OFCOM

NTS RETAIL UPLIFT AND PRS BAD DEBT SURCHARGE CHARGE CONTROL PROJECT

FINAL | 21 January 2011

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BDO

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1 TERMS OF REFERENCE

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As set out in the Contract, the Report has been prepared solely for the purposes of evaluating the methods used and the calculations made by BT to: attribute bad debt costs & revenues to PRS and other NTS calls; and to identify the NTS call minutes made by its retail customers and consider what impact the change in volumes should have for BT's estimate of the associated costs excluding bad debt. It should not be used for any other purpose or in any other context, and BDO accepts no responsibility for its use in either regard.

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1 TERMS OF REFERENCE

SPECIFICATION OF SERVICE SET OUT BY OFCOM

Background

Ofcom (Office of Communications) requires BT to originate and to retail NTS calls (broadly calls to 08 and 09 numbers) on behalf of other communications providers. Through the existing charge controls, Ofcom allows BT, when it originates NTS calls, to retain an amount to cover its costs including an element of its own retailing costs. These specific retailing costs are referred to as the NTS Retail Uplift. For the higher priced PRS calls (09 numbers), Ofcom also allows BT to retain a percentage of revenue to recover the higher level of bad debt encountered on these calls via the PRS Bad Debt Surcharge.

In July 2009, Ofcom consulted on a proposal to increase the PRS Bad Debt Surcharge to 9.7% of revenue subject to a satisfactory outcome of an independent review. BT has since reviewed the underlying data and believes the level of the Surcharge should be 5.24%.

In the light of BT's amended numbers for 2008/09, Ofcom has commissioned BDO to review and report on the methods used and the calculations made by BT to attribute bad debt costs & revenues to PRS and other NTS calls. The focus of this review has been on BT's revised estimate for 2008/09 and the equivalent estimate for 2009/10, using the most up to date information available. In addition Ofcom commissioned BDO to provide an opinion on BT's bad debt management & procedures to factor into its deliberations about whether BT efficiently manages PRS bad debt.

In a separate development, BT informed Ofcom that 2008/09 call volume information previously supplied had been overstated. This information is a critical input into Ofcom's RPI-X model for the NTS Retail Uplift. In light of BT's revised volumes for 2008/09, this review also examines the methods used and the calculations made by BT to identify the NTS call minutes made by its retail customers and consider what impact the change in volumes should have for BT's estimate of the associated costs excluding bad debt.

Both elements of review will be used to inform Ofcom's further consultation on the level of the PRS Bad Debt Surcharge and 'X' for the NTS Retail Uplift charge controls.

ENGAGEMENT APPROACH AND LIMITATIONS

Introduction

Our review discussions with BT were limited to management teams in relation to PRS and bad debt and did not seek views and opinions outside of the representatives chosen by BT to assist our review. As such, this review has not assessed the operational capability, organisational structure, governance or reporting processes of any of the BT's products and services that do not have a direct association with PRS.

In addition, our assessment of the specific areas of BT in relation to PRS are solely based on management representation and any documentation supplied by BT to support our discussions. It was not within the scope of our review to audit processes, policies and controls in relation to BT's debt management and, therefore, we are unable to validate some of the claims made by BT representatives.

All findings, analysis and recommendations are based on information supplied from subject matter experts within BT, supporting data supplied by Ofcom and PRS Industry stakeholder feedback.

Project approach

The keys to success in a project of this nature are robust financial analysis and an understanding of good practice approaches, enabling Ofcom to make an informed, fact-based decision when setting a new price control.

Our discussions and analysis were conducted from 22/06/2010 to 21/01/2011 and our engagement approach was designed to address the specification of service set out by Ofcom. For clarity, this report has been separated into two main sections:

1. Bad debt and retail revenues for NTS calls (pages 17 – 23)
2. NTS retail call minute volumes and impact on associated costs (pages 24 – 27).

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Meetings and discussions

Bad debt and retail revenues for NTS calls

To assess BT's calculation of the PRS bad debt surcharges for 2008/09 and 2009/10, we met with key BT individuals, ensured that relevant reports were rerun, tested the methodology applied and analysed data (pages 18 – 21).

To review the design of BT's bad debt management processes and controls we held meetings and conducted conference calls with the relevant BT employees, in addition to reviewing BT's bad debt management supporting documentation (pages 21 – 23).

NTS retail call minute volumes and impact on associated costs

To assess BT's reported volumes for 2007/08, 2008/09 and 2009/10, we met with key BT individuals, ensured that relevant reports were rerun and analysed data (pages 25 – 27).

To review the change in cost allocations for 2008/09 resulting from the reduction in reported volumes, we reviewed high level cost allocations and BT attribution methodology documentation (pages 25 and 27).

Supporting analysis

All supporting analysis is contained within our appendices (pages 28 – 125).

In addition, all debt management and good practice observations contained within this report are of a general nature as due to the scope of this review, BDO has not reviewed detailed information around BT's operational aspects, supporting technologies, reporting structure or controls environment.

2 EXECUTIVE SUMMARY

2 EXECUTIVE SUMMARY

INTRODUCTION

Within the scope specified by Ofcom for this review (Appendix C1, page 118), there are two key areas of focus:

- Bad debt and retail revenues for NTS calls
- NTS retail call minute volumes and impact on associated costs.

This Executive Summary outlines our review approach and key findings in relation to Ofcom's high level objectives for each of the two areas of focus. The specific queries raised by Ofcom for each area of focus are then addressed within Sections 4 and 5 of this report (pages 17 and 24), with all supporting analysis being contained within our appendices.

BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

Overview

To form the basis of the NTS and PRS charge control set by Ofcom, BT has calculated the incidence of bad debt on 08 NTS and 09 PRS calls. For the purposes of this report, bad debt is defined as debt that is considered unrecoverable or where recoverability is in doubt. It is charged as an expense in a company's financial statements (for full definition, see Appendix C2, page 123). From the work conducted as part of this review, we understand that BT accounts for bad debts in line with normal accounting practice. In addition, BT's auditors audit the bad debt charge, including any element relating to provision movements, on a quarterly basis.

According to BT, it is not possible to extract information from its systems on the exact level of bad debt relating to 08 NTS and 09 PRS calls, as bad debt is processed and considered at customer bill level. As such, BT has developed a methodology to estimate the level of bad debt for these call types within total bad debt.

To validate the information provided to Ofcom by BT for the purposes of setting the charge control, it was necessary to review four areas:

1. The methodology applied by BT to attribute bad debt costs to 08 NTS and 09 PRS
2. BT's application of the methodology to 2008/09 and 2009/10 financial information
3. BT's explanations for the changes in reported bad debt attributions for 2008/09
4. BT's bad debt management processes and procedures.

Bad debt attribution methodology

Methodology

As BT is unable to directly identify the element of bad debts relating to NTS and PRS calls, it has developed a methodology which estimates the value of these bad debts.

In simplified terms, BT's methodology calculates the proportion of revenue from all written off accounts for a sample of months that relates to 08 NTS and 09 PRS calls, then applies these proportions to BT Retail's total bad debt charge. The resulting amount of bad debt charge allocated to 08 NTS and 09 PRS call types are then used as the basis for the PRS surcharge calculation, along with total revenue for 09 PRS calls.

A more detailed explanation of the bad debt attribution methodology adopted by BT is set out in Appendix A1 (page 29).

Assumptions

The methodology outlined above makes an assumption for some of the data used (CSS data) that there is a direct relationship between 08 NTS and 09 PRS revenues as a proportion of total sampled revenue, and 08 NTS and 09 PRS bad debt as a proportion of total bad debt. Should this assumption not hold true, the bad debt costs attributed to 08 NTS and 09 PRS may not be correct.

In 2009/10, some of the written off accounts related to customers that had been migrated to BT's Avalon system. The revenue information provided for this system related to unpaid bills rather than a 12 month period and, from this information, it was concluded that the assumption made above for CSS data is reasonable.

As such, the methodology that BT has used for attributing bad debts to NTS and PRS calls is deemed to be reasonable.

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Application of methodology in 2009/10 and 2008/09

2009/10

The estimated PRS bad debt surcharge calculated by BT using actual financial data for 2009/10 is 5.25%. This calculation, based on the methodology outlined on the previous page, is set out in Appendix A2 (page 33). We have reviewed BT's application of the methodology to it's financial data for 2009/10 and, where appropriate, have confirmed the financial data used back to BT systems.

In 2009/10, BT's calculation of the estimated surcharge was made more complex due to some residential customers having been migrated from one billing system, CSS, to a new billing system, Avalon. This meant that revenue data needed to be sourced from both systems to evaluate sampled 08 NTS and 09 PRS revenue as a proportion of total sampled revenue. Our review of sampled revenues found that these had been extracted from both systems appropriately.

In the calculation of the estimated PRS bad debt surcharge of 5.25%, three issues were identified. These are as follows:

1. Unallocated revenue

Only 97% of the sampled revenue from the CSS was allocated to products (e.g. 08 NTS or 09 PRS). For the 3% of unallocated revenue, BT assumed that this would be allocated to products in the same proportion as the 97% of revenue that had been allocated.

We have not identified any evidence that directly supports either the assumption that unallocated revenue relates to 08 NTS and 09 PRS in the same proportion as allocated revenue, or the assumption that unallocated revenue does not relate to 08 NTS or 09 PRS. As such, neither assumption can be been deemed to be unreasonable.

2. Base percentages

When BDO recalculated the base percentages, i.e. 08 NTS and 09 PRS revenue as a proportion of total revenue, used by BT for the estimated PRS bad debt surcharge calculation, small variances were identified. It is believed that these are due to rounding differences within BT's systems and calculations.

3. Allocation of write backs to 08 NTS and 09 PRS products

When BDO recalculated the allocation of bad debt write backs to 08 NTS and 09 PRS calls, small variances were identified with the values used by BT.

It is this issue that is the primary driver of the reduction in the calculated surcharge for issue 2 above as, by itself, the variance in base percentages used has a minimal impact on the calculated surcharge.

Impact of issues on the 2009/10 surcharge percentages

If the estimated PRS bad debt surcharge is reproduced using the base percentages and write back allocations calculated by BDO, this would reduce the estimated PRS bad debt surcharge to 5.22%.

