate, special national rate, PRS in an identical manner, since the costs are equally relevant to all products. This is consistent with BT's current attribution methodologies. There are a small number of exceptions to this rule, where a cost relates specifically to one type of call (e.g. PRS call barring).

In BT's regulatory financial statements, no retail cost is attributed to BT-OLO **Freephone** calls, although BT does incur costs in 'retailing' these services for OLOs. BT was not able to provide a statement of retail costs for this service because, although the direction of traffic is BT to OLO, the interconnection payment is made from the OLO to BT. Therefore, in BT's accounting separation system, such calls have for some years been classified as a wholesale product, and part of the network regulatory business. As such, it has not attracted retail costs, and so determination of a 'retail uplift' from BT's FACs is not currently straightforward. During the review of the current attribution methodologies for other NTS calls, Analysys also considered whether they were appropriate for Freephone calls and what a suitable attribution method would be.

This report contains a summary of the results of this study, followed by a chapter for each individual cost sector (e.g. marketing and sales, finance and billing etc.). A section follows this on Freephone calls, which currently have no retail costs attributed and then there is a review of capital employed allocated to the retail uplift. Annex A provides detailed breakdowns of the costs



allocated to retail NTS calls; Annex B provides a review of the attribution methods used for minor costs; and Annex C is a copy of Brand Finance's report.



## 2 Guiding principals of cost attribution

Analysys has reviewed retail cost attribution methodologies based on BT's Regulatory Accounting Principals (RAPs), the most significant of which is cost causality, in this case. The eight RAPs under which BT's regulatory accounts are prepared are:

- Principle 1 – Priority
- Principle 2 – Definitions
- Principle 3 – Cost causality
- Principle 4 – Objectivity
- Principle 5 – Consistency of treatment
- Principle 6 – Use of UK GAAP
- Principle 7 – Transparency
- Principle 8 – Sampling.

The review by Analysys has focused on the third of these principles – cost causality – which contains the following statement:

*“Revenue (including transfer charges), costs (including transfer charges), assets and liabilities shall be attributed to cost components, services and businesses or disaggregated businesses in accordance with the activities which cause the revenues to be earned or costs to be incurred or the assets to be acquired or liabilities to be incurred.*

*Where it is not possible to attribute revenues, costs, assets and liabilities in accordance with the preceding paragraph, the attribution shall be such as to present fairly the revenues, costs, assets and liabilities accounted for in the financial statement for each business as disaggregated, and to present fairly a comparison between the businesses as disaggregated.”*

The interpretation of the above statement used through this report is that Paragraph 2 applies where it is not possible to attribute revenues, costs, assets and liabilities in accordance with the first paragraph, but that cost causality must still exist for Paragraph 2 to be applied. This might be the case where some form of indirect or implicit cost causality can be inferred from the activities being undertaken, but where it is not possible to determine a direct cost causal link under Paragraph 1.

Analysys believes that this approach is consistent with the principals put forward in BT's 2001/2 DAM document, namely:

*“The principle of cost causality requires costs (revenues, assets and liabilities) to be allocated or apportioned to products or components in a way that reflects the way that products cause or drive the costs to be incurred (or revenues to be earned or assets to be acquired or liabilities to be incurred).”*

## 3 Summary of results of analysis

### 3.1 Costs analysed

A total of 71% of the operating costs<sup>9</sup> comprising the retail NTS uplift have been analysed in the course of producing this report. Two levels of detail have been used in this analysis:

- Detailed analysis based on the attribution methodologies in the DAM and a detailed review of the individual working documents used by BT to calculate the actual attribution (e.g. spreadsheets, notes, supporting documentation, outputs from surveys, employees by function etc.). This analysis has been supplemented with discussions with BT to ensure that the DAM and working documents were correctly interpreted and the rationale for each attribution methodology was understood and to provide an opportunity to challenge the current attribution method where it did not appear appropriate. This detailed analysis was conducted for each individual operating cost where the attribution to retail OLO NTS call was over 1% of total retail costs for BT-OLO NTS calls (39 separate costs) – these costs account for 55% of the total attributed cost.
- High-level analysis based on the attribution methodologies in the DAM, data provided as part of the detailed analysis (e.g. same attribution methodology employed), summary cost information provided by BT and discussions with BT on key themes (e.g. systematic use of certain attribution methodologies). Specific queries on items of concern were then raised with BT and a response/explanation provided, including provision of internal working documents (as per detailed analysis described above). The threshold for this analysis varied by sector,

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<sup>9</sup>

Sum of costs allocated to retail NTS calls (products P313, P314, P315 – local, national and premium rate services)

but was generally approximately 0.2% of total retail costs for BT-OLO NTS calls, resulting in these costs accounting for a further 16% (61 separate costs) of total attributed costs.

	<i>P313 – Lo-call</i>	<i>P314 – National call</i>	<i>P315 – Premium rate</i>
Analysed in detail	56%	56%	54%
Other analysed	15%	16%	15%
Total analysed	71%	72%	69%
Operating costs			

**Exhibit 3.1:** *Proportion of costs analysed [Source: Analysys / BT]*

If costs are considered as *absolute* values, i.e. treating negative costs as positive, then the proportion of costs analysed increases to 75%. Negative costs occur in part as a result of cost transfers, which are generally offset versus other costs (see costs transfers section for further information).

	<i>P313 – Lo-call</i>	<i>P314 – National call</i>	<i>P315 – Premium rate</i>
Analysed in detail	62%	63%	61%
Other analysed	14%	14%	13%
Total analysed	76%	77%	75%

**Exhibit 3.2:** *Proportion of absolute costs analysed [Source: Analysys / BT]*

The remaining 29% of costs (25% of absolute costs) have not been analysed individually, since there are several thousand different cost items (F8/OU combinations), each of which is very small (<0.1% of total costs). It is possible (probable) that some of the unanalysed costs will, in fact, be using an inappropriate attribution methodology, or not be relevant to NTS calls at all. However, Analysys is of the opinion that the value of costs involved will be small, and so the impact on retail uplift will be negligible (a few percent at most). The reasons for this are as follows:

- Only 29% of costs have not been analysed. A very significant proportion (at least 10% i.e. one third of these costs) of these will share an attribution methodology with one of the 100 analysed costs and so any changes recommended will in fact flow through to a significant proportion of these unanalysed costs.

- Cost is spread over a large number of different (small) cost items and attribution methodologies. A large number of attribution methodologies would need to be inappropriate to make a significant impact.
- Attribution methodologies are reviewed as part of BT's audit process; any systematic errors should be uncovered.

### 3.2 Alternative attribution methodologies

Following the analysis outlined above and explained in detail in the following sections, each individual operating cost (there are several thousand) that makes a contribution to retail NTS costs could be allocated to one of four categories:

- cost attributed to BT-OLO NTS calls is generated by BT-OLO NTS calls (cost causal) and attribution methodology employed is appropriate, based on principles of cost causality (RAPs)
- cost is caused by BT-OLO NTS calls, but attribution methodology employed does not appear appropriate, or alternative methodology is more appropriate, based on principles of cost causality (RAPs)
- cost does not appear to be caused by BT-OLO NTS calls and so should not affect retail uplift, i.e. currently the cost is attributed to BT-OLO NTS calls and the Analysys view, based on principles of cost causality (regulatory accounting principals), is that it should not be
- cost has not been analysed (generally under 0.2% of total costs), since it is not practical to analyse every cost (many are very small).

As can be seen in the table below, the proportion of costs allocated to each BT-OLO NTS product where the attribution methodology was deemed to be inappropriate, or the cost itself was not seen as relevant to NTS calls, was significant.

	<i>P313 – Lo-call</i>	<i>P314 – National call</i>	<i>P315 – Premium rate</i>
Current method appropriate	19%	19%	16%
Alternative method recommended	47%	48%	50%
Cost not relevant to retail NTS	5%	6%	3%
Cost not analysed	29%	28%	31%

**Exhibit 3.3:** Summary of suitability of current attribution methodology [Source: Analysys / BT]

The table can be restated in absolute terms to account for the impact of negative costs.

	<i>P313 – Lo-call</i>	<i>P314 – National call</i>	<i>P315 – Premium rate</i>
Current method appropriate	47%	46%	43%
Alternative method recommended	27%	28%	29%
Cost not relevant to retail NTS	3%	3%	2%
Cost not analysed	24%	23%	26%

**Exhibit 3.4:** Summary of suitability of current attribution methodology (**absolute costs**) [Source: Analysys / BT]

As can be seen from the tables above, in the vast majority of cases Analysys took the view that the costs in question should be allocated to NTS services. The only costs where it was felt it was not appropriate for allocation to BT-OLO NTS calls to occur were (see individual sections for detailed explanation):

- compensation payments made by BT to customers against Customer Service Guarantee Scheme (SC 209631 & ST 209631) – **total impact 0.1-1% of total costs**
- Concert SG&A charges (NG 234501) – **total impact 1-5% of total costs**
- auto-dialler charges – (M 201114) – **total impact 1-5% of total costs**
- market research – (M 207160) – **total impact 0.1-1% of total costs**

More significant are the number of cost items where it is appropriate for costs (or a portion of the costs) to be allocated to BT-OLO NTS calls, but Analysys has reservations about the current



methodology used and has recommended that an alternative approach is adopted. These costs fall into a series of broad categories:

- marketing/publicity & sales – attribution to products to be via net revenue – **current costs >5% of total costs**
- bad debt – attribution to account for varying incidence of bad debt by product – **current costs >5% of total costs**
- PRS call barring – review final allocation of costs (not all relevant to PRS call barring) – **current costs >5% of total costs**
- Talktime – attribution to products by volume (minutes) instead of revenue – **current costs 1-5% of total costs**
- billing costs (running/development) – investigate using a base derived from ‘billing events’/CDRs instead of revenue – **current costs >5% of total costs**

The remainder of costs reviewed are appropriate to BT-OLO NTS costs and are, in Analysys’s view, using an appropriate attribution methodology, within the realms of practicality.

### 3.3 Impact analysis

If all the Analysys recommendations were accepted, the ‘bottom line’ impact (i.e. the change in fully allocated costs (FAC) on which the ‘target’ year retail uplift will be based) will be a reduction of approximately 20% (approximately 80% of this impact results from changes to Marketing & Sales attributions). The changes to the FAC when compared to BT’s 2001/2 regulatory financial statements are as a result of changes recommended to the attribution methodology of a number of cost items and the exclusion of a small number of costs that were previously apportioned to retail BT-OLO NTS calls. The rationales for the change in each individual cost are contained in the remaining sections of this report. The impact of these changes is summarised in the table below.

The majority of the proposed changes to attribution methodologies involve the creation of a new ‘base’ for the allocation, using data that is not currently captured by BT. As a result of this, it is not possible to provide a precise estimate of the impact of these changes, and so the calculation of impact is currently based on a number of rough estimates intended to provide an indication of the

scale of any change rather than a precise calculation. The assumptions used to generate the figures presented below are described in the ‘impact analysis’ section of each main chapter.

	<i>P313 – Lo-call</i>	<i>P314 – National call</i>	<i>P315 – Premium rate</i>
Alternative method proposed	47%	48%	50%
Cost not relevant to retail NTS	5%	6%	3%
Total FAC			
Total impact on FAC of revising attribution methodology	-18.5%	-26.7%	-16.7%

**Exhibit 3.5:** *Impact on fully allocated costs [Source: Analysys / BT]*

	<i>P313 – Lo-call</i>	<i>P314 – National call</i>	<i>P315 – Premium rate</i>
Marketing and sales	<-5%	<-5%	<-5%
Finance and billing	0	0	1-5%
Computing	0.1-1%	-0.1 to -1%	-0.1 to -1%
General management and other	-1% to -5%	-0.1 to -1%	-1% to -5%
Accommodation	0	0	0
Customer Service	0.1-1%	-0.1 to -1%	-1% to -5%
Depreciation	0	0	0
Planning and development	0	0	0
General support	0	0	-0.1 to -1%
Other	-1% to -5%	-1% to -5%	-1% to -5%
<b>Total</b>	<b>-18.5%</b>	<b>-26.7%</b>	<b>-16.7%</b>

**Exhibit 3.6:** *Impact analysis – sector summary: Impact on costs by sector of revising attribution methodologies [Source: Analysys]*

## 4 Marketing and sales

Marketing and sales is currently the largest of all the sectors contributing to retail BT-OLO NTS costs, with the largest cost items unsurprisingly resulting from publicity and marketing. The largest six cost items have been analysed in detail. This analysis consisted of a review of the working documents used by BT to calculate the actual attribution (including spreadsheets used to calculate each base, input material to these calculations, such as survey outputs, cost and revenue categories, offline calculations etc.) and a series of meetings/discussions with BT where clarification, or justification of these calculations was required. This was to ensure that Analysys had a complete understanding of which activity was responsible for each of these costs, and could reach an informed decision as to whether this cost was caused by NTS calls and determine whether the current attribution methodology was appropriate (or not).

A further 10 cost items have been analysed at a higher level, with selected items analysed in full, as described above. Initial analysis was based on information provided in the DAM, cost data provided by BT and relevant calculations/methodologies provided by BT (a number of the attribution methodologies employed were identical or similar to those used for larger cost items). Specific cost items were then raised with BT in more detail (as described above), where the initial data provided was insufficient, or required justification.

<i>OUC</i>	<i>F8</i>	<i>Description</i>	<i>P313 – Lo-call (GBP000s)</i>	<i>P314 – National call (GBP000s)</i>	<i>P315 – Premium rate (GBP000s)</i>	<i>Total (GBP000s)</i>
MY	207172	Other publicity	>5%	>5%	1-5%	>5%
MBC	153152	Sales support	<0.1%	<0.1%	>5%	1-5%
MK	153113	Marketing services	>5%	1-5%	1-5%	1-5%
M	207172	Other publicity	1-5%	1-5%	1-5%	1-5%
MBPA	153135	Selling solutions	<0.1%	<0.1%	1-5%	0.1-1%
MB	153134	Selling solutions	1-5%	1-5%	0.1-1%	0.1-1%
<i>Other analysed</i>			>5%	>5%	1-5%	1-5%
<i>Unanalysed</i>			1-5%	1-5%	1-5%	1-5%
<b>Total</b>						
<b>Proportion analysed</b>			<b>90%</b>	<b>90%</b>	<b>96%</b>	<b>92%</b>

**Exhibit 4.1:** Marketing and sales operating costs [Source: Analysys/BT]

A full breakdown of all costs greater than 0.1% of total costs is included in Annex A. A brief overview of each major cost item (>1% of total costs) and a review of the attribution methodology employed is provided below.

#### 4.1 Attribution methodology revised

Analysys has been assisted by Brand Finance in its analysis of marketing and sales costs. Brand Finance has analysed the four largest cost categories, namely:

- MY 207172, Consumer division – other publicity
- MBC 153152, Brands distribution sector – sales support
- MK 153113, Small and medium-sized enterprises – marketing services
- M 207172, BT Retail – other publicity.

Full details of the results of Brand Finance’s analysis are included in their separate report, which should be read in conjunction with the Analysys review. A summary of the main findings is provided in the section below.

Analysys provided a review of the remaining cost items of more than 0.3% of total cost within this section, comprising a detailed review of the two other cost items of more than 1% of total cost and a higher-level review of other costs. Analysys also provided a review of MBC 153152, since the base created to allocate the costs to products for this item is used in a significant number of other smaller cost items in marketing and sales, general management and general support sectors.

## **4.2 Brand Finance review**

This section provides a very brief high level summary of the findings of Brand Finance’s report and resulting changes recommended to existing attribution methodologies. Please refer to Brand Finance’s report for a description of the rationale for these changes and more detailed explanation of these changes.

### **4.2.1 MY 207172 (Consumer division – other publicity)**

OU MY relates to marketing costs which BT categorises as “publicity”. This principally includes promotional activity, whether through mass media, direct marketing or other methods, targeted at consumers specifically, as opposed to businesses (see OU M below).

Brand Finance concluded that across the campaigns that they reviewed there was a weak cost causal link between general promotion of the BT brand and NTS calls and thus some cost attribution was warranted, however, the current attribution methodology did not reflect the weak nature of this cost causal link and should be altered. Brand Finance proposed that the current attribution methodology, which was based on GROSS revenues should be adjusted to be based on NET revenues (to BT) instead.

Additionally Brand Finance concluded that for other campaigns, such as those addressing a range of products, market research, reseller and reconnection campaigns any cost causal link to BT-OLO NTS calls was too weak to warrant any cost attribution.

These changes will clearly lead to a very significant reduction in costs attributed to BT-OLO NTS calls (see Impact Assessment), which Brand Finance feel better reflects the weak cost causal relationship that exists.

#### **4.2.2 MBC 153152 (Brands Distribution Sector – Sales Support)**

This cost has also been reviewed by Analysys and is addressed later in this section. The conclusions drawn by Brand Finance and Analysys are consistent.

#### **4.2.3 MK 153113 (Small & Medium Enterprises – Provide Marketing Services)**

These costs relate to a sales force which specifically targets SME customers. Its activities are assumed to be those typical of a proactive sales force: engaging with current and prospective customers in order to generate new business.

Brand Finance concluded that any cost causal link between activities of the SME sales force and BT-OLO NTS calls would be at best a weak, indirect link and therefore the current attribution methodology (based on BT gross revenues) would be inappropriate. Brand Finance have further concluded that after their review of sales force activity the cost causal link to BT-OLO NTS calls appears too weak to warrant any cost attribution. This may change in the future, in which case attribution should be based on NET revenues to BT to reflect the weak cost causal link.

This change will clearly lead to a very significant reduction in costs attributed to BT-OLO NTS calls (see Impact Assessment), which Brand Finance feel better reflects the weak cost causal relationship that exists.

#### **4.2.4 M 207172 (BT Retail – other publicity)**

OU M relates to publicity costs targeted at businesses specifically, as opposed to consumers (see OU MY above).

Brand Finance have concluded that they do not believe that cost causality exists between the majority of the 2001/02 business publicity expenditure incurred and BT-OLO NTS call products. Where it is considered to exist, the sales incentive programme, it is also considered too weak to warrant cost attribution.

Brand Finance therefore concluded that the use of channel revenues as a cost driver (current attribution methodology) will attribute a disproportionate amount of business publicity costs to BT-OLO NTS call products in relation to the likely strength of the indirect cost causal link with BT-OLO NTS products (where this is considered to exist at all).

Brand Finance have therefore proposed that any cost attribution to BT-OLO NTS products should be based on NET revenues (instead of GROSS channel revenues).

This change will clearly lead to a very significant reduction in costs attributed to BT-OLO NTS calls (see Impact Assessment), which Brand Finance feel better reflects the weak cost causal relationship that exists.

### **4.3 Analysys review**

Details of all cost items analysed where the attribution methodology does not appear to be fully appropriate are provided below.

#### **4.3.1 MBC 153152 (Brands Distribution Sector – Sales Support)**

##### *Activity*

This cost relates to the management of customer contact and handling of orders, specifically, in this case, service operatives dealing with requests for PRS call barring to be added to customers' accounts.

### *Cost causality*

The justification for attributing these costs was raised with BT. Its response was that the specific costs of implementing PRS call barring are needed to recover from the call types that caused the cost in the first place, i.e. if there were no PRS calls there would be no need for PRS call barring. These are costs that are not recovered via activation or rental charges (BT makes no charge for this service).

The cost causality argument set out by BT above does not appear to be unreasonable, but the counter argument would be that the retail uplift is to cover BT's costs of retailing NTS services on behalf of OLOs and that call barring is not part of this service (would the service provider want call barring to be provided?) and is instead a general service provided by BT to improve customer satisfaction and minimise bad debt.

On balance, Analysys feels that it is reasonable for BT to recover costs relating to PRS call barring from PRS calls, since they are the primary cause of the need for call barring (BT does not recover costs directly from customers requesting call barring) and so are cost causal. No costs are allocated to either local or national BT-OLO NTS calls, since they do not require call barring.

### *Description of attribution methodology*

Costs are allocated based on activity data collated via BT's Orderline system (logs reason for call), weighted by appropriate surveyed handling times. The Orderline system provides a direct link to the product from the reason for the initial call, i.e. all calls requesting PRS call barring are logged as such and then costs allocated to PRS calls as appropriate.

### *Review of attribution methodology*

Analysys has reviewed the output from Orderline used as a feed into the calculation of cost to be attributed to PRS calls and raised a number of concerns with the actual calculation used in practice by BT, since it appeared to be allocating a number of call barring costs to PRS calls that were not relevant.



Analysys's concern related to the final allocation to PRS services. All customer service time/cost recorded as a particular code had been reallocated to PRS, but the data provided by BT indicated a number of additional services categorised under this code that are not related to PRS services, namely:

- international and PRS call barring
- incoming calls barred – first line
- outgoing calls barred – first line
- outgoing calls barred – with 999 – first line
- select service call barring.

Discussions with BT confirmed that there was indeed a minor error in the calculation that resulted in costs attributed to PRS services being overstated by approximately 20%. A more detailed set of 'sub-codes' exist which will enable costs to be broken out into the different types of call barring.

### *Recommendation*

Analysys recommends that the existing attribution methodology be adjusted to ensure that only costs resultant from requests for PRS call barring are allocated to NTS calls. This should be a straight-forward change for BT to implement.

It is especially important that this methodology is consistent with cost causality and does not allocate costs for activity that is not relevant to PRS calls to PRS costs, since it is used in a significant number of other cost items, for example:

- marketing and sales – MBPA 153135
- marketing and sales – MBB 153135
- general management – MBB 109650
- general management – MBPA 109001
- general management – MBC 109001
- general support – MBC 203621

#### **4.3.2 MBPA 153135 (customer operations – selling solutions)**

See above discussion on PRS call barring costs, MBC 153152.

#### **4.3.3 MYS 153113 (marketing operations and sales – marketing services)**

##### *Activity*

Costs incurred are as a result of computers used in publicity campaigns to residential customers (i.e. support for publicity campaigns).

##### *Cost causality*

The cost causality argument is in practice identical to the argument set out by Brand Finance regarding residential publicity costs (MY 207172). Where the activity relates to general promotion of the BT brand and non-product specific campaigns, cost causality does exist, although it is indirect or weak.

##### *Description of attribution methodology*

Three types of allocation are used:

- direct – can be apportioned directly to single product
- group of products – allocated to group of products, existing base (for that group of products) is then used to allocate to products
- general – cannot be allocated directly to specific product or group of products, so allocated pro-rata to revenues.

Only the third of these approaches is relevant to BT-OLO NTS calls, since there is no allocation direct to NTS calls, or to groups of products including NTS calls.

*Review of attribution methodology*

Where costs can be attributed directly to a single product or group of products, then costs are directly linked to the products causing these costs to occur, providing a very strong cost causal link (not relevant to NTS products). Where this is not practical and the attribution to products is based on revenues, then the cost causality link to products is lost and as such products, which have only a weak cost causal, may be allocated a disproportionate quantity of marketing costs. This is consistent with the marketing issues highlighted by Brand Finance in its report and summarised above.

*Recommendation*

The proposal suggested by Brand Finance would be to allocate general marketing costs (where they are applicable to NTS calls) on NET revenues to BT (instead of GROSS). The same attribution methodology should be employed for this cost item.

**4.3.4 MYS 207187 (marketing operations and sales – agency staff costs)**

See MYS 153113 – same method and issues.

**4.3.5 MYS1 207187, 153113 (marketing operations and sales – marketing services)***Activity*

The cost is for telemarketing/sales activity from BT to retain and win business from existing and new customers. This can be relevant to a particular product (e.g. select services, broadband service), or more general in nature.

### *Cost causality*

Where the reason for a call can be directly linked to a particular product, for example telemarketing of broadband, then there is a direct cost causal link. Where this is not the case and the telemarketing is more general in nature, a direct cost causal relationship does not exist and as with other publicity costs we are left with an indirect/weak cost causal link.

### *Description of attribution methodology*

The cost of the telemarketing/sales activity is attributed across activities/products based on call handling time survey and a database, which records reason for call or product ordered.

Where the cost can be apportioned direct to a particular product there is no need for further attribution. Where the cost cannot be attributed directly to a particular product, e.g. BT Together, then a base for that activity is applied.

### *Review of attribution methodology*

Analysis of actual attribution shows that approximately 55% of costs are attributed direct to a particular product (total of 30 products). The remaining 45% of costs are attributed using a range of 18 different bases, with approximately half of the remaining costs attributed utilising a BT together base (primarily geographic call revenue based) and the remainder using a variety of bases, the most significant being a residential billing base (mainly based on revenue).

As with the residential publicity costs discussed above, where revenue is used for the final apportionment then certain products, which have only a weak cost causal link, may be attributed substantial costs.

*Recommendation*

Analysys would recommend that the approach utilised should be as consistent as possible with the proposals outlined by Brand Finance and therefore propose the final allocation to products of this type of costs and should be based on net revenue to BT (instead of gross revenue).

**4.3.6 M 207160(BT Retail – market research)***Activity*

This covers the cost of market research activities undertaken by BT.

*Cost causality*

One of Brand Finance's conclusions (MY 207172 – other publicity costs) was that any cost causal link that may exist between customer research/surveys was too indirect or weak to warrant any cost attribution.

Service providers will conduct their own market research, so unless BT shares the results of its market research with OLOs/service providers it does not seem appropriate that they (OLOs/service providers) should be required to contribute to BT's costs in this respect, as they are not causing this cost to be incurred.

*Description of attribution methodology*

The apportionment is based on cost analysis of market research programmes, mapped direct to products where possible, or to groups where this is not possible. The final allocation from groups to products is based channel revenue.

For BT-OLO NTS calls there is no direct apportionment (all based on revenue).

### *Recommendation*

Analysys is of the opinion that these costs cannot be linked to NTS calls (linkage too weak/indirect) and therefore should not be attributed to NTS calls.

#### **4.3.7 MB 153134 (major business – selling solutions)**

##### *Activity*

These costs relate to the activities of the Major Business sales channel and include marketing and sales, general support, personnel, admin, supplies, transport and accommodation costs.

##### *Cost causality*

As discussed above in the Brand Finance section (MK 153113) a weak / indirect causal link exists to BT-OLO NTS products, since general BT sales effort (e.g. increasing number of connections, sale of call ‘packages’) will result in an increase of sales/usage of all call products, including BT-OLO NTS products, although the sales ‘effort’ will be primarily targeted at other products.

##### *Description of attribution methodology*

Activity analysis is used to breakdown costs of sales staff to customer groups/BT units based on surveys (snapshot). The costs within each group/BT unit are then apportioned to products on the basis of revenues (major business channel revenues in this case).

Allocation to BT unit is based on an activity survey so links costs (activities) to BT Units in an accurate manner (or as accurate as survey allows). A review of the calculation/survey shows that approximately 30% of sales time can be allocated direct to a product, or group of products not relevant to NTS products. The remaining 70% falls under ‘Retail’, with approximately half of this allocated direct to products, the remainder is attributed to retail products on the basis of revenues.

*Review of attribution methodology*

Where sales costs can be attributed directly to a product (or group of products) a clear cost causal link can be established. Where this is not possible and the final allocation from group (e.g. Retail) is based on revenues the allocation does not directly link costs to activities, since if BT is pushing sales (or usage) of a particular product (or putting little effort into another product) this will not be reflected in the base. For example a legacy product could have a relatively high revenue, but in actual fact incur little sales effort, as it is no longer being actively sold.

One attribution methodology that would avoid this issue would be to collect activity analysis down to an actual product level, which is currently only partially done by BT and would be likely to be very challenging in practice. An alternative would be to undertake more detailed survey work at the level of bundled packages, with final attribution to products by revenue (breaking out sales costs to each individual call type is difficult since they are not 'sold' individually – a breakdown could be estimated by BT, but would be very difficult to audit, so revenue may be only solution). In practice this will be very similar to the current methodology, with many bundled packages utilising a revenue base for final attribution.

*Recommendation*

Where costs cannot be attributed directly to a product, then utilising revenue for the final attribution is a practical, but not ideal method, since it has only a weak link to costs (e.g. BT sales staff will often be incentivised on revenue). Two alternative methodologies have been considered:

- increase level of granularity in survey
- make final attribution based on net revenues to BT

Due to the cost and complexity of increasing the granularity in the survey and the relatively low expected impact on costs Analysys do not recommend this approach.

Analysys are of the opinion that attributing costs based on net revenue would be the most appropriate solution, since this best reflects the weak cost causal link between sales effort and BT-OLO NTS calls, which are not a product that will be a primary sales objective. This is consistent with recommendations made by Brand Finance.

### **A.1.2 MAB 153113, MAB 207172 (Indirect channels)**

Attributes pay costs in indirect channels (for sales activity). Base for allocation to products derived from revenue weighted by channel (SME, major business, consumer, product).

Using revenue for final allocation of general sales is not ideal, since the linkage between revenue and costs is weak. A survey that could allocate time accurately by product would provide an alternative. Analysys recommend the methodology is adjusted in a consistent manner to other sales costs (see MB153134 for discussion) and is thus attributed based on net revenues.

### **A.1.3 MBG 153134 (Major business – selling solutions)**

Apportioned based on activity survey (of Major Business sales force) of time spent providing support for each BT units/channels. Allocation to products based on Major Business channel revenue.

Picks up portion of costs allocated to Retail. Allocation by product is based on revenue, in a similar manner to that described above. Analysys recommend the methodology is adjusted in a consistent manner to other sales costs (see MB153134 for discussion) and is thus attributed based on net revenues.

## **4.4 Impact analysis**

The most significant impact on this sector will come as a result of adopting Brand Finance's suggestion of utilising net revenues to drive the majority of attributions for marketing and sales costs.

BT have so far been unable to provide a statement of net revenues that is consistent with the aims of the proposed new attribution methodology, due to provisions/payments resulting from changes to BT-OLO NTS charges that have been backdated to previous years. Additionally there is a small circularity in this calculation in that changing the attribution methodology will change the 'retail uplift', which will in turn change the net revenues to BT (see below for Analysys view on



practicality of implementation). BT have therefore provided an estimate of the likely impact (off-line calculation).

BT have estimated that net revenue (revenue less POLO) accounts for 37% of revenue for P313, 15% for P314 and 1.4% for P315.

The majority of the campaigns reviewed by Brand Finance were found not to be relevant to NTS calls and so should warrant no cost attribution. The review was focused on the top 10 campaigns and so an exact total figure of the value of campaigns relevant to NTS calls is not available. The implementation of this recommended change will require BT to classify each of their campaigns as to whether it is (or isn't) relevant to NTS call according to the approach set out in Brand Finance's report. For the purpose of estimating the likely overall impact Analysys have assumed that 75% (conservative assumption) of the total campaign spend for consumer and business publicity is not relevant to NTS calls (see Brand Finance report for more detailed breakdown of campaigns).

Additionally market research costs (M 207160) are assumed to be no longer attributed to NTS calls and so create a minor impact. Correcting the calculation used in the PRS call barring base will also have a significant impact.

	<i>P313 – Lo-call (GBP000's)</i>	<i>P314 – National call (GBP000's)</i>	<i>P315 – Premium rate (GBP000's)</i>
Publicity/marketing (analysed by Brand Finance)	<-5%	<-5%	<-5%
Publicity/marketing (follow through of changes recommended by Brand Finance)	-1 to -5%	-1 to -5%	-1 to -5%
PRS call barring	0	0	-1 to -5%
Sales costs	<-5%	<-5%	-1 to -5%
<b>Total</b>	<b>&lt;-5%</b>	<b>&lt;-5%</b>	<b>-1 to -5%</b>

**Exhibit 4.2:** *Impact analysis – marketing and sales<sup>10</sup> [Source: Analysys]*

<sup>10</sup> Impact is shown as a proportion of total FACs for each product

#### 4.4.1 Net revenue circularity

Utilising net revenues to BT as part of attribution calculation introduces a circularity to the calculation, since net revenues will be impacted by the retail uplift.

If the changes to attribution methodologies recommended by Analysys and Brand Finance are adopted then the impact of Marketing and Sales costs on the retail uplift and thus on net revenues will in fact be small, so the circularity will have only a minor effect.

Analysys therefore recommend that the practical solution would therefore be to assume that marketing and sales costs have a zero contribution to the retail uplift when calculating a net revenue figure to be used in cost attribution calculations. This will lead to a slight under-estimate of real net revenues (and thus retail uplift), however, this impact will be small due to the significant reduction of marketing and sales costs attributed to NTS calls.

## 5 Finance and billing

Finance and billing is the second largest of all the sectors contributing to retail BT-OLO NTS expenses, with the bulk of the value being accounted for by a small number of very large items, primarily write-off of bad debt, bad debt provisions and operation of the billing process.

<i>OUC</i>	<i>F8</i>	<i>Description</i>	<i>P313 – Lo- call (GBP000s)</i>	<i>P314 – National call (GBP000s)</i>	<i>P315 – Premium rate (GBP000s)</i>	<i>Total (GBP000s)</i>
MFBSB	207352	Residential bad debt write off	>5%	>5%	>5%	>5%
MFSA	207351	Business bad debt write off	>5%	>5%	1-5%	>5%
MX	207372	Movement on bad debt provision	1-5%	1-5%	1-5%	1-5%
MFBSB	107311	Operate billing process	1-5%	1-5%	1-5%	1-5%
MFSA	107311	Operate billing process	1-5%	1-5%	0.1-1%	1-5%
MFSH	207323	Debt collection	0.1-1%	0.1-1%	1-5%	0.1-1%
MFBSB	207354	Other bad debt write off	(-1%)-(-5%)	(-1%)-(-5%)	<-5%	(-1%)-(-5%)
MFSA	207372	Movement on bad debt provision	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)
MFBSB	207353	Residential bad debt VAT relief	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)
MFSA	207353	Business bad debt VAT relief	(-1%)-(-5%)	0-(-1%)	(-1%)-(-5%)	0-(-1%)
MFSA	207354	Other bad debt write off	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)
MFBSB	207372	Movement on bad debt provision	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)
<i>Other analysed costs</i>			<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Unanalysed</i>			<i>1-5%</i>	<i>1-5%</i>	<i>1-5%</i>	<i>1-5%</i>
<b>Total</b>						
<b>Proportion analysed</b>			<b>89%</b>	<b>90%</b>	<b>90%</b>	<b>90%</b>

**Exhibit 5.1:** Finance & Billing operating costs [Source: Analysys/BT]

A full breakdown of all expenses of more than GBP100 000 is included in Annex A. A brief overview of each major cost item and a review of the attribution methodology employed is provided below.

## 5.1 Attribution methodology revised

### 5.1.1 MFSB 207352 (residential billing – bad debt write-offs)

#### *Activity*

This cost consists of residential bad debt (unpaid bills) written off by BT.

#### *Cost causality*

Bad debt (unpaid bills) is directly caused by all products that are billed to the end customer (i.e. all revenue-generating products), BT-OLO NTS calls are billed by BT, so there is direct cost causality between NTS calls and bad debt, although determining the proportion of bad debt caused by NTS products is not necessarily straightforward (discussed below).

#### *Description of attribution methodology*

Total residential bad debt is apportioned to products using normal billed product turnover, weighted for differing customer billing arrangements and bad debts policies. Weightings allow for differing bad debt between connections, rentals and calls, due to the different points in billing cycle that these are charged.

Allocation to products is pro rata to revenue, weighted for connections, rentals and calls (weighting is 136 for calls, 45 for rentals and 90 for connections). These different weightings are used to account for the point in the billing cycle that different product types are billed. The bad debt provision for residential customers is triggered on BT's systems when the invoice is 45 days old, so rentals, which are billed in advance, will have only 45 days of revenue at this point. Calls are billed in arrears, so the account against which an invoice is generated will have incurred 136

days of activity (quarterly billing period of 91 days plus 45 days bad debt policy). Connections are also invoiced in arrears, but can occur at any point during the quarter, so are assumed to occur in the middle of the quarter and thus have a weighting of 90 (45 days middle of billing period plus 45 days bad debt policy).