Furthermore, should it be determined that BT's assumption was incorrect and that unallocated revenue was not related to 08 NTS or 09 PRS calls, the estimated PRS bad debt surcharge would reduce to 5.16%.

With the exception of the potential issues outlined above, however, it has been found that BT has correctly applied the surcharge methodology outlined on page 30 to its financial data for 2009/10.

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2008/09

The estimated PRS bad debt surcharge calculated by BT for 2008/09 is 5.24%. This calculation, based on the methodology outlined previously, is set out in Appendix A3 (page 54). We have reviewed BT's application of the methodology to it's financial data for 2008/09. Our key findings are outlined below.

BT's application of the methodology in 2008/09 has a number of fundamental limitations, resulting from a lack of available data due to the transition to a new billing system in addition to BT's data retention policies. These limitations are as follows:

- Three consecutive months immediately after the 2007/08 year end were chosen for the sample, meaning that the sample does not eliminate the possible effect of seasonality and that the debts written off are likely to relate to revenue that was not generated during the 2008/09 financial year
- Only seven months' revenue data was available, meaning that data for each account written off could be inconsistent, i.e. some might have seven months' revenue data and some might only have one month's data, depending on final bill dates
- A major provision was released during the 2008/09 financial year, relating to the migration of customers from the CSS system to the Avalon system. This was a one off event that is likely to skew the calculation of the estimated PRS bad debt surcharge and it is not possible to accurately assess whether this provision movement relates solely to the 2008/09 financial year.

Due to the fundamental limitations outlined above, even if the financial data used for 2008/09 could be verified back to BT's systems, we would be unable to conclude that the estimated PRS bad debt surcharge of 5.24% calculated by BT is reasonable. For this reason, the financial information used for 2008/09 has not been verified back to BT's systems and this report has focused on the application of the methodology in 2009/10.

Explanations for the changes in reported bad debt attributions for 2008/09

Correction of revenue allocations

BT's original application of the methodology calculated an estimated PRS bad debt surcharge for 2008/09 of 9.7%. In the amended calculation, the estimated PRS bad debt surcharge for 2008/09 was reduced to 5.24%.

BT explained the variance as being due to the original application of the methodology in 2008/09 using reporting tools within BT's systems to identify revenue by Sub-break and Locality codes. It was thought that these Sub-break and Locality codes were appropriate for identifying revenue relating to 08 NTS and 09 PRS calls but, when reviewed, it was found that some 08 NTS revenue had been incorrectly classified as 09 PRS revenue.

As it was not within the scope of this review to examine the calculations supporting the previous PRS bad debt surcharge, set in 2005, we have no basis for commenting on whether this issue of revenue allocation in 2008/09 was also an issue then.

In BT's new application of the methodology for 2008/09, Network Value Numbers (NVNs), explained on page 41, were used to identify revenue relating to 08 NTS and 09 PRS calls within the sample. This was found to be a reasonable approach and resulted in a smaller proportion of revenue being identified as 09 PRS. As such, the bad debt attributed to 09 PRS calls for 2008/09 was found to have reduced from £6.9m to £4.5m.

As a result of the review, the 09 PRS revenue total used to calculate the surcharge increased from £70.7m to £83.3m.

This was because the revenue total used for the revised calculation included both BT to BT and BT to other service provider revenues, whereas only BT to other service provider revenues were used for the initial calculation. BT to other service provider revenues alone have actually fallen.

Given that bad debt costs allocated to 09 PRS have fallen and the 09 PRS revenue total used has increased from the original application of the methodology, a reduction in the estimated PRS bad debt surcharge is considered reasonable. Due to the limitations noted opposite, however, we are unable to validate that 5.24% is a reasonable calculation for 2008/09.

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Bad debt management processes and procedures

Levels of BT Retail debt and BT Retail bad debt

BT's 2008/09 regulatory financial statements report that the total amount of outstanding Retail Markets external debtors at 31 March 2009 was £5,945m. The total Retail Markets revenue for the year ended 31 March 2009 was £17,706m. As such, outstanding Retail Markets external debtors at the year end equated to 33.6% of Retail Markets revenue for the year.

The Retail Markets bad debt charge for the year ended 31 March 2009 was a credit of £87m, suggesting that BT either had a high level of bad debt write backs or had reduced its bad debt provision significantly during the year.

This revenue and bad debt information does not only relate to PRS or NTS calls, so it is not possible to directly conclude from the regulatory financial statements whether there is a specific issue with bad debts in relation to PRS and NTS calls.

Whilst there are likely to be specific factors influencing the fact that BT had a bad debt credit for the year rather than a charge, the financial results suggest that, in general, BT does not have a significant issue in relation to bad debts within its Retail Markets business.

This information was not specifically reported in BT's 2009/10 regulatory financial statements.

Treatment of PRS debt

From our discussions with BT in relation to its debt management processes and procedures, in addition to analysis of the PRS bad debt surcharge calculation methodology, it is clear that BT does not separately identify PRS debt from other debt in accounts that are written off. As such, our review of BT's bad debt management processes and procedures covers BT's wider credit management processes and procedures, not only those which relate to PRS.

Wider processes and procedures

BT have been able to demonstrate to our satisfaction during this review that they have reasonable credit management processes and controls in place to efficiently manage debt. BT's processes, polices and procedures are well documented and demonstrate good practice. Given this, it has been concluded that BT's general debt management processes and controls do not significantly contribute to the higher level of bad debt relating to PRS calls than other call types.

There are, however, a number of possible contributing factors to the level of bad debt within PRS:

- As PRS is not individually considered within BT's debt management policies, there is a possibility that some cases of unusual PRS usage may not be identified
- BT's High Value Accounts team only focuses on high value accounts and unusual activity, meaning that issues within the medium value customers segment may see customers steadily accrue charges unnoticed
- Monthly direct debit is BT's preferred payment option and BT has over 68% of its customers paying via one of its various direct debit options. However, 32% choose alternative methods of payment and either monthly or quarterly billing. It is reasonable to expect BT or any other business to offer different payment options. However, in offering these choices, the risks should be managed to mitigate their potential impact on costs
- BT has policies for setting either a usage or credit limit on accounts but this is not applied to all customers as standard.

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NTS RETAIL CALL MINUTE VOLUMES AND IMPACT ON ASSOCIATED COSTS

Overview

A further element of the NTS and PRS charge control set by Ofcom relies on accurate call minute volumes being reported by BT for NTS retail calls and accurate costs being allocated to these call types. For its 2008/09 charge control calculations, BT provided Ofcom with NTS retail call minute volumes that were significantly lower than those stated in BT's costing system.

To validate the volume and cost information provided to Ofcom by BT for the purposes of setting the charge control, we have reviewed a number of areas:

- BT's extraction of call minute volumes for retail NTS calls in 2009/10, 2008/09 and 2007/08
- BT's explanations for the variance in 2008/09 call minute volumes between those contained within its initial information response and revised information response
- The change in costs allocated to NTS calls for 2008/09 as a result of the reduction in reported call minute volumes.

2007/08, 2008/09 and 2009/10 reported call minute volumes

2009/10

The total NTS retail call minutes volume reported by BT for the 2009/10 financial year was 9,932 million minutes.

The chargeable NTS retail call minutes volume for 2009/10 was 6,567 million minutes, comprising 6,462 million minutes of 08 NTS calls and 105 million minutes of 09 PRS calls.

The difference between the total NTS retail call minutes volume and the chargeable NTS retail call minutes volume was 3,365 million minutes, relating to freephone calls.

It is the 2009/10 call minutes volume that Ofcom will be primarily using for the setting of the NTS charge control and, as such, it was agreed with Ofcom that our testing of BT's extraction of volumes from its systems would focus on 2009/10.

The chargeable volume of 6,567 million minutes for 2009/10 is primarily made up of three elements: CSCS minutes, Featurenet minutes and Hosted Voice minutes. These are considered in the following sections. A very small volume of other minutes (e.g. payphone calls) is also included.

CSCS and Featurenet

BT has extracted CSCS and Featurenet minutes from its financial systems using a number of reports from its Powerhouse data warehouse system. We confirmed the volumes reported by BT for CSCS and Featurenet to BT's listing of Powerhouse reports and then tested a random sample of the listed reports to direct system outputs provided by BT.

A total of [✂] minutes out of a total of [✂] minutes (28.4%) were tested within our sample. It was found that the variance between BT reported volumes for CSCS and Featurenet and those confirmed to systems by BDO, due to late adjustments, was less than 0.01%. As such, it was deemed that CSCS and Featurenet volumes had been extracted correctly.

Hosted Voice

BT hosts voice calls on behalf of Cisco and Nortel. Of the calls made by Cisco and Nortel customers, some relate to NTS. Although the revenue for these calls is captured by BT's systems, the volumes, however, are not.

To estimate the volume of Hosted Voice NTS calls, BT has used the NTS revenue arising from Cisco and Nortel calls and a rate of three pence per minute (ppm) to calculate volume. As total NTS revenue generated from Cisco and Nortel for the year was £[✂], this resulted in an estimated Hosted Voice volume of [✂] minutes.

The revenue from Cisco and Nortel was agreed to financial information provided by BT product finance and the rate of three ppm was tested. Using the CSCS data provided, it was found that the average revenue achieved for NTS calls was 3.5 ppm.

Whilst BT's assumption of three ppm does not seem unreasonable, using 3.5 ppm would result in a reduction in the Hosted Voice volume of [✂] minutes ([✂]% of total chargeable NTS minutes for 2009/10). Given the small size of the variance identified, BT's estimate of [✂] minutes for Hosted Voice in 2009/10 was deemed reasonable.

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Freephone

The total call minutes volume of Freephone NTS calls reported by BT to Ofcom in its Fixed Telecommunications Market Data Reports for 2009/10 was 5,426 million minutes, but this total included [✂] minutes of data calls and [✂] minutes of wholesale calls. As such, the reported Freephone NTS call minutes volume for 2009/10 was 3,365 million minutes.

2008/09

The chargeable NTS retail call minutes volume for 2008/09 was 8,418 million minutes, comprising 8,287 million minutes of 08 NTS calls and 132 million minutes of 09 PRS calls.