### *Review of attribution methodology*

The key to the validity of the current approach (i.e. cost causal link) is the assumption that bad debt does not vary significantly by product. If this is the case then a close link between revenues and costs (bad debt) exists and therefore allocating bad debt based on revenues is appropriate, as are the adjustments to account for different position in billing cycle of calls, connections and revenues, since this links the cost (loss of revenue as a result of bad debt) to products in a manner proportional to this cost.

During the analysis two concerns with this approach were discussed with BT:

- could bad debt data be directly taken from the billing system, therefore negating the need for an attribution methodology?
- is the assumption that bad debt does not vary significantly by product true? Is it possible that certain products (e.g. international calls, PRS calls) generate a higher incidence of bad debt than would be expected from allocating bad debt based on revenues?

BT's view was that it was not feasible/practical to use a direct feed to assess bad debt by product, since the manner in which the billing system and AS classify bad debt are quite different and thus would require substantial manipulation. Further the overall level of bad debt does not reside on the billing system itself and is generated as a result off-line analysis of the status of late payment accounts. Debts are only classified as 'bad' once a defined process is complete.

Analysys are of the opinion that it should be possible for an efficient operator to be able to identify total bad debt on the billing system, although some off-line analysis may be required this should not be especially onerous. Analysys does, however, accept that the way in which BT as a company captures bad debt costs (on the billing system) and the manner in which bad debt is classified under AS may be quite different and therefore require significant off-line analysis if bad debt based on FACs is attributed directly to products.

Analysys is not in a position to estimate the cost of changing BT's systems and the off-line analysis required to enable this 'direct allocation' to occur, however, we do not accept that it would be 'impossible', since it must be possible to match between the billing system and AS, and the bad debt (by bill) will be captured on the billing system i.e. the data does exist, but it is not currently possible to extract it in a useful manner/format. A trade-off must be made between the accuracy of the current attribution methodology and the cost involved in producing a more accurate solution.

In relation to certain products generating a higher incidence of bad debt BT agreed that this was certainly possible and that an attribution method that 'weighted' products according to their incidence of bad debt would have conceptual attractions, but felt that actually implementing such an attribution had two key difficulties:

- **Practicability:** any such method would require the selection of a representative sample of customer bills (both good and bad) on a regular basis. Considerable effort may be needed in order to identify the statistical confidence levels required, and the sample sizes that would support this. This would need to address issues of how frequently sampling should be undertaken, and the length of period from which a sample of bills should be taken, in order to be representative. Having identified the sample, a rigorous means of analysing the customer bills to the AS products would need to be developed – this may require inputs from other systems, or may in fact require a very granular analysis of billing information. Then, the approach would have to be both replicable on a reliable basis. All of this would need to fit into the AS reporting cycle.
- **Objectivity:** the approach (sampling, product mapping and analysis) would have to be sufficiently objective to stand up to audit scrutiny. Objectivity may be difficult to prove, since it is highly unlikely that a customer's bill would comprise (or even be dominated by) any one particular call type. Therefore, it would be difficult to "prove" that a bad debt is caused by a particular product or range of products. However, it may be possible to use statistical techniques to assess whether there was a correlation between the activity on certain products and the possibility of default. Such techniques would have to be rigorously developed to stand up to audit scrutiny – and it may be that product weightings could be estimated on a broad-brush basis, rather than precise weightings specific to each product.

Analysys is of the opinion that whilst it may be somewhat difficult, or time-consuming for BT to provide a measure to link incidence of bad debt to products it is certainly not impossible. Proving the link between unpaid bills (and thus bad debt) to products should also be possible, since in most cases it is the entire bill that is unpaid (or specific reason given for part payment) and so in most cases bad debt will be shared by all products on an unpaid bill. Analysys do not accept that it should be any more difficult to provide a sampling approach that stands up to audit scrutiny than the current survey based approaches used for many other cost items.

Analysys would expect that this sampling approach will show that bad debt does not vary significantly across products, but a small number of often 'high value' products (such as PRS or international calls) will show a significant variation. It may therefore be possible to restrict further sampling work (after initial sample) to these products.

### *Recommendation*

As noted above the key assumption on which the existing attribution methodology is based is that bad debt costs do not vary significantly by product (and thus attributing by revenue is appropriate). Analysys recommends that this key assumption should be tested by BT by analysing a statistically significant number of customer bills. If the results of this analysis are that there is indeed no significant variation in bad debt by product, then the existing methodology should be retained, since it is not worth expending significant money/effort to develop a new attribution methodology, which produces results that are not materially different to the existing methodology.

If the analysis shows that bad debt does in fact vary significantly by product (or by a small number of products), then a new attribution methodology is clearly required.

Ideally this would be to link bad debt on the billing system with bad debt on AS to allow bad debt to be identified by product. Analysys recommends that BT conduct a brief preliminary investigation into the costs (approximate scale) of providing an accurate match between bad debt and products. A view as to whether it is 'worthwhile' progressing this proposition can then be reached. A direct link between bad debt and products will also remove the need to weight bad debt for calls, rentals and connections.

If the cost of providing a direct link from BT's systems into bad debt by product is viewed as too expensive for the improvement in attribution methodology, then a sample-based approach should be adopted. Analysys expects that after a comprehensive initial sampling exercise is complete, further sampling need only focus on the (small) number of products where bad debt does in fact show a significant variance.

### 5.1.2 Further bad debt

An identical methodology is utilised for all other bad debt cost lines (business bad debt is weighted 42/87/133 for rentals/connections/calls due to 42 day bad debt policy for business bills). The cost items covered by this methodology are therefore:

- MFSA 207351 Business billing – Bad debt write off
- MX 207372 Central booking – Movement on bad debt provision
- MFSB 207354 Residential billing – Other bad debt write off
- MFSA 207372 Business billing – Movement on bad debt provision
- MFSB 207353 Residential billing – Bad debt VAT relief
- MFSA 207353 Business billing - Bad debt VAT relief
- MFSA 207354 Business billing – Other bad debt write off
- MFSB 207372 Residential billing – Movement on bad debt provision.

The issues are identical to those outlined above.

## 5.2 Existing attribution methodology appropriate

Details of all major cost items analysed (>1% of total costs) where the attribution methodology appears appropriate are provided below. Details of attribution methodology for minor costs are provided in Annex B.



### 5.2.1 MFSB 107311(residential billing – operate the billing process)

#### *Activity*

This code captures a range of costs related to the billing of residential customers, such as; managing bill production (diverts, suppressions, rejected invoices), direct debit activity, quality control, credit control, fraud/bad debt protection, order control, credit management and general support.

#### *Cost causality*

BT bills end customers for BT-OLO NTS calls and as such incurs a cost in operating the billing process and thus are directly cost causal. Although BT would incur costs for operating the billing process even if no NTS calls were made, BT-OLO NTS calls cause these costs to be incurred in exactly the same manner as other calls and so should share a proportion of the cost.

#### *Description of attribution methodology*

An initial survey is carried out to determine the time spent on the billing process for each function e.g. Credit Management, High Value Accounts & Invoice Control, this is then weighted by average pay in each function to attribute costs to each function. Each function then has an existing base (see below) applied to it to apportion costs from function to product and thus generate an overall base, with a small proportion of activities treated as an overhead on this base.

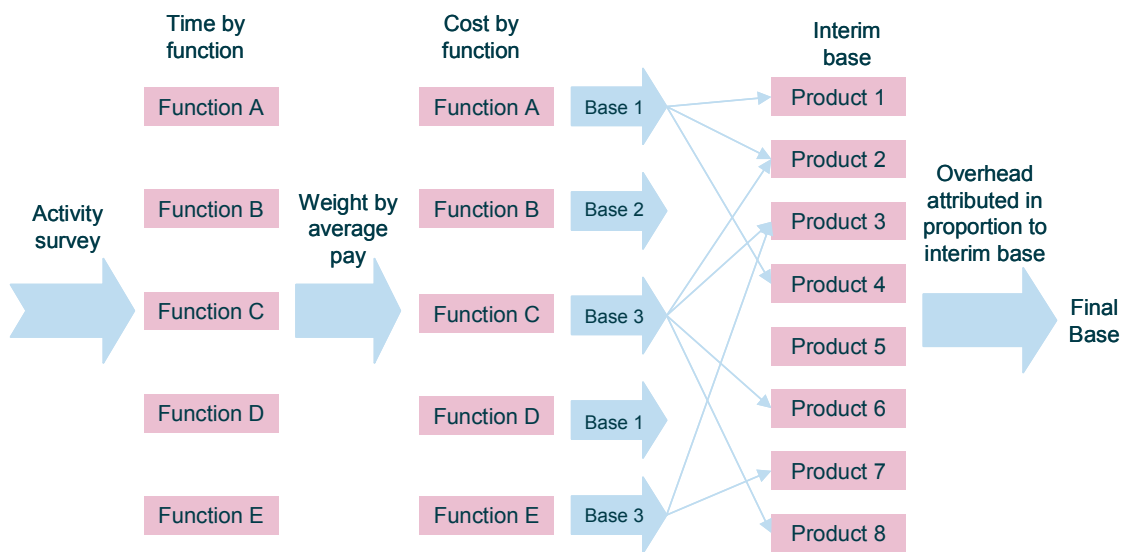
Six different generic types of base are utilised, namely:

- method 1 - allocate to products by effort where possible, revenue if not possible (diverts, suppressions, rejected invoices)
- method 2 - split residential / business and then allocate by residential / business revenue (direct debit, income integrity)
- method 3 - similar to method 2, but costs initially split of basis of FTEs (credit reference & control)

- method 4 - similar to method 1, but census sufficient to allocate costs i.e. final step not required (high value accounts, rejected charge inputs, order control)
- method 5 - as per bad debt (credit management)
- method 6 - previously apportioned costs.

Analysys have reviewed the output of the activity survey and further apportionment to products, which shows this base is in fact dominated by Credit Management, which accounts for >60% of the FTE costs. Credit management is allocated to products using the residential bad debt base (see above for description). This accounts for >80% of the costs allocated to PRS products.

The remaining cost by function is allocated to products using the most appropriate base available (or direct to product if possible). The only other significant costs allocated to NTS products are from set up/management of direct debits, where a residential revenue base is used and other miscellaneous costs that are treated as an overhead to the base and so closely reflect the Credit Management (bad debt) base.



**Exhibit 5.2:** Schematic of attribution methodology [Source: Analysys]

### *Review of attribution methodology*

Credit Management costs are not identified at a product level, since they are relevant to all products that are billed to end customers (credit management is relevant to the whole bill) and so an onward apportionment methodology is required to attribute costs to products.

Utilising a bad debt base for Credit Management does appear to be the most appropriate methodology as it links the cost of credit management to the cause (bad debt). In theory if there was no bad debt, there would be no need for credit management. It does not provide a direct link to products, however, to do this would require collection of activity data down to a product level, which is not applicable in this case, since the activity takes place at a 'total bill' level.

'Direct debits' are granted on the fixed fee price, however, Analysys feel it is appropriate that BT recovers costs on all products, since they are all cost causal (regardless of technicalities of direct debit set-up). Any changes would also have only a minor impact.

### *Recommendation*

Analysys recommend that no changes are made to the current attribution methodology. Although any changes to the **bad debt base** (discussed above – bad debt section) will have a follow through impact on this cost item, which BT should ensure is implemented.

## **5.2.2 MFSA 107311(Business billing – Operate the billing process)**

### *Activity*

This code captures a range of costs related to the billing of business customers in a similar manner to MFSB 107311 described above.

### *Description of attribution methodology*

The methodology employed is very similar in principal to the approach taken for residential billing. An initial survey is carried out to determine the time spent on billing process for each function e.g. Receipting, Customer Care, Credit Management and Private Circuits, this is then weighted by average pay in each function to attribute costs to each function. Each function then has an existing base applied to it to apportion costs from function to product and thus generate an overall base, with a small proportion of activities treated as an overhead on this base.

Where possible the costs are allocated directly to products (e.g. Private Circuits), where not possible an appropriate base is applied to allocate the cost from function to products (e.g. Openworld and Ignite have separate bases). The main functions to impact on NTS calls are credit management (business bad debt base), credit referrals (residential, SME and business revenue bases), receipting (residential and business revenue base), 'one bill' – Major Business (business revenue base) and customer care - calls (PSTN call revenue base).

### *Review of attribution methodology*

Where practical BT has attempted to link the costs by function as directly as possible to the activity generating this cost. Thus credit management costs are driven by a bad debt base (see discussion for Residential billing) and credit referrals/receipting are driven by the relevant revenue base (Analysys's view is that revenue is the most appropriate base for credit/receipting activity).

Customer care activity is initially split between rentals, calls (including discounts), payments and miscellaneous according to number of FTEs employed. Calls (relevant part to NTS services) are then driven by a call revenue base. Analysys's opinion is that this base should ideally be driven by a combination of call revenue and number of calls made, since both are likely to impact customer care requirements, utilising only a revenue base is likely to overestimate the weighting towards high value calls (increasing the number of calls is likely to lead to an increase in customer care requirements, even if the change in revenue is small). The overall impact on this cost base is likely to be very minimal, since customer care accounts for only a small proportion of this base and the proposed change would be relatively minor (adjustment, rather than wholesale change).

### *Recommendation*

Analysys recommend that no changes are made to the current attribution methodology, since the impact of potential changes will be minimal.

## 5.3 Impact analysis

The impact on this sector will be driven by any changes to the attribution of bad debt. The proposal by Analysys is to ideally make the necessary modifications to BT's systems to enable bad debt to be accurately matched to products, or if this is not possible (or too expensive) to link bad debt more directly to products as a result of a statistically significant sampling exercise.

Since this analysis has not been conducted it isn't possible to provide a robust calculation of the impact, as the conclusions are unknown. Analysys expect that the results will show that the incidence of bad debt is relatively uniform over most products (including NTS local and national rate), but can vary significantly for a small number of 'high value' products, such as international calls and PRS calls. The assumption used therefore is that bad debt attributed to calls is unchanged for local and national rate calls, but increases by 25%<sup>11</sup> for PRS calls. The impact is summarised below.

	<i>P313 – Lo-call (GBP000's)</i>	<i>P314 – National Call (GBP000's)</i>	<i>P315 – Premium rate (GBP000's)</i>
Bad debt	0	0	1-5%
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1-5%</b>

**Exhibit 5.3:** *Impact analysis – Finance & Billing [Source: Analysys]*

<sup>11</sup>

This is an Analysys estimate (conservative). Information supplied by BT indicates that there is a significant increase in bad debt for PRS calls, however, a reliable figure can not yet be extracted from this data.



## 6 Computing

Computing is the third largest of all the sectors contributing to retail BT-OLO NTS costs, with a significant proportion of the value being accounted for by costs which are offset versus internal cost transfer and so do not contribute to retail uplift and costs relating to Computing Partners (provide computing and development services to BT).

<i>OUC</i>	<i>F8</i>	<i>Description</i>	<i>P313 – Lo- call (GBP000's)</i>	<i>P314 – National Call (GBP000's)</i>	<i>P315 – Premium rate (GBP000's)</i>	<i>Total (GBP000's)</i>
S	247492	Computer operations	>5%	>5%	>5%	>5%
M	247492	Computer operations	1-5%	1-5%	1-5%	1-5%
YE	107482	Network support	1-5%	1-5%	1-5%	1-5%
MFSD	207413	R&D software	1-5%	1-5%	0.1-1%	1-5%
YE	207430	Software	1-5%	1-5%	0.1-1%	1-5%
<i>Other analysed</i>			<i>1-5%</i>	<i>1-5%</i>	<i>1-5%</i>	<i>1-5%</i>
<i>Unanalysed</i>			<i>1-5%</i>	<i>1-5%</i>	<i>1-5%</i>	<i>1-5%</i>
<b>Total</b>						
<b>Proportion analysed</b>			<b>87%</b>	<b>85%</b>	<b>87%</b>	<b>87%</b>

**Exhibit 6.1:** *Computing operating costs [Source: Analysys / BT]*

A full breakdown of all costs greater than 0.1% of total costs is included in Annex A. A brief overview of each major cost item (>1% of total costs) and a review of the attribution methodology employed is provided below. Cost items below 1% of total costs are reviewed in Annex B, unless their attribution methodology was viewed as being inappropriate in some way, in which case it is reviewed below.

## 6.1 Attribution methodology revised

### 6.1.1 MFSD 207413(Billing Development – Network Computing Support)

#### *Activity*

These costs relate to the billing development unit within BT. The major costs of this unit are:

- Building and occupation expenses
- Computers and equipment costs
- Computer maintenance and support
- Employee pay costs
- Research and development software expenditure

‘Development projects’ are undertaken to improve the BT billing process e.g. blue bill development, revenue assurance. Development projects are worked on by staff from this unit, which drives the cost of this unit.

#### *Cost causality*

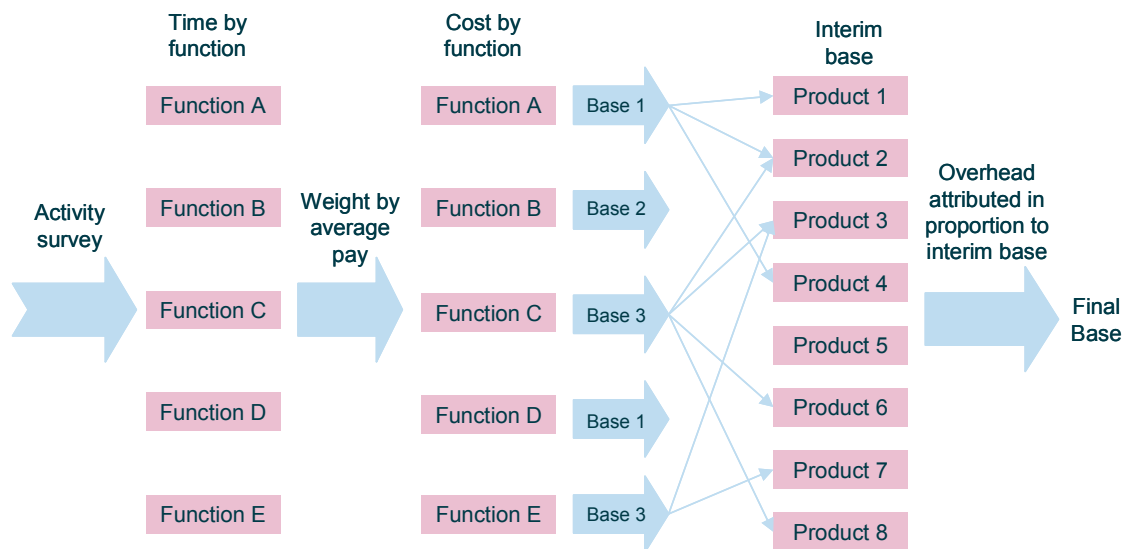
In order to improve the accuracy of its billing systems and keep pace with developments BT will incur costs resulting from development of their billing system. BT-OLO NTS calls are billed by BT utilising this system and so costs for billing development, which cannot be allocated directly to products, will in part be caused by NTS calls.