We agreed the volume reported by BT for 2008/09 to supporting schedules but, as outlined on the previous page, our testing of volumes back to BT's systems was limited to those relating to 2009/10.

2007/08

The chargeable NTS retail call minutes volume for 2007/08 was 11,591 million minutes, comprising 11,420 million minutes of 08 NTS calls and 171 million minutes of 09 PRS calls.

We agreed the volume reported by BT for 2007/08 to supporting schedules but, as outlined on the previous page, our testing of volumes back to BT's systems was limited to those relating to 2009/10.

Variance in 2008/09 reported call minute volumes with regulatory volumes

Elimination of relevant data

As outlined above, BT has reported a chargeable NTS retail call minutes volume for 2008/09 of 8,418 million minutes. BT has explained that these revised volumes are 'operational' volumes which, following its internal work, it considers to be the correct volumes for Ofcom to use for the setting of the charge control.

BT has previously reported chargeable regulatory volumes to Ofcom of 12,969 million minutes. The explanation for the variance between this regulatory volume and the 'operational' volume now reported by BT is that the regulatory volume reported contains volumes that are not within the definition of retail NTS calls. The regulatory volumes include, for example, volumes relating to wholesale NTS calls.

Adjustments

BT has provided a schedule outlining the significant reconciling items between regulatory volumes and operational volumes. It was explained that a full reconciliation of the two totals could not be provided as although the operational and regulatory volumes are derived from BT's base calls data, they have been produced in different ways, using different reporting systems, and there is no conclusive method of producing a 100% reconciliation between the two.

Significant differences between the two volume totals, as outlined by BT, include but are not limited to the following:

- BT originated Wholesale calls
- OCP originated calls ported away from BT
- BT originated calls ported to BT
- Average porting conveyance charge (APCC) volumes.

Explanations for the variances were discussed with BT and it was deemed that the categories of adjustment were reasonable.

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Change in cost attributions to NTS as a result of volume reductions in 2008/09

Basis of attribution

BT informed us that, where possible, costs are directly allocated to the products to which they relate. Where this is not possible, BT attempts to allocate products in what it considers to be the most appropriate way. This includes allocation to products on the basis of revenue.

BT informed us that costs are not attributed to NTS products based on volumes and, as such, the reduction in volumes would not have an implication of costs attributed to NTS.

To validate these assertions, we reviewed BT's Detailed Attribution Method (DAM) 2008 document which outlines the basis of attribution of various cost categories. Whilst the DAM does not provide information on a line by line basis for costs, it does outline that, where possible, costs are allocated directly to the products to which they relate.

Some costs, particularly those that can't be easily allocated to products, e.g. BT Innovate & Design and BT Operate, Call Centre, and Marketing & Sales, are allocated to products based on revenue. Our review did not identify any significant cost categories being allocated to products based on volumes.

Given our findings from the review of the DAM, no significant change in cost allocations to NTS products would be expected as a result of NTS volume restatement, unless NTS revenues were also significantly restated.

3 CONCLUSIONS

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INTRODUCTION

In forming our conclusions for this report, we have sought to address a number of key questions in relation to:

- Bad debt and retail revenues for NTS calls
- NTS retail call minute volumes and impact on associated costs.

These questions and our related conclusions are set out on the following pages.

BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

Is BT's methodology for calculating an estimated PRS bad debt surcharge fit for purpose?

The methodology adopted by BT for calculating its estimated PRS bad debt surcharge is a pragmatic solution designed to take account of limitations in the financial data that BT is able to extract from its systems. Having reviewed this methodology, we have concluded that it is fit for purpose and, based on our understanding of the information available from BT's systems, is the most appropriate method for attributing bad debt costs to 08 NTS and 09 PRS calls.

Has the above methodology been applied correctly for 2008/09 and 2009/10, and can the financial information used for the attributions be tied back to BT's systems?

Due to significant limitations in relation to the availability of information to support BT's estimated 2008/09 calculation of the surcharge, we are unable to conclude that the methodology has been correctly applied and, as such, the application of the methodology for the year has not been verified back to BT's systems.

For 2009/10, however, BT has been able to provide the supporting data required for validation of the estimated surcharge of 5.25% and we have been able to verify the information provided back to BT systems and management accounts. Broadly speaking, the methodology has been applied correctly, although there are a few minor issues which may support a small (0.03% to 0.09%) reduction in the estimated surcharge.

Are BT's explanations for the changes in the attributions of retail bad debts and revenues to 08 NTS and 09 PRS calls, plus the resulting change in the PRS bad debt surcharge, reasonable?

Initially, BT's estimated PRS bad debt surcharge for 2008/09 was 9.7%. Upon review, however, this was reduced to 5.24%. BT's explanation for this reduction was that, due to inaccurate mapping of revenue to products, the data used for the initial calculation had overstated revenue relating to 09 PRS calls at the expense of 08 NTS calls. As such, the debt attributed to 09 PRS calls for 2008/09 and the resulting surcharge calculation were also overstated.

BT's amended calculation used a new method for mapping revenue to products which was found to be reasonable. Whilst we are unable to validate the calculation of the amended surcharge percentage for 2008/09, due to the reasons outlined previously, a reduction in the surcharge percentage from 9.7% is considered reasonable.

Do BT's bad debt management processes and procedures contribute to a higher level of PRS bad debt?

BT has been able to demonstrate to our satisfaction during this review that it has reasonable credit management processes and controls in place to efficiently manage bad debt. BT's processes, polices and procedures are well documented and demonstrate what we would consider to be good practice.

BT's systems do not differentiate between PRS debt and any other debt in accounts which are written off and, as a result, we have concluded that BT's general debt management processes and controls do not contribute significantly to the higher level of bad debt relating to PRS calls than other call types. This is further supported by the activities of the High Value Accounts (HVA) team which, whilst not PRS specific, are focused on accounts with higher value bills, including those with high PRS spend.

Whilst there are other debt management processes and procedures specifically relating to PRS debt that BT could implement, these would have a cost that would need to be borne. BT has assessed that the costs of implementing possible additional debt management processes and procedures are likely to outweigh the benefits of doing so.

3 CONCLUSIONS

NTS RETAIL CALL MINUTE VOLUMES AND IMPACT ON ASSOCIATED COSTS

Has BT appropriately extracted and reported call minute volumes for NTS calls in 2007/08, 2008/09 and 2009/10?

Due to the issues identified with data availability to support the PRS bad debt surcharge for 2008/09, it was agreed with Ofcom that our review would primarily focus upon validation of 2009/10 data.

For 2007/08, 2008/09 and 2009/10, we have agreed the call minute volumes reported by BT back to supporting spreadsheets. The 2009/10 spreadsheets have then been validated by agreeing a sample of base reports back to direct system outputs. With the variance identified being less than 0.01%, it has been concluded that BT has appropriately extracted and reported call minute volumes for NTS calls in 2009/10.

Are BT's explanations for the reduction in reported call minute volumes for 2008/09 reasonable?

BT's reported NTS call volume for 2008/09 were 8,418 million minutes. This volume is significantly lower than 12,969 million minutes that had previously been reported to Ofcom as part of BT's response to an information request, as this regulatory NTS volume, drawn from BT's regulatory costing system, included a significant volume of calls that are not retail NTS calls.

BT's explanations for the variances between the regulatory volume and the operational volume, used for the estimated PRS bad debt surcharge calculation, have been reviewed and are considered to be reasonable.

BT has not provided a full reconciliation between the two volumes and, as such, we have not been able to validate the magnitude of the variance. As outlined above, however, we have validated the operational volume provided by BT for 2009/10.

Are BT's explanations for the change in costs allocated to NTS for 2008/09 as a result of the change in volumes reasonable?

From our discussions with BT, we understand that costs are not allocated to products based on volumes but instead are allocated using other methods, e.g. revenue. This has been supported by a review of BT's Detailed Attribution Method (DAM) 2008 documentation.

As a result, no significant changes in cost allocations would be expected as a result in the reduction in volumes for 2008/09. We understand that this is indeed the case.

4 BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

4 BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

INTRODUCTION

The specification of requirements set out by Ofcom for this engagement (Appendix C1, page 118) requires a number of outputs and other material to be addressed and commented on within the category of bad debt and retail revenues for NTS calls.

For clarity, this section of our report summarises our findings in relation to this matter, addressing each of the queries set out by Ofcom's specification and cross referencing to the detailed analysis contained within the appendices to this document.

Relevance, reliability and comparability

1.2.1 - An assessment of the fairness and objectivity of the underlying cost attribution methodology used to attribute retail bad debt to PRS calls in aggregate ("BT to OCP PRS calls" (BT product group P315) and "BT to BT PRS" calls (BT product group Value Call P059)) setting out the key features of the methodology and the basis on which the assessment was made

The methodology used by BT to attribute bad debt to PRS calls is outlined and evaluated within Appendix A1 (page 29).

As a basic outline, BT takes a sample of written off accounts and assesses the proportion of revenue for those accounts that relates to PRS calls. This proportion is then applied to BT Retails total bad debt charge to derive a bad debt attributable to PRS calls.

This methodology is used as BT is not able to directly identify PRS bad debt from its systems. It makes an assumption for revenue data extracted from BT's CSS system that PRS revenue as a proportion of total revenue within written off accounts is equal to PRS bad debt as a proportion of total bad debt.

Using financial information provided from BT's new billing system, Avalon, as support, this assumption seems to be reasonable. As such, the cost attribution methodology employed by BT for attributing debt to PRS calls is deemed to be fair and objective.

1.2.2 - Verification that BT correctly applied its chosen attribution methodology to the relevant inputs to arrive at the levels of bad debt for 2008/09 and 2009/10 provided to Ofcom for PRS calls and other NTS calls

2009/10

Applying the cost attribution methodology to 2009/10 financial data, BT has calculated an estimated PRS bad surcharge of 5.25%.

Our review of BT's application of the methodology in 2009/10, as outlined in Appendix A2 (page 33) has found that, broadly speaking, this has been completed correctly.

Three issues, however, were identified that may have an impact on the estimated PRS bad debt surcharge percentage:

1. Depending on an assumption made by BT in relation to unallocated revenue, the estimated PRS surcharge might be slightly lower
2. Should the base percentages, as recalculated by BDO, be used for the surcharge calculation, the estimated PRS surcharge might again be slightly lower
3. Should write back allocations, as recalculated by BDO, be used for the surcharge calculation, once more the estimated PRS surcharge might be slightly lower.

Were adjustment required for all three issues, the estimated surcharge could reduce to 5.16%.

The assumption made by BT in relation to unallocated revenue has not been deemed to be unreasonable, but we have no specific evidence to support that it is reasonable. If adjustment were not made for this and instead only made for issues 2 and 3 above, the estimated surcharge could reduce to 5.22%.

4 BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

2008/09

Applying the cost attribution methodology to 2008/09 financial data, BT has calculated an estimated PRS bad surcharge of 5.24%.

Our review of BT's application of the methodology in 2008/09, as outlined in Appendix A3 (page 54) has identified issues, the most significant relating to the migration of residential customers from BT's CSS billing system to a new system, Avalon, as well as a lack of availability of supporting data due to BT's data retention policies.

Given the issues identified, we are unable to verify that BT has applied the methodology correctly to attribute bad debt to PRS in 2008/09.

1.2.3- Verification that BT correctly attributed its revenues to PRS and other NTS calls for 2008/09 and 2009/10 in the information supplied to Ofcom.

2009/10

BT has reported PRS revenue for the surcharge calculation for 2009/10 of £68.2 million. This total has been adjusted from the general ledger account containing PRS revenue of £77.7 million for the year to eliminate revenue that does not relate to the PRS surcharge, e.g. Wholesale, Timeline and PNS revenue.

Our review of BT's reported revenue for 2009/10 is outlined in Appendix A2 (page 33). Based on the system reports provided, we have obtained reasonable assurance that the revenue total has been correctly attributed to PRS.

2008/09

BT has reported PRS revenue for the surcharge calculation for 2008/09 of £83.3 million. As in 2009/10, this total has been adjusted from the general ledger account containing PRS revenue of £114.9 million for the year to eliminate revenue that does not relate to the PRS surcharge.

Our review of BT's reported revenue for 2008/09 is outlined in Appendix A3 (page 54). Whilst the explanations for the adjustments that have been made to ledgered revenue in 2008/09 are consistent with those made in 2009/10, BT has not adjusted 2008/09 revenue for items such as PRS revenue re-assigned to VOIP or employee call allowances.

As outlined previously, due to the issues identified with the data available for 2008/09, this review has focused on the application of the methodology in 2009/10 and agreeing the financial data for that year back to BT's systems. We are unable to confirm that revenues have been correctly attributed to PRS.

1.2.4- A commentary on any statistical sampling technique used to attribute bad debt across retail product groups including an assessment of the reliability of the sampling processes used for 2008/09 and 2009/10.

2009/10

As outlined in Appendix A2 (page 33), in the selection of its sample for 2009/10, BT has examined all accounts written off during three months of the year: June 2009, November 2009 and January 2010.

Although we do not have data to verify the total number of accounts written off during the year or, therefore, the exact percentage of accounts sampled, it would seem reasonable to assume that the sample covers approximately 25% of write offs during the year.

The three months are spread throughout the year, which means that the impact of seasonality on the timing of when an account is written off is likely to be addressed. In addition, the use of 12 month revenue data for CSS accounts means that seasonality of revenue within sampled accounts is also addressed. As the data provided for the three months is aggregated, however, it is not possible to assess whether the revenue proportions within each of the three months used are comparable with each other.

Given the size of the sample and that seasonality has been taken into account, the sample that has been selected for 2009/10 has been deemed to be reasonable and is considered likely to be reflective of the year as a whole.

4 BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

2008/09

As outlined in Appendix A3 (page 54), In the selection of its sample for 2008/09, BT has examined all accounts written off during three months of the year: April 2008, May 2008 and June 2008.

Although we do not have data to verify the total number of accounts written off during the year or, therefore, the exact percentage of accounts sampled, it would seem reasonable to assume that the sample covers approximately 25% of write offs during the year.

The issue with BT's sample in 2008/09 was that the limitation of months available for selection, due to system migration and data availability issues, resulted in the three months being consecutive and at the beginning of the year. This means that the impact of seasonality on write offs cannot be discounted. Furthermore, as only seven month revenue data was available, this means that the effect of seasonality of revenue within sampled accounts cannot be discounted either.

Due to the seasonality issues identified above, we are unable to conclude that the sample that has been selected for 2008/09 is reasonable or that it is likely to be reflective of the year as a whole.

1.2.5- An opinion on whether the bad debt attributed to the following call types is properly matched to the corresponding year's revenue for the financial years 2008/09 and 2009/10

- PRS calls
- Other NTS calls.

The methodology that BT has used for the calculation of its estimated PRS bad debt surcharge does not directly match actual written off amounts to revenue. Instead, an apportioned bad debt charge for 08 NTS and 09 PRS call types is calculated for the year and the PRS bad debt charge is then matched to PRS revenue for the year.

Although bad debt is attributed to other NTS calls, this attribution is not used to calculate a separate NTS surcharge.

2009/10

We have reviewed the attribution of bad debt to 08 NTS and 09 PRS call types for 2009/10, plus the subsequent matching of PRS bad debt to PRS revenue for the year within Appendix A2 (page 33).

It was found that the bad debt attributed to 08 NTS and 09 PRS calls, as well as the revenue attributed to 09 PRS calls, both related to the 2009/10 financial year.

2008/09

We have reviewed the attribution of bad debt to 08 NTS and 09 PRS call types for 2008/09, plus the subsequent matching of PRS bad debt to PRS revenue for the year within Appendix A3 (page 54).

Due to the issue of a large one-off provision movement in 2008/09, we are unable to confirm whether the bad debt attributed to 08 NTS and 09 PRS for the year specifically relates to 2008/09. In addition, the selection of a sample that only covers the first three months of the year means that the revenue sampled is unlikely to relate to 2008/09.

1.2.6- Observations on trends, for example any significant trend movements, any exceptional 'one-off' items and an opinion on whether the incidence of bad debt is likely to continue in the period April 2010 to September 2014 at levels seen in 2008/09 and in 2009/10.

Due to the way that data is reported from BT's systems, particularly the fact that clear data on specific write-offs of PRS revenue is not available, it is very difficult to identify consistent trends in the incidence of PRS bad debt. During our review, however, no significant one-off items were identified within the financial data provided for 2009/10 and, as such, this is considered to be a reasonable benchmark for future years. This was not the case with the 2008/09 data provided.

Our review of BT's overall debt management performance (pages 20 - 22) has highlighted that write off levels seem to be fairly consistent. Subject to one-off items, it is our view that the incidence of PRS bad debt is likely to continue in the immediate future at levels seen in 2009/10.

4 BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

1.2.7- If appropriate, to identify and comment on any other factors or evidence that supports or potentially questions the robustness of BT's calculations of the incidence of bad debt on PRS and other NTS calls.

Other than the factors outlined previously and in more detail in Appendices A2 and A3, no further issues have been identified that either support or potentially question the robustness of BT's calculation of the incidence of bad debt on PRS calls.

BT's bad debt management processes & procedures

1.2.8- An opinion on whether BT's approach to PRS bad debt management is in line with best practice.

Throughout this review, BT has demonstrated that reasonable credit management processes and controls are in place to efficiently manage their debt. Based on the information provided by BT, staff have reasonable motivation, support and controls in place to enable them to make decisions and manage customer interaction appropriately. The technology (although not tested) appears to manage the flow of information and route the customer through a variety of scenarios adequately. Processes and procedures are well documented and again demonstrate good practice.

Bad debt: definition

1.3.1- An outline description of the transactions and other events which BT recognises as giving rise to a bad debt charge. The report should address the following transactions and other events which PRS stakeholders have raised:

- the giving credit to a retail customer who raises concerns with BT regarding the validity of particular PRS calls; and
- BT's setting and revision of bad debt provisions

In its most limited sense, BT's retail bad debt refers to that element of the total amount owed by retail customers to BT for services provided for which there is no prospect that the customer will pay.

What is relevant for the PRS Bad Debt Surcharge, however, is BT's bad debt charge, an item within BT's profitability statement, which reflects the revenues for the period which will, in BT's view, prove to be uncollectible.

The bad debt charge therefore reflects both the change in the value of BT's provision for doubtful debts between the beginning and end of the relevant accounting period as well as the amounts actually written off as irrecoverable in the period and amounts written back, i.e. where cash has been received from a customer in relation to a debt that had previously been written off.

Further information of BT's policies on bad debt write offs, write backs and provision changes is contained within Appendix A8 (page 93).

In relation to stakeholders' specific query about the giving of credit to a retail customer who raises concerns with BT regarding the validity of particular PRS calls, it is our understanding that this does not give rise to a bad debt charge. The giving of credit in such an instance leads to both a reduction in that customers debt and the reported PRS revenue for that customer. It is not accounted for as a write off.

Bad debt: accounting

1.3.2- An outline description of the elements of BT's retail bad debt charge which

- distinguishes between elements originating on BT's different retail billing systems; and
- distinguishes between amounts written off, written back and movement between provisions

A breakdown of BT's 2009/10 bad debt charge, by system and type, is provided within Appendix A8 (page 93).

4 BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

Attribution methodologies across services

1.3.3- A description setting out all key elements of the attribution methodology applied, input data used and calculations adopted by BT for 2008/09 & 2009/10 to

- attribute retail bad debt to its retail regulatory product groups including those containing NTS calls
- classify retail call revenues as relating to NTS calls, and if so, which retail regulatory product group they should be recorded within

The description should highlight any changes in the methodology between 2008/09 and 2009/10.

BT's attribution methodology and the application of this in both 2008/09 and 2009/10 are outlined in Appendices A1 – A3 (pages 29 – 69).

BT has not changed this methodology from 2008/09 to 2009/10, the only difference year on year being a slight change to the application of the methodology due to residential customer revenue data now being sourced from two separate billing systems, CSS and Avalon.

Incidence of bad debt across call types

1.3.4- An evaluation of the incidence of bad debts for PRS, other NTS calls and to other retail calls such as local, national and calls to mobile calls. A commentary on the reasonableness or otherwise of significant differences.