Billing developments to handle billing for products (or packages) that are not relevant to NTS calls, for example BT Together packages, are not caused by NTS calls and as such should not be attributed to BT-OLO NTS calls. For example expenditure on BT Together packages is driven by a desire to promote BT’s geographic calls (part of bundled package) and retain/win back customers. A BT Together customer will clearly make other calls types (including NTS), but it is only the geographic calls that are ‘causing’ this expenditure to be incurred.



### Description of attribution methodology

An initial survey is undertaken (period 10) to allocate the time spent on development projects/activities to particular activities e.g. Price Implementation, Revenue Assurance, Geneva (billing engine) etc., this is then weighted by average pay of the staff involved with the activity to attribute costs to each activity. Each activity then has an existing base applied to it to apportion costs from activity to product. These are then combined to create an overall interim base, with a proportion of activities treated as an overhead on this base to calculate the final base (i.e. in proportion to interim base). Overheads are costs that cannot be allocated directly to products.



**Exhibit 6.2:** Schematic of attribution methodology [Source: Analysys]

The two major attribution methods employed (accounting for over 70% of the total base) use a billing base and an overhead base (driven by interim base calculated), effectively meaning that the allocation is primarily driven by the billing base. This billing base is a weighted combination of residential and business revenue.

*Review of attribution methodology*

The concern Analysys has over this attribution methodology is that the link between costs incurred and the actual products driving these costs is not directly cost causal as a result of the utilisation of a revenue base for final apportionment to products. The difficulty and hence development work required to accurately bill for a given product does not necessarily clearly relate to revenue, for example ‘rentals’ and ‘connections’ are often relatively straight forward to bill and would not on their own account require a complex billing engine, but do account for a very significant proportion of revenue. ‘Calls’ tend to be more complex to bill, requiring a detailed rating engine as part of the billing system, additionally the cost of the call (and therefore revenue) has no direct impact on the complexity of billing for it.

There is not, however, an obvious, easy to implement alternative to utilising a revenue base. ‘Volume’ is unlikely to be appropriate, since it is difficult to generate a ‘common basis’ on which to express volumes (e.g. contrast a leased line versus a call minute). Although development activity could be split into broad types e.g. leased lines, fixed fee packages, variable call charges etc. and then an suitable ‘volume’ measure can do the onward attribution to products. Breaking down development work by broad categories may not be straightforward e.g. billing development for BT Together.

One potential alternative would be to use the number of ‘billing events’ e.g. CDRs (call data records) generated for each product on the billing system as the base to allocate billing system costs. The rationale being the greater number of ‘billing events’ the greater the cost to develop / support the billing system. There are two immediately obviously potential issues with this approach:

- BT may not hold or be able to access this data in an appropriate format from the billing system – it is not currently used in any bases, although Analysys would expect this data should be available. Implementation could be challenging and expensive if the data is not recorded, or if multiple billing systems are utilised which record CDRs in a different manner
- Some products will have only a small number of ‘billing events’, but still be difficult to bill / require significant development.

*Recommendation*

Analysys feel that a ‘billing event’ attribution methodology would provide a better reflection of cost causality than a revenue base, although neither is ideal. A ‘billing events’ approach would substantially alter the balance of billing costs towards calls and away from rental and connection revenues, whilst also reducing the allocation of costs to ‘expensive’ call types (such as PRS – would lead to a reduction of >50%) towards ‘cheaper’ calls (such as local NTS – could easily double). Without access to the actual CDR data it is difficult to estimate the impact (volume/call minutes is a poor proxy in this case since certain call types e.g. NTS tend to have significantly different call durations)

At this stage we would recommend that BT investigate the cost and practicality of generating this base, since they do not currently produce any bases that use this type of attribution. The practicality of this approach will depend on the details of BT’s billing systems and whether it currently stores this information in a format that can be extracted. Analysys can’t make a judgement on whether this is possible without intimate knowledge of BT’s systems (typically we would expect this data to exist, although extraction may be an issue, but all billing systems have different interfaces/capabilities). A decision can then be reached as to whether it would be appropriate to proceed.

Additionally billing developments for packages (e.g. BT Together) that do not impact the manner in which NTS calls are billed (not part of package) should only be attributed to call types that are part of the bundle (i.e. not NTS services).

**6.1.2 MYS 207413(Marketing Operations & Sales – R&D Computing Software)***Activity*

This cost item consists of costs of R&D computing software required for publicity campaigns.

### *Cost causality*

As explained earlier in the report Analysys and Brand Finance are of the opinion that there is an indirect cost causal link between general marketing and publicity and BT-OLO NTS costs, although this link is weak.

### *Description of attribution methodology*

This cost item utilises the MYS cost base discussed in the Marketing & Sales section. The attribution to products is primarily based on revenues.

### *Review of attribution methodology*

The attribution to products is primarily based on revenues and as such the cost causality link to products is unclear and as such products, which derive minimal benefit from this marketing, may be allocated a disproportionate quantity of marketing costs. This is consistent with the marketing issues highlighted by Brand Finance in their report and summarised in the Marketing & Sales section.

### *Recommendations*

The approach utilised should be consistent with the approach utilised for other marketing and sales effort, hence this item should be attributed by NET revenues.

## 6.2 Existing attribution methodology appropriate

### 6.2.1 'YE' cost base

#### *Activity*

The 'YE' cost base comprises services provided by Computing Partners to BT. These consist of:

- Development Services – project based and undertaken at the request of Lines of Business (LOB)
- Computing Services – ongoing support for LOB, including processing data transactions, email, maintaining a 'firewall' etc.

#### *Cost causality*

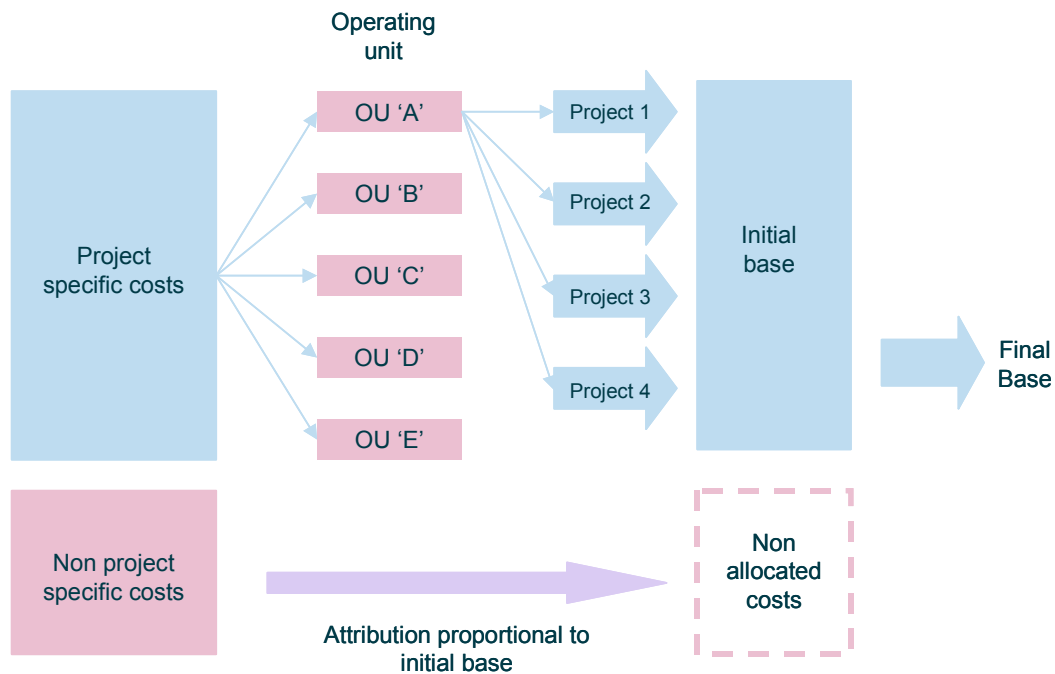
Costs for ongoing computer services and development services will be caused by all products that BT retails. In some cases the attribution can be made directly to a particular product where there is a very direct link, however, in many cases the costs can only be linked to the operating unit that incurs the expense (i.e. causes the cost), with the cost effectively caused by all (or a group of) products that the unit supports. BT-OLO NTS calls are no different from other general BT call types in this regard and so Analysys is of the opinion that a cost causal link exists.

#### *Description of attribution methodology*

Cost items falling within 'YE' are attributed in a similar manner based on allocation from Activity Groups 103 & 104 (Development & Computing).

Costs are apportioned to the line of business (OU code) that originates the work via recharges on a project-by-project basis. The costs are then apportioned to products by the Operating Unit on a project-by-project basis. When all recharges are netted against actual costs incurred by the unit

incurring the costs (Computing Partners) a balance remains, this cost is allocated across OUCs and products based on the allocation used for all the specific projects (see diagram below).



**Exhibit 6.3:** Schematic of attribution methodology [Source: Analysys]

*Review of attribution methodology*

The method used here is very detailed, with allocation to products occurring on a project-by-project basis, so without analysing the allocation for every project (100+) it isn't possible for Analysys to fully test the attribution utilised (this would also change on a year by year basis). However, given that each project is effectively individually allocated (e.g. a total of 33 different bases are used for Retail) then any minor errors should net out - a consistent misallocated would be required to cause a problem, which should be picked up during the audit process.

The Most common means of attributing to products (within Retail) is to use a 'pay base' for allocation (11 different pay bases are used, selection depending on individual project). NTS products pick up a relatively small proportion of this cost (total of 3.5% for all BT-OLO NTS products).

The intention of this detailed attribution methodology is to ensure that the costs generated are linked as accurately as possible to the products generating the need for these costs to be incurred. A brief review of the match between projects and bases used for attribution confirmed that the bases selected did indeed appear to be appropriate.

### *Recommendation*

Analysys recommend that the existing attribution is unchanged, since it already provides a very detailed attribution to products and any changes would be likely to reduce the level of accuracy and link to cost causality.

## **6.2.2 Costs offset via internal costs transfers**

Two major costs within the Computing sector are in fact virtually entirely offset against Internal Cost transfers (within costs transfers section) and as such make no overall net contribution to the retail uplift. As such the analysis undertaken extended only to confirming that this offset did indeed occur and resulted in a minimal net contribution of these costs. The items offset were:

- S 247492 (BT Retail Service – Computer Operations)
- M 247492 (BT Retail – Computer Operations)

## **6.3 Impact analysis**

Two items impact the costs attributed to NTS calls for this sector. Marketing & Sales related activity (Software R&D) will be attributed utilising a methodology consistent with other marketing / publicity costs and will therefore use a marketing base developed to attribute marketing costs (assumptions used here as per Marketing & Sales chapter).

Billing development costs will also be impacted if a ‘billing event’ approach is adopted as the base for this attribution. As BT do not currently produce a ‘billing event’ base it is not possible to provide a robust calculation of the impact. Analysys expect that switching to a ‘billing event’ base will substantially increase the cost attributed to Calls (and decrease attribution to Rentals and

Connections). ‘High value’ calls such as PRS services will likely see a net reduction, since they account for a significantly greater proportion of revenue than they do calls. Analysys has therefore used the assumption that costs attributed to local NTS calls are increased by 50%, whilst costs attributed to PRS calls are halved (call minutes are a poor proxy for this calculation, since call duration varies significantly by product, especially local NTS calls).

	<i>P313 – Lo-call (GBP000's)</i>	<i>P314 – National Call (GBP000's)</i>	<i>P315 – Premium rate (GBP000's)</i>
Billing development	0.1-1%	0	-0.1 to -1%
Marketing (R&D Software)	-0.1 to -1%	-0.1 to -1%	-0.1 to -1%
<b>Total</b>	<b>0.1-1%</b>	<b>-0.1 to -1%</b>	<b>-0.1 to -1%</b>

**Exhibit 6.4:** *Impact analysis – Computing [Source: Analysys]*



## 7 General management and other

General Management accounts for 9% of the total retail BT-OLO NTS costs. Unlike many of the other sectors where the majority of the costs are concentrated in a small number of large cost items the costs are distributed over a large number of relatively small cost items.

<i>OUC</i>	<i>F8</i>	<i>Description</i>	<i>P313 – Lo- call (GBP000's)</i>	<i>P314 – National Call (GBP000's)</i>	<i>P315 – Premium rate (GBP000's)</i>	<i>Total (GBP000's)</i>
S	209636	Relay phone service	1-5%	1-5%	1-5%	1-5%
D	109650	General management	0.1-1%	0.1-1%	0.1-1%	0.1-1%
<i>Other Analysed</i>			1-5%	1-5%	1-5%	1-5%
<i>Unanalysed</i>			>5%	1-5%	>5%	>5%
<b>Total</b>						
<b>Proportion analysed</b>			<b>47%</b>	<b>48%</b>	<b>41%</b>	<b>45%</b>

**Exhibit 7.1:** *General Management & Other operating costs [Source: Analysys / BT]*

A full breakdown of all costs greater than 0.1% of total costs is included in Annex A. A brief overview of each major cost item (>0.9% of total costs) and a review of the attribution methodology employed is provided below. Cost items below 0.9% of total costs are reviewed in Annex B, unless their attribution methodology was viewed as being inappropriate in some way, in which case it is reviewed below.

## 7.1 Attribution methodology revised

### 7.1.1 S 209636 (BT Retail Service – Relay Phone Service)

#### *Activity*

These costs relate to a service provided by the Royal National Institute for the Deaf, called ‘Talktime’. The name is a bit of a misnomer, and would be more accurately referred to as this ‘Type-Talk’. This service enables hearing-impaired customers to both make and receive communications, whereby the RNID operators translate between verbal and text communication. It is quite possible for such customers to make and receive calls with both normal geographic and also non-geographic numbers – hence this could include the customer making calls to NTS service providers (BT-hosted or OLO hosted).

#### *Cost causality*

This service enables deaf customers to make calls, including NTS calls and as such a cost causal link exists.

It could however, be argued that the Talktime service should be treated as a separate (loss making) retail service, rather than distributing its costs across a range of products, non of which have a direct cost causal link.

If Talktime is not to be treated as a separate product, then Analysys feels that it is appropriate for NTS calls to incur a share of the costs for this service (along with all other call types), since it does make a contribution to all call volumes/revenues.

#### *Description of attribution methodology*

The base is calculated using Channel Revenue of Business and Residential Calls.

*Review of attribution methodology*

Analysys feels that it is appropriate for NTS calls to incur a share of the costs for this service, since all calls (including NTS calls) are cost causal, although the current attribution methodology does not appear appropriate:

- Utilising call revenue will include ‘data’ calls (a high proportion of NTS calls are to the internet), which require no translation and so do not cause any cost
- Cost is caused by volume (minutes) and not revenue – a one minute local call will cost exactly the same to ‘translate’ as a one minute international call, or premium rate call

It would, therefore, be more appropriate to use the actual call volumes (minutes) generated by this services as a base, since this more accurately reflects the costs incurred. However, the number of call minutes are not currently captured within the Talktime service (Analysys feel that they should be) and so general retail call minutes may need to be used, although this must exclude data/internet calls, since these clearly are not relevant to this service.

*Recommendation*

Analysys recommend that the actual call minutes used on the Talktime service be utilised. If this service is operated efficiently then this information should be captured.

If this isn’t possible, then an interim measure of general retail call minutes, excluding internet calls should be used.

**7.1.2 SC 209631, ST 209631***Activity*

These items cover the allocation of compensation costs paid by BT to business and residential customers for failure of BT services, such as missed appointments, or repeated loss of service. Allocation to products is based on revenue.

### *Cost causality*

BT's reason for allocating a share of these costs to NTS products is that the compensation scheme provides an incentive to BT to ensure good service and as a result all products and services provided to BT's customer benefit from this improved service and so should incur a share of the costs.

Analysys is of the view that it is not appropriate to allocate this cost to NTS services (charge to OLO), since the NTS calls are not causing the cost to be incurred (cost is entirely caused by BT). Analysys is of the opinion that this is subtly different from the argument presented for marketing costs where a weak/indirect cost causal relationship was considered. In the case of marketing increased spend by BT has an indirect positive effect on NTS volumes, whilst for compensation costs an increase in spend by BT will in fact have a negative impact on NTS volumes (the poorer the service provided by BT the greater the costs attributed to NTS calls) and so Analysys view NTS calls are non cost causal.

### *Recommendation*

These costs should no longer be treated as relevant to BT-OLO NTS calls

### **7.1.3 MBB 109650 (IP & New Data – General Management)**

Cost is in relation to call barring for Premium Rate Services. Refer to Marketing & Sales section, MBC 153152.

## **7.2 Existing attribution methodology appropriate**

Refer to annex B for overview of attribution methodology utilised for smaller cost items.

### 7.3 Impact analysis

Attribution to products for ‘Talktime’ services should, Analysys believe, be on the basis of volume (call minutes) for this service (not total call revenue). This is information that BT currently does not collect, however, Analysys feel that if this service is to be operated efficiently this is information that should be available. Analysys expect that the call volumes on this product will be significantly different from total call volumes (no ‘data/internet’ calls, which account for >80% of NTS calls will be made, additionally PRS calls may be less common as certain call types don’t naturally lend themselves to requiring translation e.g. adult services). Given that the actual call volumes for this service are not currently provided by BT it isn’t possible to provide a detailed calculation of impact. Analysys expect that the reductions for both local rate NTS calls and PRS calls will be significant due to the expected lower volumes (local and PRS) and the different balance between revenue and volume (PRS) and therefore conservatively estimate that the cost attributed to local NTS calls and PRS calls will be halved.

Compensation payments to end customers (resulting from poor BT services) are considered not to be attributable to BT-OLO NTS calls and are therefore excluded. Costs relevant to PRS call barring have also been re-estimated.

	<i>P313 – Lo-call (GBP000’s)</i>	<i>P314 – National Call (GBP000’s)</i>	<i>P315 – Premium rate (GBP000’s)</i>
‘Talktime’	-0.1 to -1%	0	-0.1 to -1%
Compensation payments	-0.1 to -1%	-0.1 to -1%	-0.1 to -1%
PRS call barring	0	0	-0.1 to -1%
<b>Total</b>	<b>-1 to -5%</b>	-0.1 to -1%	<b>-1 to -5%</b>

**Exhibit 7.2:** *Impact analysis – General Management & Other [Source: Analysys]*



## 8 Accommodation

Accommodation accounts for 9% of the total retail BT-OLO NTS costs. A significant proportion of the total cost is comprised of a large number of relatively small costs, which are offset via internal transfer charges and therefore do not make a material contribution to the retail uplift.

<i>OUC</i>	<i>F8</i>	<i>Description</i>	<i>P313 – Lo-call (GBP000's)</i>	<i>P314 – National Call (GBP000's)</i>	<i>P315 – Premium rate (GBP000's)</i>	<i>Total (GBP000's)</i>
R	208120	Rents	1-5%	1-5%	1-5%	1-5%
YH	208752	Cleaning	0.1-1%	0.1-1%	0.1-1%	0.1-1%
		<i>Other Analysed</i>	1-5%	1-5%	1-5%	1-5%
		<i>Unanalysed</i>	1-5%	1-5%	1-5%	1-5%
<b>Total</b>						
<b>Proportion analysed</b>			<b>71%</b>	<b>70%</b>	<b>74%</b>	<b>72%</b>

**Exhibit 8.1:** Accommodation operating costs [Source: Analysys / BT]

A full breakdown of all costs greater than 0.1% of total costs is included in Annex A. A brief overview of each major cost item (>0.6% of total costs) and a review of the attribution methodology employed is provided below. Cost items below 0.6% of total costs are reviewed in Annex B, unless their attribution methodology was viewed as being inappropriate in some way, in which case it is reviewed below.

### 8.1 Attribution methodology revised

No changes to attribution methodologies have been recommended (see section below for explanation)

## 8.2 Existing attribution methodology appropriate

### 8.2.1 'R' cost base

#### *Activity*

The 'R' cost base relates to costs incurred by BT Property Partners (formerly Group Property), who act as an interface between Lines of Business, Group and the external property infrastructure and service providers.

Property Partners manages the supply of all property in accordance with BT's requirements. Property Partners also holds on behalf of BT Group all interests in land and property and as such manages the supply of the following activities for the benefit of BT group:

- provision of premises
- building and plant maintenance/replacement
- alteration to accommodation
- moves and space management
- estate management
- rating and valuation etc.

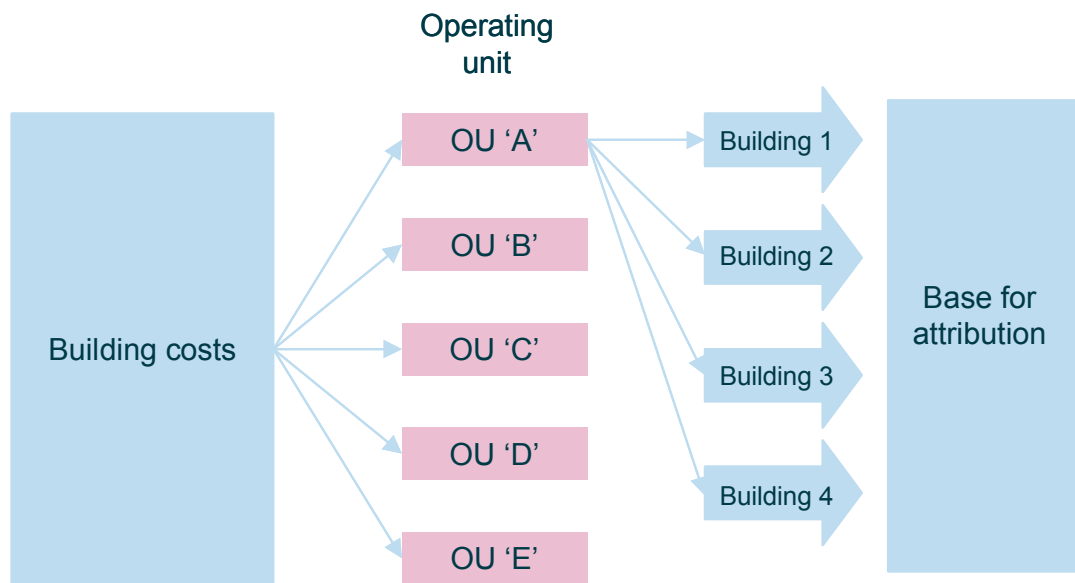
#### *Cost causality*

Property costs incurred by BT will be caused by all products that BT retails. In some cases the attribution can be made directly to a particular product where there is a very direct link, however, in many cases the costs can only be linked to the operating unit that incurs the expense (i.e. causes the cost), based on building occupancy, with the cost effectively caused by all (or a group of) products that the unit supports. BT-OLO NTS calls are no different from other general BT call types in this regard and so Analysys is of the opinion that a cost causal link exists.



### *Description of attribution methodology*

Allocation works in a similar manner to 'YE' cost base. Transfer charges are made to lines of business / OUCs, where the OU activity is used to apportion cost (at building level) to products (e.g. utilising a PSTN/ISDN calls, connections and rentals overhead base). Transfer charges are calculated using the Skyline system (name of BT system).



**Exhibit 8.2:** Schematic of attribution methodology [Source: Analysys]

### *Review of attribution methodology*

The method used here is very detailed (allocation to products effectively conducted on a building to building basis), so without Analysys analysing the allocation for every building it isn't possible to fully test the attribution utilised. However, given granular method of allocation then any minor errors should net out - a consistent misallocated would be required to cause a problem, which should be picked up during the audit process. NTS products pick up a relatively small proportion of this cost (total of 2.3% for all BT-OLO NTS products).

### *Recommendation*

Analysys recommend that the existing attribution is unchanged, since it already provides a very detailed attribution to products and any changes would reduce the level of accuracy and cost causality link.

#### **8.2.2 Costs offset via internal costs transfers**

A large number of relatively small costs within the Accommodation sector are in fact virtually entirely offset against Internal Cost transfers (within costs transfers section) and as such make no overall net contribution to the retail uplift. As such the analysis undertaken extended only to confirming that this offset did indeed occur and resulted in a minimal net contribution of these costs. A breakdown of these costs is shown in Annex A.

### **8.3 Impact analysis**

No changes are recommended, so there will be no impact on attributed costs.

## 9 Customer service

Customer Service accounts for 7% of the total retail BT-OLO NTS costs. Almost 80% of the total costs are accounted for by only 3 cost items.

<i>OUC</i>	<i>F8</i>	<i>Description</i>	<i>P313 – Lo-call (GBP000's)</i>	<i>P314 – National Call (GBP000's)</i>	<i>P315 – Premium rate (GBP000's)</i>	<i>Total (GBP000's)</i>
SCC	107511	Customer service – front office	1-5%	1-5%	1-5%	1-5%
M	231111	Commissions	1-5%	0.1-1%	0.1-1%	1-5%
SCC	207521	Customer service	0.1-1%	0.1-1%	0.1-1%	0.1-1%
<i>Other Analysed</i>			<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Unanalysed</i>			<i>1-5%</i>	<i>1-5%</i>	<i>1-5%</i>	<i>1-5%</i>
<b>Total</b>						
<b>Proportion analysed</b>			<b>80%</b>	<b>81%</b>	<b>77%</b>	<b>79%</b>

**Exhibit 9.1:** Customer Service operating costs [Source: Analysys / BT]

A full breakdown of all costs greater than 0.1% of total costs is included in Annex A. A brief overview of each major cost item (>0.8% of total costs) and a review of the attribution methodology employed is provided below. Analysis has been restricted to only the 3 major cost items.

## 9.1 Attribution methodology revised

### 9.1.1 SCC 107511(Call centre management – customer service)

#### *Activity*

Costs are predominantly labour costs for staff involved with customer service (call centre) and relate to activities such as payments, customer care, correspondence / enquiries etc.

#### *Cost causality*

Costs incurred by BT in respect to customer service can either be attributed direct to a particular product, or for more general queries (such as billing queries) are relevant to all retail services offered. BT-OLO NTS calls will cause these costs to be incurred in exactly the same manner as other BT calls and so are cost causal.

#### *Description of attribution methodology*

Costs are allocated direct to products where possible, or apportioned based on activity time by area e.g. payments, customer care, BT together, correspondence / enquiries. Initial allocation is to over 150 separate areas/products, which then have a range of different bases (with different drivers) applied to them to attribute costs from general area to specific products.

#### *Review of attribution methodology*

The attribution methodologies used to attribute costs to NTS products are dominated by ‘billing costs’, which account for in excess of 70% of the costs allocated to NTS products. ‘Billing costs’ are allocated based on revenue (these are predominantly bill queries).

Direct allocations are appropriate as is the initial attribution to area based on activity time. Analysys has reviewed the onward apportionment and are satisfied that the costs are either immaterial to NTS (very small), or utilise an attribution methodology that we would not recommend changing (too many to include in report), with the exception of 'billing costs', which is discussed below.

The final cost allocation to products for 'billing costs' is done by revenue, which does not link directly to costs (as discussed in Computing section for MFSD base).

BT's position is that these billing costs relate to people querying the amount of their regular bill and therefore, should be apportioned to all the products relevant to these bills, which includes Access products (e.g. telephone line connections, telephone line rental) and Call products (e.g. local calls, national, international, calls to mobile, etc.), as well as products such as leased lines connections and rentals. Additionally billing queries are more likely to occur for larger bills and so by extension, BT argue that it would seem reasonable that a revenue weight would be appropriate, since this may be an accurate reflection of one of the key causal factors behind a bill queries.

Analysys considers this to be a somewhat similar issue to that addressed in the Computing section for MFSD 207413 and as such recommend that the practicality of allocating these costs based on the number of 'billing events' e.g. CDRs is investigated. The rationale for this argument is that the greater the number of 'billing events' on any given bill the greater the possibility of error (and thus a customer query). In a similar manner to the issues discussed under MFSD 207413, there are three concerns with this approach:

- BT may not hold or be able to access this data in an appropriate format from the billing system – it is not currently used in any bases, although Analysys would expect this data should be available. Implementation could be challenging and expensive if the data is not recorded, or if multiple billing systems are utilised which record CDRs in a different manner
- Revenue will play a role in driving queries, since as BT point out customer are more likely to query 'large' amounts i.e. small errors will generally not be noticed and even if they are no action may be taken
- Certain products (e.g. PRS calls) may generate a higher incidence of queries than is suggested either by revenue, or billing events (and others a lower incidence)

An alternative to a ‘billing event’ approach would be to have a system in place to capture the reason for billing queries at a more detailed level at point of contact, although to enable accurate allocation this would need to be at a product level (for example if PRS calls generate more queries), which may prove unviable.

### *Recommendation*

Analysys feel that a ‘billing event’ attribution methodology would provide a better reflection of cost causality than a revenue base, although neither is ideal, since the link to cost causality in both cases is relatively weak.

Given Analysys’s concerns over the viability / practicality of capturing reasons for bill query at a product level a ‘billing event’ or ‘revenue’ attribution may be the only practical solution. The results will be very different for the latter two approaches (utilising a ‘billing event’ approach will substantially increase the attribution to local and national NTS calls, whilst decreasing the attribution to PRS calls.

Analysys recommend that a ‘billing event’ approach is utilised, provided the costs involved with developing this base are not excessive compared to the impact on attribution of costs (see Computing section for MFSD 207413). If the cost of developing a ‘billing event’ approach is significant (compared to impact on attributed costs) then the existing attribution methodology should be retained, since neither methodology is ideal.

## **9.1.2 SCC 207521(Call centre management – customer service)**

See SCC 107511 above

### 9.1.3 M 231111 (BT Retail – Third party dealers)

#### *Activity*

This cost covers commissions paid to third party dealers (indirect channels) for sales made on behalf of BT e.g. call packages.

#### *Cost causality*

An indirect cost causal link exists to NTS products, since general BT sales effort (e.g. increasing number of connections) is caused by the effort required to increase sales/usage of all call products, including NTS products.

#### *Description of attribution methodology*

Cost is apportioned based on revenue by product by channel, weighted by indirect channel revenue (weights in favour of SME / business).

#### *Review of attribution methodology*

As discussed in the Sales & Marketing section (MB 153134) utilising revenues as the basis of final apportionment is not ideal for a general 'sales cost', since revenue does not link directly with sales cost. E.g. some high revenue items may be relatively easy sales (e.g. high growth items)

#### *Recommendation*

Where costs cannot be attributed directly to a product, then utilising revenue for the final attribution is a practical, but not ideal method, since it has only a weak link to revenues. Two alternative methodologies have been considered:

- Undertake survey to allocate effort direct to products
- Make final attribution based on net revenues to BT

Due to the cost and complexity of producing a sufficiently granular survey and the relatively low expected impact on costs Analysys do not recommend this approach.

Analysys are of the opinion that attributing costs based on net revenue would be the most appropriate solution, since this best reflects the weak cost causal link between sales effort and BT-OLO NTS calls, which are not a product that will be a primary sales objective

## 9.2 Impact analysis

The only changes recommended relate to the handling of customer queries relating to ‘billing queries’, where Analysys has recommended the viability of utilising a ‘billing base’ should be investigated<sup>12</sup> and changes to the third party sales attribution to make it consistent with changes proposed to other sales costs (attribute on net revenues)

	<i>P313 – Lo-call (GBP000’s)</i>	<i>P314 – National Call (GBP000’s)</i>	<i>P315 – Premium rate (GBP000’s)</i>
Billing queries	1-5%	0	-1 to -5%
Third Party sales	-1 to -5%	-0.1 to -1%	-0.1 to -1%
<b>Total</b>	<b>0.1-1%</b>	<b>-0.1 to -1%</b>	<b>-1 to -5%</b>

**Exhibit 9.2:** *Impact analysis – Customer service [Source: Analysys]*

<sup>12</sup> The assumptions used to estimate the impact of this change of base as described in the Computing section for MFSD 207413



## 10 Depreciation

Depreciation accounts for 5% of the total retail BT-OLO NTS costs. Almost 60% of the total costs are accounted for by only 2 items.

<i>OUC</i>	<i>F8</i>	<i>P313 – Lo-call (GBP000's)</i>	<i>P314 – National Call (GBP000's)</i>	<i>P315 – Premium rate (GBP000's)</i>	<i>Total (GBP000's)</i>
YE	452264	1-5%	1-5%	1-5%	1-5%
R	957275	1-5%	1-5%	1-5%	1-5%
<i>Other Analysed</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Unanalysed</i>		1-5%	1-5%	1-5%	1-5%
<b>Total</b>					
<b>Proportion analysed</b>		<b>59%</b>	<b>62%</b>	<b>55%</b>	<b>58%</b>

**Exhibit 10.1:** *Depreciation operating costs [Source: Analysys / BT]*

A full breakdown of all costs greater than 0.1% of total costs is included in Annex A. A brief overview of each major cost item (>1% of total costs) and a review of the attribution methodology employed is provided below. Analysis has been restricted to only the 2 major cost items.

### 10.1 Attribution methodology revised

No changes to attribution methodologies have been recommended (see section below for explanation)

## **10.2 Existing attribution methodology appropriate**

Both major F8/OUCs in this sector fall within the 'R' and 'YE' codes. See comments in 'Computing' and 'Accommodation' for description of attribution methodology.

## **10.3 Impact analysis**

No changes are recommended, so there will be no impact on attributed costs.

## 11 Planning and development

Planning & Development accounts for 4% of the total retail BT-OLO NTS costs, although the majority of costs are in fact offset versus internal costs transfers and so do not have a material impact on the retail uplift. Once offsets are accounted for Planning & Development accounts for less than 1% of total costs.

<i>OUC</i>	<i>F8</i>	<i>P313 – Lo-call (GBP000's)</i>	<i>P314 – National Call (GBP000's)</i>	<i>P315 – Premium rate (GBP000's)</i>	<i>Total (GBP000's)</i>
M	244912	1-5%	1-5%	1-5%	1-5%
YE	207415	0.1-1%	0.1-1%	0.1-1%	0.1-1%
M	204102	0.1-1%	0.1-1%	0.1-1%	0.1-1%
<i>Other Analysed</i>		<i>0.1-1%</i>	<i>0.1-1%</i>	<i>0.1-1%</i>	<i>0.1-1%</i>
<i>Unanalysed</i>		<i>0.1-1%</i>	<i>0.1-1%</i>	<i>0.1-1%</i>	<i>0.1-1%</i>
<b>Total</b>					
<b>Proportion analysed</b>		<b>79%</b>	<b>82%</b>	<b>79%</b>	<b>79%</b>

**Exhibit 11.1:** *Planning & Development operating costs [Source: Analysys / BT]*

A full breakdown of all costs greater than 0.1% of total costs is included in Annex A. A brief overview of each major cost item (>1% of total costs) and a review of the attribution methodology employed is provided below. Cost items below 1% of total costs are reviewed in Annex B, unless their attribution methodology was viewed as being inappropriate in some way, in which case it is reviewed below.