Limited evidence that we have reviewed in relation to bad debt incidence by call type, suggests that PRS calls have a higher incidence of bad debt than local, national and calls to mobile calls. Of these other call types, calls to mobile have a higher incidence of bad debt than either local or national calls.

A possible explanation for this is that BT offers a number of different call packages / products to its customers, many of which include certain types of calls as part of the package, e.g. local and national calls. It is, therefore, unlikely that customers will incur large bills relating to these call types as, generally, they will have already paid for them.

Due to PRS calls being more expensive than other call types, it is considered to be easier for a customer to run up large bills in a short space of time without necessarily realising that they are doing so. In these instances, some customers may not be able to pay their bills, resulting in bad debt.

Bad debt: BT's exercise of judgement in provisioning

1.3.5- An analysis and commentary of the key judgements and estimates made by BT in preparing and provisioning bad debts for this service in 2009/10, noting any differences in implementation between 2008/09 and 2009/10. This will include ascertaining and questioning BT on general movements in bad debts and the reasons for those movements

BT's policy for provisioning is to calculate and provide for debt using pre-determined rates based on the age of debt. Each month end, BT's billing team obtains debtor balances from the Customer Service Systems (CSS) and process the provision required.

The level of provision required is calculated by taking the set provision percentage rates and multiplying these by the debt for the relevant age bands (excluding VAT). These provision percentage rates are general and not PRS specific. BT's bad debt provision is then audited on a quarterly basis.

Our understanding is that BT's approach to provisioning has remained consistent year on year.

4 BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

Revenue definition

1.3.6 - An outline description of the elements of BT's PRS and other NTS call revenues

The report should address the following transactions and other events which PRS stakeholders have raised:

- BT's retail revenues withheld under its AIT (artificial inflation of traffic) procedures.

Elements of revenue

BT's reported 08 NTS and 09 PRS revenues are comprised of revenues relating to a number of different products.

The 08 NTS revenue includes revenue relating to products:

- P056 – BT Linkline
- P313 – BT to OLO Lo-call
- P314 – BT to BT Nationalcall
- P346 – BTnet Services - Dial Access

The 09 PRS revenue includes revenue relating to products:

- P059 – BT Valuecall
- P315 – BT to OLO Valuecall

It should be noted that some of the revenue included within products P059 and P315 relates to call types that are not strictly 09 PRS calls, e.g. Timeline and Personal Numbering Services. When reporting 09 PRS revenue, BT has adjusted the P059 and P315 totals for these to ensure that only true 09 PRS revenue is being included.

AIT

When revenue is retained under BT's AIT procedures, e.g. fraudulent activity, the amount retained is deducted from both reported revenue and customer debt. As such, this amount does not get included within BT's bad debt charge as it is not written off from a customer's account.

When revenue is not retained under BT's AIT procedures, e.g. when activity is not deemed to be fraudulent, if the affected customer refuses to pay their bill and the account is written off, this would be included within BT's bad debt charge.

BT's bad debt management processes & procedures

1.3.7- A description of BT's retail telephony bad & doubtful debt management processes and disconnection procedures including those which relate exclusively to PRS calls.

BT has documented processes and procedures in place for the whole customer credit life cycle, from the sign up of new customers through to account termination and bad debt management.

There are no specific processes and procedures for PRS call types, although some of BT's Special Measures, e.g. the High Value Accounts team, are more likely to be applied to PRS customers, as it is these customers that are likely to generate the highest bills. BT's systems do not currently enable separate treatment of customers with high PRS usage. It is considered by BT that the cost of enabling separate treatment of high PRS usage customers would be much higher than the benefits achievable through a reduction in PRS bad debt.

Further details on BT's processes and procedures in this area are provided within Appendices A4 – A8 (pages 70 – 95).

5 NTS RETAIL CALL MINUTE VOLUMES AND IMPACT ON ASSOCIATED COSTS

5 NTS RETAIL CALL MINUTE VOLUMES AND IMPACT ON ASSOCIATED COSTS

INTRODUCTION

The specification of requirements set out by Ofcom for this engagement (Appendix C1, page 118) requires a number of outputs and other material to be addressed and commented on within the category of NTS retail call minute volumes and impact on associated costs.

For clarity, this section of our report summarises our findings in relation to this matter, addressing each of the queries set out by Ofcom's specification and cross referencing to the detailed analysis contained within the appendices to this document.

Relevance, reliability and comparability

2.2.1 - Verification that BT has

- correctly identified and then extracted from its source systems, and where necessary further analysed, the call volume minutes as provided to Ofcom which relate to NTS calls for 2007/08, 2008/09, and 2009/10
- the volumes so provided are relevant, reliable and comparable with each other

BT has reported operational chargeable NTS call minute volumes for the last three financial years as follows:

- 2007/08 – 11,591 million minutes
- 2008/09 – 8,418 million minutes
- 2009/10 – 6,567 million minutes.

These volumes are comprised of CSCS volumes, Featurenet volumes, Hosted Voice volumes and freephone volumes, for which supporting spreadsheets have been provided. We have reviewed the volumes reported by BT for each of the three years and agreed these back to the supporting spreadsheets.

In addition, for 2009/10, we have agreed the spreadsheets provided by BT back to system outputs. This has been completed as follows:

- CSCS and Featurenet volumes – The volumes for CSCS and Featurenet were generated by BT using its Powerhouse reporting system, with the schedule of report totals from Powerhouse being used as the basis of the supporting spreadsheet. We selected a sample of the reports from the Powerhouse report listing and agreed these to direct outputs from the Powerhouse system. A variance of less than 0.01% was identified
- Hosted Voice – BT's systems do not directly report volumes relating to Hosted Voice calls, so BT has estimated these from Hosted Voice revenues using a revenue rate of three pence per minute. The revenue totals have been verified to finance reports provided by BT product finance and the assumption of three pence per minute was evaluated. It was found that for CSCS NTS calls, an average revenue of 3.5 pence per minute was achieved, suggesting that Hosted Voice volumes may be overstated by [✂] minutes ([✂]% of total chargeable NTS volumes)
- Freephone – Volumes have been agreed to Fixed Telecommunications Market Data Reports provided to Ofcom and the adjustments for wholesale and data calls have been evaluated.

2.2.2- A calculation of the estimated impact that the drop in reported NTS call volume minutes should have on the previously provided cost information provided to Ofcom.

Where possible, BT allocates costs to the products to which they specifically relate. In some instances, costs can't be directly allocated to a specific product type so are allocated across products using a measure that BT deems to result in fair cost allocation, including the use of product revenue.

As such, a reduction in the reported NTS call minute volumes from 12,969 million minutes to 8,418 million minutes (regulatory to operational volumes) will not necessarily have an impact upon the costs that are allocated to NTS or PRS.

We understand that the majority of the cost categories allocated to PRS and NTS products are done so on the basis of revenue, so only a reduction in NTS or PRS revenues as well as volumes would be likely to result in a reduction in costs allocated to these products.

5 NTS RETAIL CALL MINUTE VOLUMES AND IMPACT ON ASSOCIATED COSTS

2.2.3- Observation on trends, for example any significant trend movements, any exceptional 'one-off' items in NTS call volumes between 2007/08 and 2008/09 prepared on a consistent basis

We have not been made aware of, nor have we identified during the course of our review, any particular one-off items in NTS call volumes between 2007/08 and 2008/09.

The major trend in NTS call volumes is that these reduced from 11,591 million minutes in 2007/08 to 8,418 million minutes in 2008/09. A further reduction to 6,567 million minutes was seen in 2009/10. We understand that the primary cause of the reduction in volume has been a decrease in popularity of NTS services, something that would seem to be supported by PRS revenue declining from £83.3 million in 2008/09 to £68.2 million in 2009/10.

Source operational systems

2.3.1- An outline description of the various source systems that BT uses to source NTS call volume minutes, including

- INCA
- Outbound Platform
- CSCS
- Sources supporting freephone volumes supplied quarterly by BT to support Ofcom market data

In sourcing its NTS call minutes volume data, BT uses a variety of systems, including those outlined above. These systems are used together in a variety of ways, depending on the type of call that is being made and which system the customer is billed using.

It should be noted that these systems support BT's retail activities and none have been specifically designed with the purpose of providing information for regulatory reporting.

A more detailed outline of the different systems used by BT and how these are used to extract NTS volumes data is contained within Appendix B6 (page 113).

Processing of raw volume data

2.3.2 - A description of how BT has processed the raw data taken from source systems to provide the NTS call volume figures it has supplied to Ofcom. The description should highlight any changes in sources and processes between 2007/08, 2008/09 and 2009/10.

We understand that the systems used by BT for sourcing its operational NTS call volume data have remained consistent in 2007/08, 2008/09 and 2009/10, with the only exception being revenue data for customers who BT have migrated to the Avalon billing system. As such, the data used should be comparable year on year.

Drop charge calls

2.3.3- A description of how BT measures drop charge calls for the purposes of recording NTS call minutes volumes. Drop calls are estimated to account around one third of all PRS revenues.

Drop charge calls are recorded in the same way as any other NTS call, i.e. the duration of the call is recorded by BT's systems and this information drives reported volumes.

Volumes: BT's exercise of judgement

2.3.4- An analysis of commentary on the key judgements and estimates made by BT in identifying and summarising NTS call minute volumes

The key area in which judgements have been made by BT in reporting NTS call minute volumes has been around Hosted Voice volumes, comprising [✂]% of total reported chargeable NTS volumes for 2009/10.

As outlined on page 103, Hosted Voice volumes have been estimated using revenue data for the year and an assumed revenue rate of three pence per minute. Our analysis has identified that a rate of 3.5 pence per minute may be more appropriate, however, suggesting that Hosted Voice volumes may be overstated by [✂] minutes (0.02% of total chargeable NTS volumes). This is not deemed to be a significant misstatement of reported NTS volumes for the year.

5 NTS RETAIL CALL MINUTE VOLUMES AND IMPACT ON ASSOCIATED COSTS

Retail cost attribution methodologies excluding bad debt

2.3.5- A description of the most significant of those retail cost attribution methodologies applied by BT to costs items which are not attributed to different call types directly in line with call volume minutes for 2008/09.