### 11.1 Attribution methodology revised

No changes to attribution methodologies have been recommended (see section below for explanation)

## **11.2 Existing attribution methodology appropriate**

### **11.2.1 Costs offset via internal costs transfers**

Two significant costs within the Planning & Development sector are in fact virtually entirely offset against Internal Cost transfers (within costs transfers section) and as such make no overall net contribution to the retail uplift. As such the analysis undertaken extended only to confirming that this offset did indeed occur and resulted in a minimal net contribution of these costs. A breakdown of these costs is shown in Annex A, they are:

- M 244912 (BT Retail – computer development)
- S 244912 (BT Retail – computer development)

### **11.2.2 YE 207415 (Computing Partners – R&D contracts)**

Refer to ‘YE’ cost base in Computing section

## **11.3 Impact analysis**

No changes are recommended, so there will be no impact on attributed costs.

## 12 General support

General Support accounts for only 3% of the total retail BT-OLO NTS costs, with 5% of this cost accounted for by the only 4 items with a cost of over 0.3% of total costs. Three of these items are offset versus internal cost transfers and therefore do not have a material impact on the retail uplift. The one remaining item is attributed according to the MBC cost base (PRS call barring), which has been previously discussed in the Marketing & Sales section (see *MBC 153152*). See annex A for a breakdown of costs within this sector.

### 12.1 Impact analysis

The only impact will be as a result of changes to the PRS call barring calculation, which is a small change to a small cost (for this sector) and therefore has a non-material impact.



## 13 Other sectors

Other Sectors account for 13% of the total retail BT-OLO NTS costs, 27% of which is accounted for by 3 cost items. All other cost items are small (below 0.4% of total costs) and so have not been analysed further. No single other sector accounts for more than GBP3m.

<i>OUC</i>	<i>F8</i>	<i>Description</i>	<i>P313 – Lo-call (GBP000's)</i>	<i>P314 – National Call (GBP000's)</i>	<i>P315 – Premium rate (GBP000's)</i>	<i>Total (GBP000's)</i>
NG	234501	Concert SG&A	1-5%	1-5%	0.1-1%	1-5%
M	245509	VMO recharge	1-5%	1-5%	<0.1%	1-5%
M	201114	Auto-dialer provision	1-5%	1-5%	1-5%	1-5%
<i>Other Analysed</i>			<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Unanalysed</i>			<i>&gt;5%</i>	<i>&gt;5%</i>	<i>&gt;5%</i>	<i>&gt;5%</i>
<b>Total</b>						
<b>Proportion analysed</b>			<b>34%</b>	<b>42%</b>	<b>15%</b>	<b>27%</b>

**Exhibit 13.1:** Other sector operating costs [Source: Analysys / BT]

A breakdown of the total costs for each sector is included in Annex A. A brief overview of each major cost item (>1% of total costs) and a review of the attribution methodology employed is provided below.

## 13.1 Attribution methodology revised

### 13.1.1 Sector C2: NG 234501(Global Venture SG&A charges)

Concert sold BT products to concert customers under terms of BT Concert JV. Costs incurred by concert in selling BT products borne by BT. This should no longer relevant following dissolution of BT - Concert JV.

BT have so far been unable to produce evidence to support the inclusion of these costs in the 2002/03 FACs.

### 13.1.2 Sector B1: M 201114 (BT Retail)

#### *Activity*

This is a provision for loss of revenue as a result of introduction of auto-diallers into customers' homes. Forecast loss of revenue is apportioned to products by revenue.

#### *Cost causality*

The rationale for allocating this cost was raised with BT and they responded that they have investigated the nature of this provision, and believe that it is not appropriate for BT to OLO NTS calls. The provision was set up in 2001/02 and reversed out the following year, and therefore does not represent an ongoing cost.

#### *Recommendation*

Item has already been reversed out.



## 13.2 Existing attribution methodology appropriate

### 13.2.1 M 245509 (BT Retail VMO recharge)

This cost is virtually entirely offset against Internal Cost transfers (within costs transfers section) and as such makes no overall net contribution to the retail uplift. As such the analysis undertaken extended only to confirming that this offset did indeed occur and resulted in a minimal net contribution of these costs.

## 13.3 Impact analysis

Analysys feels that both Concert recharges and auto-dialler provisions are not relevant to NTS calls and therefore should not be included in costs attributed to these calls.

	<i>P313 – Lo-call (GBP000's)</i>	<i>P314 – National Call (GBP000's)</i>	<i>P315 – Premium rate (GBP000's)</i>
Concert recharges	-1 to -5%	-1 to -5%	-0.1 to -1%
Auto-dialler charges	-1 to -5%	-1 to -5%	-1 to -5%
<b>Total</b>	<b>-1 to -5%</b>	<b>-1 to -5%</b>	<b>-1 to -5%</b>

**Exhibit 13.2:** *Impact analysis – Other SFRs [Source: Analysys]*



## 14 Cost transfer

Internal cost transfers have a significant total value, however, this is virtually entirely offset against other costs (from different sectors) and as such makes no overall net contribution to the retail uplift. As such the analysis undertaken extended only to confirming that this offset did indeed occur and resulted in a minimal net contribution of these costs<sup>13</sup>.

<i>OUC</i>	<i>F8</i>	<i>Description</i>	<i>P313 – Lo-call (GBP000's)</i>	<i>P314 – National Call (GBP000's)</i>	<i>P315 – Premium rate (GBP000's)</i>	<i>Total (GBP000's)</i>
YE	287492	Computer operations	<-5%	<-5%	<-5%	<-5%
YE	284912	Computing development	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)
R	288005	Property charges	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)
D	284951	BT Exact charges	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)
YL	286294	Vehicle hire	0-(-1%)	0-(-1%)	(-1%)-(-5%)	(-1%)-(-5%)
R	288002	Property charges	0-(-1%)	0-(-1%)	(-1%)-(-5%)	0-(-1%)
<i>Other Analysed</i>			<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Unanalysed</i>			<i>1-5%</i>	<i>1-5%</i>	<i>1-5%</i>	<i>1-5%</i>
<b>Total</b>						
<b>Proportion analysed</b>			<b>91%</b>	<b>90%</b>	<b>90%</b>	<b>91%</b>

**Exhibit 14.1:** Cost transfer [Source: Analysys / BT]

<sup>13</sup>

Cost transfers have been left in the numbers presented, since to strip them out would lead to a series of systematic small errors when attempting to reconcile costs, since the offset is not quite a perfect match



## 15 Summary of proposed changes

This section summarises the changes proposed by Analysys and Brand Finance for the attribution methodology for each cost item (by sector). There will be additional changes to other cost items that utilise the same attribution methodology, but have not been reviewed.

### 15.1 Marketing & Sales

Changes to reviewed cost items are:

- **MY 207172, Consumer division – other publicity:** no attribution to BT-OLO NTS calls for majority of campaigns, attribution by NET revenues for remainder
- **MBC 153152, Brands distribution sector – sales support:** correct calculation to avoid over-allocation to PRS call barring
- **MK 153113, Small and medium-sized enterprises – marketing services:** attribution to be based on NET revenues
- **M 207172, BT Retail – other publicity:** no attribution to BT-OLO NTS calls for majority of campaigns, attribution by NET revenues for remainder
- **MBPA 153135, customer operations – selling solutions:** correct calculation to avoid over-allocation to PRS call barring
- **MYS 153113, marketing operations and sales – marketing services:** attribution to be based on NET revenues
- **MYS 207187, marketing operations and sales – agency staff costs:** attribution to be based on NET revenues
- **MYS1, 207187, 153113 marketing operations and sales – marketing services:** attribution to be based on NET revenues
- **M 207160, BT Retail – market research:** No attribution to BT-OLO NTS calls

- **MB 153134, major business – selling solutions:** attribution to be based on NET revenues
- **MAB 153113, MAB 207172 , Indirect channels:** attribution to be based on NET revenues
- **MBG 153134, Major business – selling solutions:** attribution to be based on NET revenues

## 15.2 Finance & Billing

Changes to reviewed cost items are:

- **MFSB 207352, Residential billing – bad debt write-offs:** adopt product specific bad debt attribution
- **MFSA 207351, Business billing – Bad debt write off:** adopt product specific bad debt attribution
- **MX 207372, Central booking – Movement on bad debt provision:** adopt product specific bad debt attribution
- **MFSB 207354, Residential billing – Other bad debt write off:** adopt product specific bad debt attribution
- **MFSA 207372, Business billing – Movement on bad debt provision:** adopt product specific bad debt attribution
- **MFSB 207353, Residential billing – Bad debt VAT relief:** adopt product specific bad debt attribution
- **MFSA 207353, Business billing - Bad debt VAT relief:** adopt product specific bad debt attribution
- **MFSA 207354, Business billing – Other bad debt write off:** adopt product specific bad debt attribution
- **MFSB 207372, Residential billing – Movement on bad debt provision:** adopt product specific bad debt attribution

## 15.3 Computing

Changes to reviewed cost items are:

- **MFSD 207413, Billing Development – Network Computing Support:** investigate practicality of utilising ‘billing event’ base

- **MYS 207413, Marketing Operations & Sales – R&D Computing Software:** attribution to be based on NET revenues

## 15.4 General Management & Other

Changes to reviewed cost items are:

- **S 209636, BT Retail Service – Relay Phone Service:** attribution to be based on actual call minutes (voice)
- **SC 209631, ST 209631, Compensation costs:** no attribution to BT-OLO NTS calls
- **MBB 109650, IP & New Data – General Management:** correct calculation to avoid over-allocation to PRS call barring

## 15.5 Accommodation

No changes proposed

## 15.6 Customer service

Changes to reviewed cost items are:

- **SCC 107511, Call centre management – customer service:** investigate practicality of ‘billing events’ base
- **SCC 207521, Call centre management – customer service:** investigate practicality of ‘billing events’ base
- **M 231111, BT Retail – Third party dealers:** attribution to be based on NET revenues

## 15.7 Depreciation

No changes proposed

## 15.8 Planning & Development

No changes proposed

## 15.9 General Support

Calculations corrected to avoid over-allocation to PRS call barring

## 15.10 Other sectors

Changes to reviewed cost items are:

- **Sector C2: NG 234501, Global Venture SG&A charges:** no attribution to BT-OLO NTS calls
- **Sector B1: M 201114, BT Retail:** no attribution to BT-OLO NTS calls



## 16 Freephone

BT-OLO freephone calls are calls that originate on BT lines and terminate on OLO hosted NTS service providers. The revenues and costs for such calls appear in product P171 (wholesale product). BT have not been able to provide a statement of retail costs for this service, because although the direction of traffic is BT to OLO, the interconnection payment is made from the OLO to BT. Therefore, in BT's accounting separation system, such calls have for some years been classified as a wholesale product, and therefore part of the Network regulatory business. As such, it has not attracted retail costs and thus determining a 'retail uplift' from BT's FACs is not currently straight-forward.

These freephone calls will in fact incur some costs within the retail business. BT is currently investigating ways in which this service could be re-classified so as to receive an allocation of retail costs in future that reflect cost causality. The intention of this section of the report is to outline the view reached by Analysys as to which costs should be allocated to BT-OLO Freephone calls and how the attribution might be achieved in practice.

### 16.1 Marketing and sales

Marketing & Sales costs fall into 3 main categories, some of which are relevant to BT-OLO freephone calls, although establishing an attribution methodology that is consistent with the manner in which costs are allocated to other products may be challenging (due to lack of retail revenue).

*Marketing*

General marketing by BT that is not attributable to any particular product could be viewed as relevant to Freephone calls, in a similar manner to NTS calls (as per Sales & Marketing section), with a weak cost causal relationship.

Currently the final allocation to products is done by retail revenue, so even if freephone calls were treated as a retail item they would attract no costs, since they have zero retail revenue. If marketing spend was to be allocated according to net revenues (as recommended by Brand Finance), then this methodology should also be applied to freephone (net revenue exists even though no 'retail' revenue exists).

*Sales*

Sales costs will be relevant to freephone products in a similar manner to other NTS products where calls are sold as part of a 'complete' package, or on the back of new connections. As for marketing costs the attribution should be consistent with the recommendations made by Brand Finance and Analysys and therefore should be attributed based on net revenues to BT.

*PRS call barring*

Freephone calls will clearly carry no costs for PRS call barring.

**16.2 Finance and billing**

The two dominant cost types for this sector are business and residential bad debt and operation of the billing process. As freephone calls generate no retail revenue (and thus no bad debt, except for OLO bad debt) and are not billed to the end customer then they should clearly not be allocated any bad debt.

Freephone calls will in fact generate a modest billing cost since they must be stripped out from other calls during the billing cycle and do in fact progress significantly through BT's billing

systems before being removed. However, many of the activities undertaken in operating the billing process, such as diverts, suppressions, rejected invoices, direct debits, income integrity, credit control and management do not in Analysys's view have a cost causal relationship with freephone calls and therefore should not receive an attribution of costs for operating the billing process.

Specific work on the billing system relevant to freephone calls should be attributed directly to this product (this will also be true for billing development work). This is expected to be a small cost most years.

### 16.3 Computing

The two key costs in the Computing sector are billing development work, which is discussed above and allocations from the 'YE' (Computing Partners) cost base. Under the 'YE' base costs are apportioned to the line of business (OU code) that originates the work via recharges. The costs are then apportioned to products by the Operating Unit on a project-by-project basis.

The method used here is very detailed, effectively on a project-by-project basis. The Most common means of attributing to products (within Retail) is to use a 'pay base'. If BT\_OLO freephone calls were to be treated as a retail product, then they could be expected to pick up a share of this allocation in future.

The granular nature of this attribution presents a challenge for freephone calls, since they have not been treated as a retail product and so have not been identified during the allocation process. Analysys feel there are two practical solutions:

- Repeated whole attribution process on a project-by-project basis, treating freephone as a retail product. This will be time-consuming and in practice may need to be repeated each year as a piece of off-line
- Treat as a 'general overhead' and attribute pro-rata based on total costs for other sectors

Analysys recommend that an initial investigation is undertaken to review the individual projects with the greatest attribution of costs to NTS products<sup>14</sup>. If these projects are viewed as being equally relevant to freephone calls then the 'overhead' method is probably appropriate. If, however, these projects are significantly more (or less) relevant to freephone calls, then only a repeat of the granular attribution process will provide representative results.

## 16.4 General management

The costs in this sector will generally be appropriate to allocate to freephone calls, since they tend to be general 'overhead' type costs, allocated either by a pay-base, or through previous runs of the regulatory accounting process. The bases would have to be developed with freephone treated as a 'general overhead' and attributed pro-rata based on total costs for other sectors.

'Talktime' (the largest cost) should also allocate costs to freephone calls, since the 'translation' service will be needed on this type of call just as much as for other call types. Analysys have recommended changing this base to work on call minutes (volume) rather than revenue, which will make this allocation possible (sticking to revenue will result in a zero allocation to freephone).

## 16.5 Accommodation

The major costs attributed in this sector are driven by the 'R' cost base. The allocation works in a similar manner to 'YE' cost base. Transfer charges are made to lines of business / OUCs, where the OU activity is used to apportion cost (at building level) to products (often using a pay / overhead base).

As with Computing costs the granular nature of this attribution presents a challenge for freephone calls, since they have not been treated as a retail product and so have not been identified during the allocation process. Analysys feel there are two practical solutions:

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<sup>14</sup> This has not been conducted for this report, since Analysys would have to conduct a detailed review of a large number of projects from differing OUs, which was outside the scope of this report

- Repeated whole attribution process (on a building-by-building basis), treating freephone as a retail product. This will be time-consuming and in practice may need to be repeated each year as a piece of off-line analysis (AS systems prevents 'wholesale' products being treated as retail)
- Treat as a 'general overhead' and attribute pro-rata based on total costs for other sectors

Analysys recommend that an initial investigation is undertaken to review the individual buildings with the greatest attribution of costs to NTS products<sup>15</sup>. If the activities undertaken in these buildings are viewed as being equally relevant to freephone calls then the 'overhead' method is probably appropriate. If, however, these is not the case, then only a repeat of the granular attribution process will provide representative results.

## 16.6 Customer service

The three major costs relate to payment to third party dealers and call centre costs.

A proportion of call centre costs will be relevant to freephone calls, such faults etc., which will be incurred in a similar manner to NTS calls. Where revenue is used for the final attribution to products a 'proxy' revenue should be used for freephone calls. A significant proportion of call centre costs will not be applicable to freephone calls, primarily billing queries (which account for 70% of the attribution to NTS costs).

Commissions to third party dealers should be treated in a consistent manner to other sales costs.

## 16.7 Depreciation

The major costs are driven by the 'R' and 'YE' cost bases and so are dealt with above.

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<sup>15</sup> This has not been conducted for this report, since Analysys would have to conduct a detailed review of a large number of buildings occupied by a range of OUs, which was outside the scope of this report

## 16.8 Planning and development, general support and other

Major costs are either not relevant to freephone calls (such as Concert recharges, costs for auto-diallers, or PRS call barring), are offset by internal cost transfers, or falls under the 'YE' base.

## 16.9 Summary

It will not be possible to estimate with a high degree of confidence the impact of attributing retail costs to BT-OLO freephone calls until BT does a full accounting separation costing run in order to populate its regulatory Financial Statements with BT-OLO freephone calls treated as a retail product, or undertakes significant off-line analysis. This is due to the granular nature of many of the attribution methods that are based on activity surveys, or have costs for individual projects or buildings allocated on an individual basis, the requirement to utilise a 'new base' (e.g. marketing), or utilising a 'general overhead' base (which requires calculation of initial base first). The general cost types for which Analysys believe it is appropriate for retail costs to be attributed to BT-OLO Freephone calls are:

- General marketing expenditure
- General sales costs
- Computing costs driven from 'YE' cost base
- General management costs, including 'Talktime'
- Accommodation costs driven from 'R' cost base
- Depreciation / other

## 17 Capital employed

The total capital employed figure from BT's regulatory accounts concerned with the retailing of BT-OLO NTS calls for local, national and premium rate (P313, P314, P315) services is in practice relatively minor when compared to the relevant operating costs for the same products.

	<i>P313 – Lo-call</i>	<i>P314 – National Call</i>	<i>P315 – Premium rate</i>
Capital employed			
Capital employed discounted at 13.5%			
Operating costs			
Cost of capital employed: Operating costs	1:30	1:7	1:37

**Exhibit 17.1:** *Materiality of Capital employed [Source: Analysys / BT]*

Capital employed consists of both positive and negative figures, some of which are large, but offset against each other to produce a relatively modest total. The total **absolute** capital employed (treat negative numbers as positive) is in fact very large. It is thus clear that an analysis of the largest items of capital employed should be conducted, since a change in attribution methodology of a particularly large item could very significantly effect the total capital employed (and consequently the retail uplift). A breakdown of the 'top 20' items of capital employed is shown below, a description of each item and overview of the attribution methodology is given in the following section.

<i>F8</i>	<i>OUC</i>	<i>P313 – Lo-call (GBP000's)</i>	<i>P314 – National Call (GBP000's)</i>	<i>P315 – Premium rate (GBP000's)</i>	<i>Absolute (GBP000's)</i>
E	JCHNAR				>5%
M	520040				>5%
M	520005				>5%
E	520060				1-5%
YE	4A2260				1-5%
M	520060				1-5%
M	520027				1-5%
R	520060				1-5%
L	4A1210				1-5%
MJ	520046				1-5%
M	520110				1-5%
YE	4B2260				1-5%
R	9A1125				1-5%
M	520046				1-5%
M	533300				0.1-1%
NL	520110				0.1-1%
L	4B1210				0.1-1%
G106	8A3532				0.1-1%
NL	533300				0.1-1%
G100	8A3532				0.1-1%
<i>Unattributed</i>					>5%
<b>Total</b>					
<b>Total analysed</b>		<b>64%</b>	<b>94%</b>	<b>68%</b>	<b>68%</b>

**Exhibit 17.2:** Capital employed [Source: Analysys / BT]

## 17.1 Attribution methodologies

As shown in the table above the ‘top 20’ items in capital employed account for approximately 70% of the total absolute value of capital employed. In all cases the attribution methodology utilised by BT is considerably less detailed than is used for the operating costs. This appears reasonable (from a BT-OLO NTS calls perspective) given the limited impact that capital employed will have on the overall retail uplift – more detailed attributions will have only a modest overall impact and may in many cases be very difficult to achieve in practice. A detailed



analysis of the 'top 20' items (including analysis of spreadsheets used to calculate attribution) reached the conclusion that although the attributions methodologies were less detailed than used for operating costs, they were in all cases an appropriate methodology (given level of accuracy required) and that each item considered was appropriate to retail BT-OLO NTS calls. A brief description of each of the 'top 20' capital employed items, the associated attribution methodology and why Analysys consider it appropriate is given below.

#### **17.1.1 E, JCHNAR (Corporate, Notional creditors)**

This item covers 'notional creditors' for the Retail Systems Business based on charges by BT's Network Business (i.e. charge between wholesale Network Business and retail Retail Systems Business). It appears as a capital employed item to reflect the fact that the service is 'used' by Retail in advance of any 'payment' that would be made to wholesale. This is an accounting separation system generated item, populated once the P&L NCC charge data is input into the AS system. NCC charges are multiplied by 59/365 to calculate this 'notional creditor' charge by product. (59 is the assumed payment delay between Retail and Network businesses).

This item is necessary to reflect the fact that the Retail Systems Business is effectively 'loaned' money from the Network Business, assuming that it would take the Retail Systems Business 59 days to pay Network business charges.

#### **17.1.2 M, 520040 (BT Retail, Direct dialled call accrual)**

Accrual for VRUF (Volume Related Unit Fee) for calls that have been made, but have not yet been billed. The initial base is derived from a system-generated ratio of gross call income. This base is then adjusted to exclude calls / products that are not relevant (e.g. telex, payphones, private circuits). This is effectively a call revenue based used to attribute unbilled call revenue.

Utilising a call revenue base to attribute unbilled call revenues is the method that most closely links costs to the products causing this cost to be incurred.

### 17.1.3 M, 520005 (BT Retail, CSS billed debtors)

This item consists of debtors arising as a result of CSS (customer services system) billing of business and residential customers. The base utilised to apportion these debtors is derived from a download of billed income by product, which includes connection charges, single payments, rentals, gross calls, calls discount etc. BT-OLO NTS calls therefore pick up a proportion of this capital employed in line with their revenue. This is a positive capital employed item since customers 'use' the service (calls) in advance of payment - fixed fee revenue (e.g. line rental) is billed in advance, but is 'outweighed' by call revenue.

Revenue (by product) is used as the base since it reflects revenues not yet billed.

### 17.1.4 E,M,R 520060 (Corporate, BT Retail & Property, Output VAT)

This base is used to apportion the Output VAT related creditors arising from VAT collected by BT for forwarding onto Customs & Excise (BT collects the money from customers in advance of distribution to Customs & Excise – hence negative amount). Attribution to products is pro rata to BT's core turnover, excluding receipts from OLOs.

There is a clear cost causal link between revenue by product and VAT (assuming all revenues are VATable)

### 17.1.5 YE 4A2260, 4B2260 (Computing partners)

This covers payments/credits to computing partners for services provided and utilises the base derived for attribution of costs from activity groups AG103 & 104 (see Computing section). This attribution methodology was determined to be appropriate in the preceding section.

### 17.1.6 M 520027 (BT Retail, Bad debt provisions)

This item is to cover provisions for bad debts. The base is treated as an overhead on the other bad debt bases within the Markets sector. The key bases in driving this allocation are MFSA and

MFSB (others include MABT, MP, MU); **hence any change to the attribution base MFSA or MFSB will have a flow through effect on this base. Refer to Finance & Billing section for description of MFSA and MFSB bases.**

#### **17.1.7 L 4A1210, L4B1210, R 9A1125 (BT Property, Gross book value buildings)**

Base is derived from detailed transfer charges relating to property. The transfer charge process allow a unit to charge for costs incurred when it carries out activities on behalf of other BT units, thus providing a very low level (detailed) view of the units activities and what those activities contribute towards. This transfer charge process allows business units to charge for costs incurred at a specific rate and thus allocate capital employed in buildings in an appropriate manner, with final attribution of costs to products is done on a building by building basis.

#### **17.1.8 M, MJ 520046(BT Retail and Northern Ireland – VRUF discount accrual)**

Accrual for VRUF (Volume Related Unit Fee) for discounts that have been made, but have not yet been billed. Initial base derived from system-generated ratio of discounted income. This base is then adjusted to exclude calls / products that are not relevant (e.g. telex, payphones, private circuits). This is effectively a call revenue base used to attribute unbilled call revenue.

Discounts may vary somewhat between call types, however, any impact (on BT-OLO NTS retail uplift) will be very small, due to the relatively low capital employed and modest discount variation (<25%).

BT Northern Ireland (MJ) treated as a separate processing unit. Methodology applied identical to description above.

#### **17.1.9 M 520110, 533300 (BT Retail, other pay recharges, CA Income Debtors unpaid other)**

Charge covers employee related debtors and creditors. Allocation by product based on previously apportioned pay costs for the relevant F8 codes.

**17.1.10 NL 520110, 533300 (BT Retail, other pay recharges, CA Income Debtors unpaid other)**

Charge covers employee related debtors and creditors. Allocation by product based on previously apportioned pay costs for the relevant F8 codes.

**17.1.11 G106, G100 8A3532(Group Secretary, UK VAT AS Only)**

Apportions the debtors relating to Output VAT, which appears on the closing balance. Attribution by product based on all vatable external income.

## Annex A: Detailed breakdown of costs

## A.1 Marketing and sales

OU code	OU description	F8 code	Expanded F8 code description	P313 BT-OLO Lo-Call	P314 BT-OLO Nat.Call	P315 BT-OLO ValueCall	Total BT-OLO NTS
				Proportion of total costs			
MY	Consumer Division	207172	Other Publicity	>5%	>5%	1-5%	>5%
MBC	Brands Distributions Sector	153152	Sales Support	<0.1%	<0.1%	>5%	1-5%
MK	Small & Medium Enterprises	153113	Provide Marketing Services	>5%	1-5%	1-5%	1-5%
M	BT Retail	207172	Other Publicity	1-5%	1-5%	1-5%	1-5%
MBPA	Customer Operations	153135	Selling Solutions, Specialist Sales	<0.1%	<0.1%	1-5%	0.1-1%
MB	Major Business	153134	Selling Solutions	1-5%	1-5%	0.1-1%	0.1-1%
MYS1	Telemarketing	207187	Marketing and Sales Agency Staff Costs	0.1-1%	1-5%	0.1-1%	0.1-1%
M	BT Retail	207160	Market Research	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MAB	Indirect channels	153113	Provide Marketing Services	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MYS	Marketing, Operations and Sales	153113	Provide Marketing Services	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MYS1	Telemarketing	153113	Provide Marketing Services	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MBG	Major Business (sales force)	153134	Selling Solutions	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MYS	Marketing, Operations and Sales	207187	Marketing and Sales Agency Staff Costs	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MBB	Major Business, IP and new data	153135	Selling Solutions, Specialist Sales	<0.1%	<0.1%	0.1-1%	0.1-1%
MAB	Indirect channels	207172	Other Publicity	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MY	Consumer Division	153113	Provide Marketing Services	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MK	Small & Medium Enterprises	153135	Selling Solutions, Specialist Sales	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MB	Major Business	153152	Sales Support	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MK	Small & Medium Enterprises	107120	F/Sales Force	0.1-1%	0.1-1%	<0.1%	0.1-1%
CR	Group Communications	207172	Other Publicity	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MY	Consumer Division	207182	Consultancy	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MB	Major Business	153135	Selling Solutions, Specialist Sales	0.1-1%	0.1-1%	<0.1%	0.1-1%
MY	Consumer Division	247195	COM PD PC	0.1-1%	0.1-1%	<0.1%	0.1-1%
MJ	Northern Ireland	153134	Selling Solutions	0.1-1%	0.1-1%	<0.1%	0.1-1%
M	BT Retail	207170	Publicity	0.1-1%	<0.1%	<0.1%	<0.1%
MBB	Major Business, IP and new data	106120	Pay	<0.1%	<0.1%	0-(-1%)	0-(-1%)
MK	Small & Medium Enterprises	106120	Pay	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)
		<i>Unattributed</i>		1-5%	1-5%	0.1-1%	0.1-1%
		<b>Total SFR sector expenditure</b>		>5%	>5%	>5%	>5%
	Cost offsets with cost in sector AX		Proportion analysed	90%	90%	96%	92%

Analysed costs

Exhibit 17.3: Marketing & Sales costs [Source: Analysys/BT]

## A.2 Finance and billing

OU code	OU description	F8 code	Expanded F8 code description	P313	P314	P315	Total	
				BT-OLO Lo-Call	BT-OLO Nat.Call	BT-OLO ValueCall	BT-OLO NTS	
					Proportion of total costs			
MFSB	Residential Billing	207352	Bad debt write offs: CSS Residential customers	>5%	>5%	>5%	>5%	} Analysed costs
MFSA	Business Billing	207351	Bad debt write offs: CSS Business customers	>5%	>5%	1-5%	>5%	
MX	Central booking	207372	Movement on Bad Debt Provision	1-5%	1-5%	1-5%	1-5%	
MFSB	Residential Billing	107311	Operate the Billing Process	1-5%	1-5%	1-5%	1-5%	
MFSA	Business Billing	107311	Operate the Billing Process	1-5%	1-5%	0.1-1%	1-5%	
MFSH	Cusromer Billing Process and Strat	207323	Debt Collection	0.1-1%	0.1-1%	1-5%	0.1-1%	
M	BT Retail	207331	Bad debt write offs: inland telephone	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MFSA	Business Billing	207322	Agency staff costs billing	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MFSA	Business Billing	153316	Commercial support	0.1-1%	0.1-1%	<0.1%	0.1-1%	
MFSB	Residential Billing	207322	Agency staff costs billing	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
M	BT Retail	153205	Produce and analyse management info	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
M	BT Retail	207372	Movement on Bad Debt Provision	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MFSA	Business Billing	207331	Bad debt write offs: inland telephone	0.1-1%	0.1-1%	<0.1%	0.1-1%	
MFSB	Residential Billing	207351	Bad debt write offs: CSS Business customers	0.1-1%	<0.1%	0.1-1%	0.1-1%	
MFSA	Business Billing	207333	Bad debt direct sales	0.1-1%	<0.1%	<0.1%	<0.1%	
M	BT Retail	153200	Provide commercial advice	0.1-1%	<0.1%	0.1-1%	<0.1%	
MFSH	Residential Billing	107311	Operate the Billing Process	<0.1%	<0.1%	0.1-1%	<0.1%	
MK	SME Business (sales force)	153200	Provide commercial advice	0.1-1%	<0.1%	<0.1%	<0.1%	
MFSB	Residential Billing	207354	Other Bad debt write-offs	(-1%)-(-5%)	(-1%)-(-5%)	<-5%	(-1%)-(-5%)	} Analysed costs
MFSA	Business Billing	207372	Movement on Bad Debt Provision	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)	
MFSB	Residential Billing	207353	Residential customer Bad debts VAT Relief	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)	
MFSA	Business Billing	207353	Business customer Bad debts VAT Relief	(-1%)-(-5%)	0-(-1%)	(-1%)-(-5%)	0-(-1%)	
MFSA	Business Billing	207354	Other Bad debt write-offs	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
MFSB	Residential Billing	207372	Movement on Bad Debt Provision	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
			<i>Unattributed</i>	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
			<b>Total SFR sector expenditure</b>	>5%	>5%	>5%	>5%	
	Cost offsets with cost in sector AX		Proportion analysed	89%	90%	90%	90%	

Exhibit 17.4: Finance & Billing costs [Source: Analysys/BT]

### A.3 Computing

OU code	OU description	F8 code	Expanded F8 code description	P313	P314	P315	Total	
				BT-OLO Lo-Call	BT-OLO Nat.Call	BT-OLO ValueCall	BT-OLO NTS	
				Proportion of total costs				
S	BT Retail Service	247492	Computer Operations	>5%	>5%	>5%	>5%	} Analysed costs
M	BT Retail	247492	Computer Operations	1-5%	1-5%	1-5%	1-5%	
YE	Computing Partners	107482	Network Computing Support	1-5%	1-5%	1-5%	1-5%	
MFSD	Billing Development	207413	Research and development computing software	1-5%	1-5%	0.1-1%	1-5%	
YE	Computing Partners	207430	Computing Software	1-5%	1-5%	0.1-1%	1-5%	
YE	Computing Partners	207455	Agency staff costs	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
YE	Computing Partners	247492	Computer Operations	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MYS	Marketing Operations and Sales	207413	R&D Computing software	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
YE	Computing Partners	207420	COMP Rental	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
YE	Computing Partners	207410	COMP Maintenance	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MFSD	Billing Development	153302	Define requirements	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MYS	Marketing Operations and Sales	207410	COMP Maintenance	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MY	Consumer Division	207413	R&D Computing software	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MB	Major Business (sales force)	207413	R&D Computing software	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
M	BT Retail	207413	R&D Computing software	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
YE	Computing Partners	207440	COMP Supplies	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MK	Small & Medium Enterprises	207413	R&D Computing software	0.1-1%	<0.1%	<0.1%	<0.1%	
		<i>Unattributed</i>		1-5%	1-5%	0.1-1%	0.1-1%	
<b>Total SFR sector expenditure</b>				>5%	>5%	>5%	>5%	
	Cost offsets with cost in sector AX		Proportion analysed	87%	85%	87%	87%	

**Exhibit 17.5:** Computing costs [Source: Analysys]



## A.4 General management and other

OU code	OU description	F8 code	Expanded F8 code description	P313	P314	P315	Total	
				BT-OLO Lo-Call	BT-OLO Nat.Call	BT-OLO ValueCall	BT-OLO NTS	
				Proportion of total costs				
S	BT Retail Service	209636	Relay Phone Service	1-5%	1-5%	1-5%	1-5%	} Analysed costs
D	BT Exact Technologies	109650	General Management	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
E	Corporate	109650	General Management	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
SC	Call Centre Management	209631	General Management and other incidentals	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
ST	Central booking	209631	General Management and other incidentals	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
M	BT Retail	109650	General Management	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
M	BT Retail	109001	New start / redundancy payments	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
M	BT Retail	209643	GRI INS CHARGES	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MY	Consumer Division	209631	General Management and other incidentals	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
G	Group Secretary's area	7A4220	PVNS - PAY 3	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MBB	IP and New Data	109650	General Management	<0.1%	<0.1%	0.1-1%	0.1-1%	
MK	SME Business (sales force)	109001	New start / redundancy payments	0.1-1%	0.1-1%	<0.1%	0.1-1%	
G	Group Secretary's area	7B2208	LIC CHG OUT APP	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MK	SME Business (sales force)	240167	PHNCARD PLUS CHGS IN	0.1-1%	0.1-1%	<0.1%	0.1-1%	
SK	Call centre - Pay Provisions	109001	New start / redundancy payments	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
G	Group Secretary's area	109650	General management	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MBPA	Customer Operations	109001	New start / redundancy payments	<0.1%	<0.1%	0.1-1%	0.1-1%	
MBC	Brands Distributions Sector	109001	New start / redundancy payments	<0.1%	<0.1%	0.1-1%	0.1-1%	
MYS1	Telemarketing	109650	General management	0.1-1%	0.1-1%	<0.1%	0.1-1%	
SK	Call centre - pay provisions	109983	PAY GEN MANAGEMENT	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MYS	Marketing, Operations and Sales	109650	General management	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
Y	Affinitis	209643	GRI INS CHARGES	0.1-1%	0.1-1%	<0.1%	0.1-1%	
MK	SME Business (sales force)	109664	NETR UNALL PAY	0.1-1%	0.1-1%	<0.1%	0.1-1%	
F	Group Finance	109665	Profit related pay	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MK	SME Business (sales force)	209632	Agency staff costs	0.1-1%	<0.1%	<0.1%	0.1-1%	
MFSA	Business Billing	109001	New start / redundancy payments	0.1-1%	0.1-1%	<0.1%	0.1-1%	
SCB	Call centre management, volume b	109650	General management	0.1-1%	0.1-1%	<0.1%	0.1-1%	
S		109001	New start / redundancy payments	<0.1%	0.1-1%	0.1-1%	<0.1%	
CR	Group Communications	109650	General management	0.1-1%	0.1-1%	<0.1%	<0.1%	
MY	Consumer Division	109650	General management	0.1-1%	0.1-1%	<0.1%	<0.1%	
YB	First Call	109001	New start / redundancy payments	<0.1%	<0.1%	0.1-1%	<0.1%	
YE	Computing Partners	109001	New start / redundancy payments	<0.1%	<0.1%	<0.1%	<0.1%	
G	Group Secretary's area	7A4210	PVNS - PAY 1	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
F	Group Finance	153403	OA:GM	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
MFSA	Business Billing	209631	General Management and other incidentals	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
<i>Unattributed</i>				1-5%	1-5%	1-5%	1-5%	
<b>Total SFR sector expenditure</b>				>5%	>5%	>5%	>5%	
Cost offsets with cost in sector AX				47%	48%	41%	45%	