As outlined on page 25, BT has confirmed that costs are not attributed to different call types in line with volumes but in the way that BT deems to be most fair. This means that, where possible, costs are allocated directly to the call types to which they relate and, where this is not possible, another basis is used, normally call revenue.

Examples of major cost categories that BT has confirmed as being allocated in line with call revenues include: Support, e.g. BT Innovate & Design and BT Operate; Call Centre; and Marketing & Sales.

Bad debt costs are another example of revenue based cost allocation although, as explained within Appendix A1, the revenue basis used for these costs is limited to sampled written off accounts, rather than all revenue.

APPENDICES

BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

APPENDIX A1
PRS bad debt surcharge calculation methodology

APPENDIX A1
PRS bad debt surcharge calculation methodology

INTRODUCTION

BT's proposed PRS bad debt surcharges for 2009/10 and 2008/09 have been calculated using a high level methodology which is outlined below.

Within the context of our review, there are three key questions which need to be answered to establish whether BT's proposed calculations for the PRS bad debt surcharge using 2009/10 and 2008/09 data are fair and equitable, balancing the interests of both BT and PRS industry stakeholders. These questions are as follows:

a) Is the methodology used to calculate the PRS bad debt surcharge fit for purpose?

b) Have the mechanics of the methodology been applied correctly to arrive at the proposed surcharges for 2009/10 and 2008/09?

c) Can the financial information used to drive the calculations be verified back to appropriate source data?

This appendix of our report has been designed to answer question (a), providing a clear overview of the methodology used by BT and examining the key assumptions contained within it.

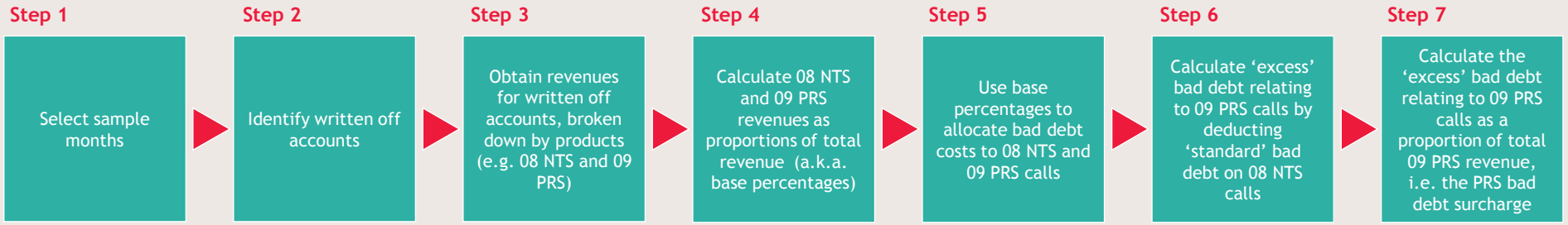
Questions (b) and (c) are addressed separately for 2009/10 and 2008/09 in the following two appendices of our report.

OVERVIEW OF BT'S PRS BAD DEBT SURCHARGE CALCULATION METHODOLOGY

BT's outline methodology for calculating the PRS bad debt surcharge has seven steps. These are as follows:

1. Three months from the financial year are selected as a sample.
2. A list of all of the accounts that have been written off during the three months selected for sampling is obtained.
3. For the accounts identified within Step 2, revenues are identified, broken down by product types, e.g. 08 NTS revenues and 09 PRS revenues.
4. 08 NTS and 09 PRS 'base percentages' are calculated, being the 08 NTS and 09 PRS revenue identified within Step 3 as a proportion of overall sampled revenue.
5. The 08 NTS and 09 PRS bad debt 'base percentages' are applied to BT Retail's total bad debt charge to estimate notional bad debt charges relating to 08 NTS and 09 PRS calls.
6. 'Excess' bad debt relating to 09 PRS calls is derived by calculating and deducting the 'standard' level of bad debt, i.e. using the per minute bad debt cost on 08 NTS calls.
7. The PRS bad debt surcharge is then derived by calculating the 'excess' bad debt relating to 09 PRS as a proportion of total 09 PRS revenue.

FIGURE 1 – BT'S PRS BAD DEBT SURCHARGE CALCULATION METHODOLOGY



APPENDIX A1
PRS bad debt surcharge calculation methodology

ASSUMPTIONS WITHIN BT'S PRS BAD DEBT SURCHARGE CALCULATION METHODOLOGY

The methodology used to calculate the PRS bad debt surcharge has been developed to provide an estimate of the correct surcharge without a commercially unacceptable burden being placed upon BT staff to do so. As such, the outline methodology contains a number of assumptions.

Given that the outline methodology contains assumptions, the PRS bad debt surcharges calculated will only be appropriate if these assumptions are deemed to hold true. In this report, therefore, we have sought to identify and, where possible, validate the assumptions contained within the methodology.

One fundamental assumption has been identified, which is addressed below. In addition, a number of other assumptions are also made within the methodology, specifically relating to BT's ability to generate accurate information from its systems. These assumptions are addressed within the following sections of our report, covering BT's application of the methodology in 2008/09 and 2009/10.

Assumption of relationship between revenue and bad debt proportions

The PRS bad debt surcharge calculation methodology does not examine actual 08 NTS and 09 PRS amounts written off, instead allocating notional bad debt costs to 08 NTS and 09 PRS calls using revenue proportions ('base percentages'). This means that the methodology is assuming a direct relationship between:

- 08 NTS and 09 PRS revenues as a proportion of total revenue, and
- 08 NTS and 09 PRS bad debt as a proportion of total bad debt.

Should this assumption not hold true, the 08 NTS and 09 PRS bad debt costs used within the methodology are unlikely to be correct and, as a result, the PRS bad debt surcharges calculated are also unlikely to be correct.

There are a number of anecdotal factors casting doubt on whether the proportion of 08 NTS and 09 PRS revenue within total revenue is directly equivalent to the proportion of 08 NTS and 09 PRS bad debt within total bad debt :

- Some elements of a customer's bill, e.g. line rental, are payable in advance, whereas others, e.g. 08 NTS and 09 PRS calls, are payable in arrears. As a result, when a customer is cut off, they should only be liable to pay for the services that they have received, meaning that the bad debt is more likely to relate to services paid for in arrears. This would suggest a higher incidence of bad debt relating to 08 NTS and 09 PRS services than services paid for in advance.
- In addition, when unauthorised activity (but not fraudulent AIT (page 92)) occurs on a customer's account, e.g. a member of a household uses the landline phone without the bill payer's consent, it is reasonable to suggest that the customer is likely to be dissatisfied with the situation. In these instances, it is feasible that there would be higher incidence of individuals refusing to pay their bills and as a result, contributing to bad debt. Given that the magnitude of the unauthorised activity is likely to be higher in relation to 08 NTS and 09 PRS calls than other calls, it is reasonable to consider that again there will be higher incidence of bad debt relating to 08 NTS and 09 PRS services than other services.

Both of these anecdotal factors suggest that the bad debt charges allocated to 08 NTS and 09 PRS are lower than may be appropriate. Having said that, however, there may be other anecdotal factors suggesting that the opposite holds true.

An example of this might be a customer who has historically used PRS services heavily but stops using them because they get into financial difficulty. Although they may have paid off all of their PRS related bills, they might have a later bill that they don't pay. In this instance, they could have quite a high proportion of PRS revenue within their total revenue for the previous 12 months, but the actual amount written off may contain no PRS revenue.

APPENDIX A1
PRS bad debt surcharge calculation methodology

Support for assumption

In 2009/10, some residential customers had been transferred to BT's new Avalon billing system. Unlike the CSS system, where 12 month revenue information was used, the financial information produced by the Avalon system reported revenue in relation to unpaid bills. This information is considered to provide a reasonable picture of the breakdown of bad debt for Avalon based accounts.

On page 40, it can be seen that 6.34% of sampled Avalon revenue related to PRS products compared to 5.25% of sampled CSS revenue. Although the Avalon data is a closer representation of written off amounts, as it is based on unpaid bills and not 12 months revenue, it would be unreasonable to use only the Avalon based residential PRS revenue percentage for the surcharge calculation. This is because there is likely to be a different incidence of bad debt across the two platforms due to the profile of customers on each being different.

To a limited extent, however, the similarity between the PRS proportions from the Avalon and CSS systems supports the notion that there is a relationship between the proportion of 08 NTS and 09 PRS revenue within total revenue and the proportion of 08 NTS and 09 PRS bad debt within total bad debt.

BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

INTRODUCTION

BT has applied the methodology set out on page 30 to data from its financial systems for the 2009/10 financial year.

As was the case in 2008/09, the application of the high level methodology using financial information available from BT's systems is relatively complex. In addition, there is a further complication with the 2009/10 data due to BT's mass migration of residential customers from its old CSS billing system to its new Geneva/Avalon system. This has required residential customer data to be drawn from both systems to provide revenue information.

This section of our report has been designed to outline:

- Have the mechanics of the methodology been applied correctly to arrive at the proposed surcharge of 5.25% for 2009/10?
- Can the financial information used to drive the calculation be verified back to appropriate source data?

A high level overview of this 2009/10 calculation is shown by Figure 2 below and opposite, and this is then assessed on a step by step basis over the following pages.

FIGURE 2 – BT'S PRS BAD DEBT SURCHARGE CALCULATION: 2009/10

STEP 3

Obtain revenues for written off accounts, broken down by products (e.g. 08 NTS and 09 PRS)

- 08 NTS: £[✂] (exc. VAT)
- 09 PRS: £[✂] (exc. VAT)
- Total: £[✂] (exc. VAT)

FIGURE 2 – BT'S PRS BAD DEBT SURCHARGE CALCULATION: 2009/10 (Cont.)

STEP 4

Calculate 08 NTS and 09 PRS revenues as proportions of total revenue (a.k.a. base percentages)

- Residential 08 NTS: 6.60%
- Residential 09 PRS: 5.54%
- Business 08 NTS: 3.26%
- Business 09 PRS: 0.70%
- Residential/Business 08 NTS: 5.70%
- Residential/Business 09 PRS: 4.24%

STEP 5

Use base percentages to allocate bad debt costs to 08 NTS and 09 PRS calls

- 08 NTS: £5.1m
- 09 PRS: £3.7m

STEP 6

Calculate 'excess' bad debt relating to 09 PRS calls by deducting 'standard' bad debt on 08 NTS calls

- **'Standard' bad debt: £0.1m**
- **'Excess' bad debt:** £3.6m

STEP 7

Calculate the 'excess' bad debt relating to 09 PRS calls as a proportion of total 09 PRS revenue, i.e. the PRS bad debt surcharge

- 09 PRS revenue: £68.2m
- PRS bad debt surcharge: 5.25%

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

STEP 1

Select sample months

Introduction

Three months from the financial year are selected as a sample to provide the basis for the PRS bad debt incidence calculation.