Exhibit 17.6: General Management costs [Source: Analysys]

## A.5 Accommodation

OU code	OU description	F8 code	Expanded F8 code description	P313	P314	P315	Total
				BT-OLO Lo-Call	BT-OLO Nat.Call	BT-OLO ValueCall	BT-OLO NTS
Proportion of total costs							
R	BT Property	208120	Rents (External Payments)	1-5%	1-5%	1-5%	1-5%
YH	FM Solutions	208752	Cleaning	0.1-1%	0.1-1%	0.1-1%	0.1-1%
R	BT Property	208220	Business Rates (External Payments)	0.1-1%	0.1-1%	0.1-1%	0.1-1%
Y	Business Services	208400	Buildings Electricity costs	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MK	Small & Medium Enterprises	248005	OCCS GPBD IN	0.1-1%	0.1-1%	<0.1%	0.1-1%
SCC	Call centre management	248005	OCCS GPBD IN	0.1-1%	0.1-1%	0.1-1%	0.1-1%
R	BT Property	205250	OCCS GPBD IN	0.1-1%	0.1-1%	0.1-1%	0.1-1%
R	BT Property	208751	OCCS GPBD IN	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MBC	Brands Distributions Sector	248005	OCCUPN CS GEN PP BLD-VCT IN AS	<0.1%	<0.1%	0.1-1%	0.1-1%
YE	Computing Partners	248005	OCCS GPBD IN	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MFSB	Residential Billing	248005	OCCS GPBD IN	0.1-1%	0.1-1%	0.1-1%	0.1-1%
SCC	Call centre management	248002	Elect Fac Man Gen In	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MYS	Marketing, Operations and Sales	248005	OCCS GPBD IN	0.1-1%	0.1-1%	0.1-1%	0.1-1%
MK	Small & Medium Enterprises	248002	Elect Fac Man Gen In	0.1-1%	<0.1%	<0.1%	0.1-1%
MYS	Marketing, Operations and Sales	248004	OCCS NWSB IN	0.1-1%	0.1-1%	<0.1%	0.1-1%
MBB	Major Business, IP and new data	248005	OCCS GPBD IN	<0.1%	<0.1%	<0.1%	0.1-1%
R	BT Property	225180	OCCS GPBD IN	<0.1%	0.1-1%	0.1-1%	0.1-1%
YE	Computing Partners	248001	ELEX SPBD IN	0.1-1%	0.1-1%	<0.1%	0.1-1%
MFSA	Business Billing	248005	OCCS GPBD IN	0.1-1%	0.1-1%	<0.1%	0.1-1%
MYS	Marketing, Operations and Sales	248002	Elect Fac Man Gen In	0.1-1%	0.1-1%	<0.1%	<0.1%
MFSB	Residential Billing	248002	Elect Fac Man Gen In	<0.1%	<0.1%	0.1-1%	<0.1%
YE	Computing Partners	248002	Elect Fac Man Gen In	<0.1%	<0.1%	<0.1%	<0.1%
MBGF	Government service, service centre	248005	OCCS GPBD IN	<0.1%	<0.1%	0.1-1%	<0.1%
SCC	Call centre management	248004	OCCS NWSB IN	<0.1%	<0.1%	<0.1%	<0.1%
SCB	Call centre management, volume b	248005	OCCS GPBD IN	0.1-1%	<0.1%	<0.1%	<0.1%
MBPA	Business Billing	248005	OCCS GPBD IN	<0.1%	<0.1%	0.1-1%	<0.1%
M	BT Retail	248005	OCCS GPBD IN	<0.1%	<0.1%	0.1-1%	<0.1%
R	BT Property	288982	OCCS GPBD IN	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)
		<i>Unattributed</i>		1-5%	1-5%	1-5%	1-5%
		<b>Total SFR sector expenditure</b>		>5%	>5%	>5%	>5%
	Cost offsets with cost in sector AX		Proportion analysed	71%	70%	74%	72%

Analysed costs

Exhibit 17.7: Computing costs [Source: Analysys/BT]

## A.6 Customer service

OU code	OU description	F8 code	F8 code description	P313	P314	P315	Total	
				BT-OLO Lo-Call	BT-OLO Nat.Call	BT-OLO ValueCall	BT-OLO NTS	
				Proportion of total costs				
SCC	Call centre management	107511	Cust Serv Front Off	1-5%	1-5%	1-5%	1-5%	} Analysed costs
M	BT Retail	231111	COMSPYM3PYDLRS	1-5%	0.1-1%	0.1-1%	1-5%	
SCC	Call centre management	207521	CUST SERV AG CS	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
SKA41	Complaints Review	107511	Cust Serv Front Off	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
SKA1	Call centre management, Resident	107511	Cust Serv Front Off	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
SCB	Call centre management, Volume t	153021	PCS:HNDL PROV Q	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MJ		107511	Cust Serv Front Off	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
SKA44		107511	Cust Serv Front Off	0.1-1%	0.1-1%	<0.1%	0.1-1%	
SCB		207521	CUST SERV AG CS	0.1-1%	<0.1%	<0.1%	<0.1%	
M	BT Retail	107511	Cust Serv Front Off	<0.1%	<0.1%	0.1-1%	<0.1%	
			<i>Unattributed</i>	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
			<b>Total Customer Service</b>	>5%	>5%	>5%	>5%	
	Cost offsets with cost in sector AX		Proportion analysed	80%	81%	77%	79%	

**Exhibit 17.8:** Customer Service costs [Source: Analysys/BT]

## A.7 Depreciation

OU code	OU description	F8 code	F8 code description	P313	P314	P315	Total	
				BT-OLO Lo-Call	BT-OLO Nat.Call	BT-OLO ValueCall	BT-OLO NTS	
				Proportion of total costs				
YE	Computing Partners	452264	DEPN-P&L-COMPA	1-5%	1-5%	1-5%	1-5%	} Analysed costs
R	Group Property	957275	CCA Dep THG BLDGS	1-5%	1-5%	1-5%	1-5%	
YL	Motor Transport	459024	DEPN-P&L-NVAC	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
R	Group Property	951125	CCA Dep THG LAND	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MK	SME Business (sales force)	452074	DEPN-P&L-COM	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
R	Group Property	451214	DEPN-P&L-BFH	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MYS	Marketing Operations and Sales	452074	DEPN-P&L-COM	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
Y	Affinitis	952265	CCA Dep THG COMPA	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
Y	Affinitis	459124	DEPN-P&L-ACP	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
ST	Customer Service Provisions	452074	DEPN-P&L-COM	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
R	Group Property	967275	CCA Supp D BLDGS	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
M	BT Retail	452074	DEPN-P&L-COM	<0.1%	<0.1%	0.1-1%	<0.1%	
Y	Affinitis	959115	CCA Dep THG ACPM	<0.1%	<0.1%	0.1-1%	<0.1%	
MB	Major Business (sales force)	452074	DEPN-P&L-COM	<0.1%	0.1-1%	<0.1%	<0.1%	
Y	Affinitis	959025	CCA Dep THG NVAC	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
R	Group Property	959365	CCA Dep THG ACPS	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
Y	Affinitis	962265	CCA Supp D COMPA	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
			<i>Unattributed</i>	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
			<b>Total Depreciation</b>	>5%	>5%	>5%	>5%	
Cost offsets with cost in sector AX			Proportion analysed	59%	62%	55%	58%	

**Exhibit 17.9:** Depreciation costs [Source: Analysys/BT]

## A.8 Planning and development

OU code	OU description	F8 code	F8 code description	P313	P314	P315	Total	
				BT-OLO Lo-Call	BT-OLO Nat.Call	BT-OLO ValueCall	BT-OLO NTS	
				Proportion of total costs				
M	BT Retail	244912	COMP DEV EXP VCT IN	1-5%	1-5%	1-5%	1-5%	} Analysed costs
YE	Computing Partners	207415	R&D CONTRACTS - UNI	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
S		244912	COMP DEV EXP VCT IN	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
YE	Computing Partners	204120	Ping Agcy Staff	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
D	Development & Procurement	204120	Ping Agcy Staff	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
D	Development & Procurement	244912	COMP DEV EXP VCT IN	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
FB	Accounting Operations	244912	COMP DEV EXP VCT IN	0.1-1%	0.1-1%	<0.1%	0.1-1%	
D	Development & Procurement	207415	R&D CONTRACTS - UNI	0.1-1%	0.1-1%	<0.1%	0.1-1%	
MK	Small & Medium Enterprises	207415	R&D CONTRACTS - UNI	0.1-1%	<0.1%	<0.1%	<0.1%	
M	BT Retail	104102	SW P&LCR AJ PAY	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
M	BT Retail	204102	SW P&LCR AJ NPY	(-1%)-(-5%)	(-1%)-(-5%)	0-(-1%)	(-1%)-(-5%)	
			<i>Unattributed</i>	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
			<b>Total Planning &amp; Development</b>	1-5%	1-5%	1-5%	1-5%	
	Cost offsets with cost in sector AX		Proportion analysed	79%	82%	79%	79%	

**Exhibit 17.10:** Planning & Development costs [Source: Analysys/BT]

## A.9 General support

OU code	OU description	F8 code	F8 code description	P313	P314	P315	Total	
				BT-OLO Lo-Call	BT-OLO Nat.Call	BT-OLO ValueCall	BT-OLO NTS	
				Proportion of total costs				
M	BT Retail	244951	IPCIN TECHCO Expense	0.1-1%	0.1-1%	0.1-1%	0.1-1%	} Analysed costs
Y	Affinitis	244951	IPCIN TECHCO Expense	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MBC		203621	S S T&S Non ETG	<0.1%	<0.1%	0.1-1%	0.1-1%	
S		244951	IPCIN TECHCO Expense	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MK		203621	S S T&S Non ETG	0.1-1%	0.1-1%	<0.1%	0.1-1%	
MBB		203621	S S T&S Non ETG	<0.1%	<0.1%	0.1-1%	0.1-1%	
MYS		203811	Sys Supp Agency	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
MB		243144	OTH AGCY EXP IN	0.1-1%	0.1-1%	<0.1%	0.1-1%	
YE	Computing Partners	203621	S S T&S Non ETG	0.1-1%	0.1-1%	<0.1%	0.1-1%	
			<i>Unattributed</i>	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
			<b>Total General Support</b>	1-5%	1-5%	1-5%	1-5%	
	Cost offsets with cost in sector AX		Proportion analysed	47%	46%	55%	50%	

**Exhibit 17.11:** General support costs [Source: Analysys/BT]

## A.10 Internal cost transfer

OU code	OU description	F8 code	Expanded F8 code description	P313	P314	P315	Total	
				BT-OLO Lo-Call	BT-OLO Nat.Call	BT-OLO ValueCall	BT-OLO NTS	
				Proportion of total costs				
YE	Computing Partners	287492	Computer operations	<-5%	<-5%	<-5%	<-5%	} Analysed costs
YE	Computing Partners	284912	Computing development	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)	
R	BT Property	288005	OCCUPN CS-GEN PP BLD VCTOUT AS	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)	
D	BT Exact Technologies	284951	IPCOUTTechCoIncome	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)	(-1%)-(-5%)	
YL	BT Fleet	286294	MT Hire VCT out	0-(-1%)	0-(-1%)	(-1%)-(-5%)	(-1%)-(-5%)	
R	BT Property	288002	Electric Fac Man General Purpose: Out	0-(-1%)	0-(-1%)	(-1%)-(-5%)	0-(-1%)	
R	BT Property	288992	BTP Oc CstNwkOu	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
R	BT Property	288004	OCCS NWSB OUT	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
R	BT Property	288008	EE GEN BLD OUT	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
R	BT Property	288001	ELEX SPBD OUT	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
R	BT Property	288003	Fac Man Gr Prop SOut	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
YP	Procurement	282183	GPS PROCMNT CHGS OUT	0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
<i>Unattributed</i>				0-(-1%)	0-(-1%)	0-(-1%)	0-(-1%)	
<b>Total SFR sector expenditure</b>				<-5%	<-5%	<-5%	<-5%	
Cost offsets with cost in other sector				91%	90%	90%	91%	
Proportion analysed								

**Exhibit 17.12:** Internal cost transfers [Source: Analysys/BT]

## A.11 Other sectors

				P313 BT-OLO Lo-Call	P314 BT-OLO Nat.Call	P315 BT-OLO ValueCall	Total BT-OLO NTS	
				Proportion of total costs				
<i>Other SFR sectors</i>								
C2	NG	Global Venture	234501 GV BT ICS S G&A charges	1-5%	1-5%	0.1-1%	1-5%	} Analysed costs
C2	M	BT Retail	245509 VMO RECHARGE - IN	1-5%	1-5%	<0.1%	1-5%	
B1	M	BT Retail	201114 Cost Rntls NWK	1-5%	1-5%	1-5%	1-5%	
			POLOs/POAs	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
			Personnel & Admin	1-5%	1-5%	1-5%	1-5%	
			Other Cost Categories	1-5%	1-5%	1-5%	1-5%	
			Provision & Installation	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
			Transport	0.1-1%	0.1-1%	1-5%	1-5%	
			Maintenance	0.1-1%	0.1-1%	1-5%	1-5%	
			Plant Support	1-5%	0.1-1%	0.1-1%	0.1-1%	
			Customer Support	0.1-1%	0.1-1%	1-5%	0.1-1%	
			Supplies	0.1-1%	0.1-1%	0.1-1%	0.1-1%	
			Redundancy	<0.1%	<0.1%	0.1-1%	0.1-1%	
			Operator Services	<0.1%	<0.1%	<0.1%	<0.1%	
			Net Short Term Interest	-	-	-	-	
			<b>Total other SFR</b>	<b>&gt;5%</b>	<b>1-5%</b>	<b>&gt;5%</b>	<b>&gt;5%</b>	
			Proportion analysed	34%	42%	15%	27%	
			Total analysed					
			Total costs					
			Total proportion analysed	71%	72%	69%	71%	

**Exhibit 17.13:** Other costs [Source: Analysys/BT]



## Annex B: Summary of attribution methodologies

### **B.1 Marketing and sales**

All analysed costs are covered in the main body of the report.

### **B.2 Finance and billing**

All analysed costs are covered in the main body of the report.

### **B.3 Computing**

#### **B.3.1 'YE' cost base**

See main document for overview of 'YE' cost base

## **B.4 General management and other**

### **B.4.1D 109650**

BT Exact provide research, development and consulting services to BT. Projects are typically commissioned by an OUC (operating unit) and may be general in nature (OUC supports wide range of products), or specific to a particular product, or set of products.

Exact transfer charge their costs to individual OUCs based on work performed. Costs are attributed from OUC to products using a standard fixed base derived from previous runs of the Regulatory accounting process (breakdown of costs for that OUC by product). Changes to existing attribution methodologies will therefore follow through to have an impact on this cost.

### **B.4.2 E 109650**

The costs in OUC E are generally labour costs (bonuses, training costs). They are apportioned across all lines of business where labour costs exist and are then allocated to products using a standard fixed base in an identical manner to that described above (D 109650).

### **B.4.3 M 109650, M109001**

General management costs, apportioned pro-rata to all pay-costs incurred.

This assumes that general management costs incurred will be in direct proportion to pay costs incurred, which in reality will not be the case (some units will require more management overhead, despite lower pay costs). However, a cost causal link does exist and the amounts involved are relatively small, so any changes are unlikely to have a material difference.

#### **B.4.4 M 209643**

General liability insurance, brokers fees and other categories attributed based on revenue/pay and retail pay overhead respectively. General Liability allocated by revenue, other insurance treated as a pay item.

These costs are caused by all products that BT retails.

#### **B.4.5 MY 209631**

An accrual for the refurbishment of call centres. Telemarketing base used, which is derived using an apportionment base from a survey of call handling times by product. Pay costs attributed based on survey of call handling times by BT product. Any changes in the **Telemarketing** base will have a subsequent impact on this item.

### **B.5 Accommodation**

#### **B.5.1 YH 208752**

Facilities Management recover their costs via charges to BT units for buildings supported. These transfer out charges are made by OUC R, the property unit. The related costs, which are held in OUC YH are apportioned to products utilising a series of bases:

- Total costs of YH are allocated to OUCs based on the apportionment of transfer charges from OUC R
- Each OUC then uses their own Except base for apportionment to products.

The methodology employed is rather opaque. Costs are attributed to OUCs pro-rata to attributions to OUCs from cost base 'R', effectively each OUC then individually determines how these costs will be allocated across products.

### **B.5.2Y 208400**

Apportioned according to the weighted pay allocation of individual units comprising Affinitis. Electricity costs allocated as per pay costs.

### **B.6 Customer service**

Analysis has been restricted to only the top 3 costs, which are covered in the main body of the report

### **B.7 Depreciation**

Analysis has been restricted to only the top 3 costs, which are covered in the main body of the report

### **B.8 Planning and development**

Analysis has been restricted to only the top 4 costs, which are covered in the main body of the report

### **B.9 General support**

Analysis has been restricted to only the top 4 costs, which are covered in the main body of the report

### **B.10 Other sectors**

Analysis has been restricted to only the top 3 costs, which are covered in the main body of the report