Overview of BT's application of the methodology

The methodology requires that three representative months are selected for sampling, with all accounts written off during those months being included within the sample data set. In 2009/10, the three months selected by BT were June 2009, November 2009 and January 2010.

BDO commentary and findings

We understand from our discussions with BT and PRS industry stakeholders that seasonality may have an impact on PRS call revenue, particularly the timing of shows which give rise to a high number of drop charge calls, such as X Factor, Britain's Got Talent and Strictly Come Dancing.

The three months selected by BT are spread out throughout the financial year and, as such, are more likely to be representative of the year as a whole than the selection of three consecutive months, as was the case for 2008/09 (page 57). In particular, seasonality in the sample selection will be mitigated to some extent by the selection of June 2009, November 2009 and January 2010 as sample months.

The data that has been provided for the three months is aggregated, which means it is not possible to verify whether each of the three months within the sample are directly comparable with each other. In addition, as is the nature of sampling, without extracting, manipulating and testing data for a number of other months during the year, it is not possible to verify that the months are directly comparable to others throughout the year.

To an extent, however, evidence supports that these months are representative of the year as a whole. The analysis on page 37 shows that of BT's bad debt write off total per its management accounts of £[✂] for the financial year, £[✂] (26.4%) related to the three months of June 2009, November 2009 and January 2010. As the three months make up 25% of the year, this suggests that these months are broadly representative of the year as a whole.

Conclusion

The selection of June 2009, November 2009 and January 2010 as sample months seems reasonable and is considered likely to provide representative data for the year as a whole.

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

STEP 2

Identify written off accounts

Introduction

A list of all of the accounts which have been written off during the three months selected for sample is obtained from BT's systems. In 2009/10, two separate systems were used, Avalon for migrated Residential customers and Customer Service System (CSS) for Business and non-migrated Residential customers.

Overview of BT's application of the methodology

In 2009/10, the sample months had [✂] accounts written off, with a total write off amount of £[✂].

The profile of the value of account balances written off during the three month sample period has been stratified and is shown in Table 1 opposite.

BDO commentary and findings

As outlined in Step 3 (page 38), the actual value of PRS related debt written off is not ascertained when calculating the PRS bad debt surcharge. Under BT's application of the methodology, it is the proportion of PRS revenue within sampled revenue that is relevant for the incidence calculation.

Table 1 opposite highlights that only 56.2% of the accounts written off had a balance of £100 or more, but these accounts represented 89.16% of the total value written off. In addition, 3.74% of the total number of accounts analysed had no more than £1 written off. These accounts contributed less than 0.01% of the total value written off.

TABLE 1 – AMOUNTS WRITTEN OFF: JUNE 09, NOVEMBER 09 & JANUARY 10

Amount written off >	Amount written off <=	Number of accounts written off (%)	Amount written off (%)	Cumulative number of accounts written off (%)	Cumulative amount written off (%)
0.00	0.01	[✂]%	[✂]%	[✂]%	[✂]%
0.02	1.00	[✂]%	[✂]%	[✂]%	[✂]%
1.01	5.00	[✂]%	[✂]%	[✂]%	[✂]%
5.01	10.00	[✂]%	[✂]%	[✂]%	[✂]%
10.01	50.01	[✂]%	[✂]%	[✂]%	[✂]%
50.01	100.01	[✂]%	[✂]%	[✂]%	[✂]%
100.01	200.00	[✂]%	[✂]%	[✂]%	[✂]%
200.01	500.00	[✂]%	[✂]%	[✂]%	[✂]%
500.01	1,000.00	[✂]%	[✂]%	[✂]%	[✂]%
1,000.01	40,000.01	[✂]%	[✂]%	[✂]%	[✂]%

If these were accounts with high PRS usage they may have a disproportionate effect on the bad debt incidence as, if CSS based accounts, the full 12 month revenues for these would be considered even though the debt write offs for these accounts were minimal. It was determined, however, that elimination of certain accounts would make the process overly complex.

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

BT provided a schedule of write off, write back and provision movement changes per month, taken from its management accounts. It is this schedule that has been used to verify the residential and business write off, write back and provision movement amounts later in this review of 2009/10 application.

On the management account schedule provided by BT, total write offs for the 12 month period were £[✂]. Write offs for the three sampled months were £[✂] equating to 26.4% of the total.

BT has explained that the variance between the total write off value on accounts written off during the sampled months (£[✂]), and the write off total within the bad debt charge per BT's management accounts (£[✂]) has arisen due to a number of factors. These include but are not limited to:

- Write off values on accounts including VAT but write off totals in management accounts excluding VAT
- Write off values on accounts including Hold To Term and Late Payment Charges but write off totals in management accounts excluding these
- Adjustments where accounts are selected for write off in a month and, as such, are accounted for within the management accounts for that month, but where they are not physically written off on the system until the following month.

This variance is not an issue in relation to the calculation of the bad debt surcharge, as sampled accounts are only used for the purposes of assessing the proportion of revenue within written off accounts that relates to NTS and PRS call types. The written off value of accounts included within the sample does not have any impact on bad debts attributed to PRS calls or the resulting surcharge.

Conclusion

We have no reason to suspect that BT's list of accounts written off in sampled months is inaccurate. BT's explanations for the variances between account balances of sampled accounts and management account write off totals for the three months are considered to be reasonable.

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

STEP 3

Obtain revenues for written off accounts, broken down by products (e.g. 08 NTS and 09 PRS)

Introduction

Steps 4 and 5 of the PRS bad debt surcharge calculation methodology (pages 43 - 47) allocate bad debt costs to 08 NTS and 09 PRS calls, based on the revenues for these call types as a proportion of total revenue. Step 3 requires extraction of revenue information to provide the basis for these calculations.

Overview of BT's application of the methodology

Within the context of the PRS bad debt calculation methodology, the most appropriate way of calculating 08 NTS and 09 PRS revenues as a proportion of total revenue would be to examine the amounts written off within the sampled accounts and identify 08 NTS and 09 PRS revenues within that spend amount. For example, if an account had £300 written off, the last £300 of expenditure on that account would be examined and any 08 NTS or 09 PRS expenditure would be calculated as a proportion of the £300 total.

BT's new Avalon system, covering migrated Residential customers, doesn't enable perfect identification of any 08 NTS or 09 PRS expenditure within write off amounts. It is possible, however, to identify any 08 NTS or 09 PRS expenditure on bills that have not been fully settled, so this data has been used as a best alternative.

BT's CSS system, used for Business and non-migrated Residential customers, is not even able to provide this data. As such, an alternative application of the methodology has had to be used for this system, examining revenue proportions for written off accounts for 12 months prior to the date that customers stopped receiving services.

Migrated Residential accounts (Avalon)

As outlined opposite, BT's Avalon system is not able to provide perfect information on the proportions of different types of product revenues within written off amounts. It can provide information on unsettled bills relating to written off accounts, but items such as part payments may result in there being a difference between the written off amount and the revenue totals from unsettled bills on that account. For example, where an account has an outstanding bill of £100 with £30 being part paid and £70 being written off, the write off total would be only £70 but the revenue reported for unsettled bills on that account would be £100.

Despite the limitation outlined above, it is considered that the magnitude of such variations is likely to be small and that information on unsettled bills for written off accounts is the most useful data available for assessing the proportions of different types of product revenues within written off amounts.

Extraction of revenue data for unsettled bills on written off accounts

Obtaining revenue data for unsettled bills from BT's Avalon system is not a straightforward process and requires a variety of reports to be generated and then matched. For simplicity, we have provided an overview of the process within Figure 3 on the following page.

Firstly, reports were generated containing all items written off during the three sampled months, June 2009, November 2009 and January 2010. It should be noted that there may be more than one item per account, i.e. if an account with two outstanding invoices was written off in November 2009, this would count as two items written off.

The written off items were then sorted by account termination date, i.e. the date that the services were no longer provided to the account, and grouped into five quarters: August 08 to October 08, November 08 to January 09, February 09 to April 09, May 09 to July 09, and August 09 to October 09. According to BT, there were no accounts with termination dates later than October 09 as there is a minimum of three months between account termination and write off.

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

Data on written off accounts is only available for those terminated from the quarter August 08 to October 08 onwards. As this data includes 99.7% of the accounts included within the sample, however, the accounts that have been omitted due to lack of available data (0.3%) are considered to be insignificant for the purposes of this review.

Quarterly reports, detailing revenue data for unsettled invoices were then extracted from BT's systems and these were then matched against the quarterly written off items tables, as outlined by Figure 3 opposite. This matching process provided a schedule of revenue data for unsettled invoices on the written off accounts included within the sample.

Issues identified with matching process

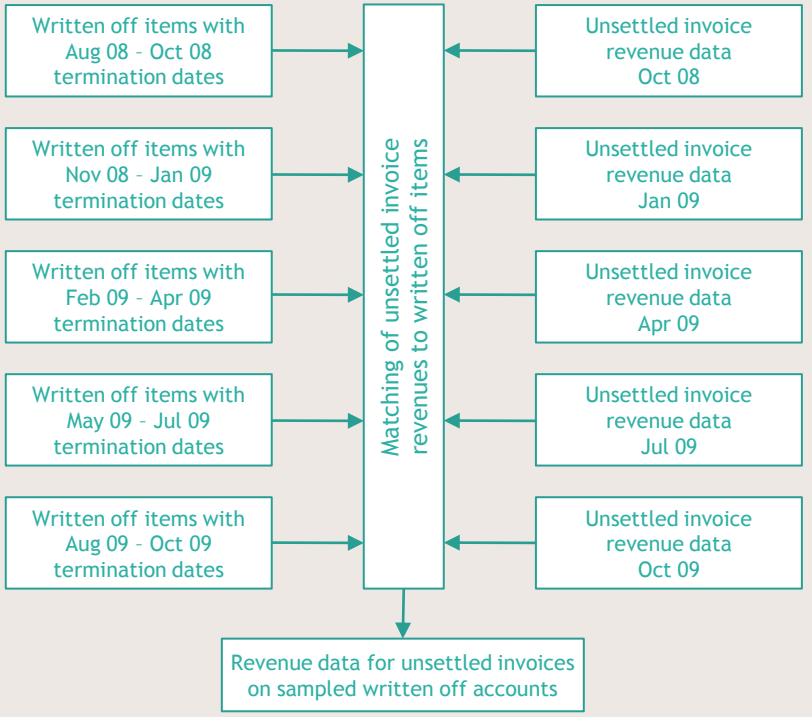
The first issue identified was that, when the data provided by BT was interrogated by BDO, it was found that there had been duplication within the matching process. Specifically, where an account had more than one written off item, each item had been matched with the revenue data for that account and, as such, the revenue for these accounts was counted more than once.

A second issue is that, for a number of Avalon based accounts included within the sample, complete data may not be available as unsettled invoice revenue data was only available for cease dates from the August 08 to October 08 quarter onwards. If accounts were ceased before this period no revenue data would be available, if accounts are ceased after 1 August 08 then revenue data would be available for all outstanding bills even where these invoices pre-date August 08.

The total amount written off for sampled accounts on the Avalon system was £[✂] (including VAT) and the total gross revenue used within the analysis was £[✂]. Of this, £[✂] was identified as relevant revenue reported for unpaid bills on these accounts.

The difference related to items such as VAT and termination charges, which do not form part of the bad debt expense. This suggests that the revenue used is a fair representation of the amounts that were written off.

FIGURE 3 – EXTRACTION OF REVENUE DATA FOR AVALON WRITTEN OFF ACCOUNTS



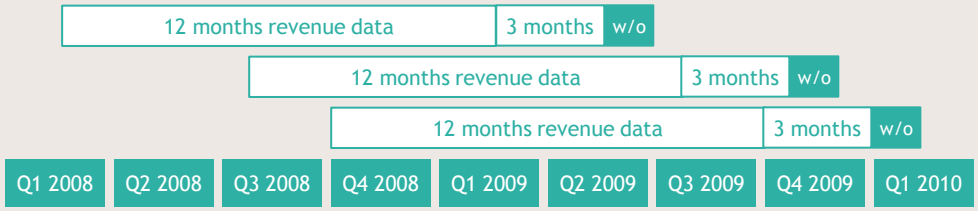
APPENDIX A2
2009/10 PRS bad debt surcharge calculation

Business and non-migrated Residential accounts (CSS)

As outlined on page 38, BT's CSS system is not able to provide data on the proportions of different types of product revenues within written off amounts. As an alternative, BT decided to review the revenues for written off accounts for a period of 12 months prior to the accounts' termination dates with a period of 3 months assumed to elapse between termination and the bill being written off. A period of 12 months was selected to eliminate seasonality within the revenue of sampled accounts.

Given that reports can only be generated on the basis of write off date and that there is a minimum of three months between an account being terminated and written off, report extracts were obtained providing revenue data for the 15 months prior to write off for each sampled account (see figure 4 below). Although this does not guarantee 12 month revenue data prior to termination, as the period between termination and write off may be more than three months, it is considered to be the most appropriate data available as a proxy for 12 month revenue data prior to account termination.

FIGURE 4 – CSS REVENUE DATA (BY MONTH OF WRITE OFF)



Variances between BT's and BDO's calculation of revenue totals

BDO's review identified that, in comparison to BT's suggested residential revenue total arising from the matching process of £[✂], the actual revenue total that should have been reported from the process was £[✂] (from both CSS & Avalon), an overstatement of 0.5%. BT's suggested revenue total arising from the matching process in respect of business was £[✂]. The actual revenue total that should have been reported from the process was £[✂] (from CSS only), an overstatement of 3.6%.

Revenue reported by product - Residential

Avalon (Migrated residential customers)

In BT's Avalon system, different types of revenue are identified using different revenue codes. These revenue codes were mapped to BT's general ledger codes which signifies the product the revenue code should be allocated to.

Although some revenue codes can be allocated to a single product, there are a significant proportion where a single revenue code represents revenue from more than one product. Where this is the case, for internal allocation of bad debt, this combined revenue is allocated in the proportion of regulatory product revenue, i.e. the revenue that can be specifically allocated.

For the PRS bad debt surcharge, PRS and NTS revenues are considered in total, i.e. the different products making up 08 NTS are aggregated and the different products making up 09 PRS are aggregated (see Table 2 below).

TABLE 2 – RESIDENTIAL 08 NTS AND 09 PRS REVENUES: AVALON SAMPLED ACCOUNTS

08 NTS Products	Revenue	% Of Total
P056 - BT Linkline	[✂]	[✂]%
P313 - BT to OLO Lo-call	[✂]	[✂]%
P314 - BT to BT Nationalcall	[✂]	[✂]%
P346 - BTnet Services - Dial Access	[✂]	[✂]%
Total mapped to all products	[✂]	100%

09 PRS Products	Revenue	% Of Total
P059 - BT Valuecall	[✂]	2.66%
P315 - BT to OLO Valuecall	[✂]	3.68%
Total mapped to all products	[✂]	100%

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

CSS (Non-migrated residential customers)

In BT's CSS system, different types of Residential revenue are identified using Network Value Numbers.

For CSS based customers, the relevant revenue is identified by a Network Value (NV). These NVs were mapped to the product the NV should be allocated to.

Although each NV only relates to a single product, NVs for a variety of products can be pointed to a single AS product (e.g. NVs for PRS, PNS and Timeline products are all pointed to P315 – BT to OLO Valuecall). Where this is the case, an apportionment of AS product bad debt costs by individual product totals is needed to ensure that the data used for the calculation of the bad debt surcharge only relates to PRS NVs.

The residential revenues mapped to different 08 NTS and 09 PRS products for sampled CSS accounts are outlined in Table 3 below.

TABLE 3 – RESIDENTIAL 08 NTS AND 09 PRS REVENUES: CSS SAMPLED ACCOUNTS

08 NTS Products	Revenue	% Of Total
P056 - BT Linkline	[✂]	[✂]%
P313 - BT to OLO Lo-call	[✂]	[✂]%
P314 - BT to BT Nationalcall	[✂]	[✂]%
P346 - BTnet Services - Dial Access	[✂]	[✂]%
Total mapped to all products	[✂]	100%

09 PRS Products	Revenue	% Of Total
P059 - BT Valuecall	[✂]	2.20%
P315 - BT to OLO Valuecall	[✂]	3.05%
Total mapped to all products	[✂]	100%

The percentage of total figures provided in Table 3 opposite are based on a mapped revenue total of £[✂]. For the Residential CSS accounts, however, sampled revenue was actually £[✂], as £0.5m of revenue was unable to be mapped.

CSS (Business customers)

As with Residential revenue, in BT's CSS system, different types of Business revenue are identified using Network Value Numbers.

The Business revenues mapped to different 08 NTS and 09 PRS products for sampled CSS accounts are outlined in Table 4 below.

TABLE 4 – BUSINESS 08 NTS AND 09 PRS REVENUES: CSS SAMPLED ACCOUNTS

08 NTS Products	Revenue	% Of Total
P056 - BT Linkline	[✂]	[✂]%
P313 - BT to OLO Lo-call	[✂]	[✂]%
P314 - BT to BT Nationalcall	[✂]	[✂]%
P346 - BTnet Services - Dial Access	[✂]	[✂]%
Total mapped to all products	[✂]	100%

09 PRS Products	Revenue	% Of Total
P059 - BT Valuecall	[✂]	0.39%
P315 - BT to OLO Valuecall	[✂]	0.88%
Total mapped to all products	[✂]	100%

The percentage of total figures provided in Table 4 above are based on a mapped revenue total of £[✂]. For the Business CSS accounts, however, sampled revenue was actually £[✂], as £0.2m of revenue was unable to be mapped.

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

BT's treatment of unmapped Residential and Business revenue on CSS assumes that, if it had been mapped, it would be allocated to NTS and PRS products in the same ratio as revenue that actually has been mapped.

It might be considered, however, that unmapped revenue is unlikely to relate to NTS or PRS products and, as such, this should be included within the calculation as non NTS / PRS revenue. If this approach were to be followed, the resulting PRS bad debt surcharge proposal for 2009/10 would be 5.18% rather than 5.25%.

We do not have sufficient evidence to conclusively support either position, but both would seem to be reasonable treatments.

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

STEP 4

Calculate 08 NTS and 09 PRS revenues as proportions of total revenue (a.k.a. base percentages)

Introduction

The NTS and PRS revenue identified within Step 3 is calculated as a proportion of the total revenue of the sampled accounts. These revenue proportions, known as base percentages, are separated out into three categories:

- Residential
- Business
- Residential/Business

Overview of BT's application of the methodology

Residential

As Residential 08 NTS and 09 PRS revenues were reported from two different systems, BT has weighted these revenue percentages to derive combined Residential base percentages for 08 NTS and 09 PRS calls.

The weightings have been calculated on the basis of the proportion of total sampled write offs originating on each system. Of the total amount written off on sampled accounts of £[✂], £[✂] (35.61%) related to CSS accounts and £[✂] (64.39%) related to Avalon accounts. As such, these percentages have been used as weightings for the base percentage calculation, as outlined by Table 5 opposite.

PRS products P059 and P315 also contain revenue not directly or indirectly relating to the PRS bad debt surcharge, e.g. Timeline and Personal Numbering Services revenue. For residential calls, these comprised 7% of P059 and P315 revenues, so these were adjusted for in the calculation of the base percentage.

TABLE 5 – CALCULATION OF RESIDENTIAL BASE PERCENTAGES

	Weighting	08 NTS				09 PRS	
		P056	P313	P314	P346	P059	P315
CSS	35.61%	[✂]%	[✂]%	[✂]%	[✂]%	2.20%	3.05%
Avalon	64.39%	[✂]%	[✂]%	[✂]%	[✂]%	2.66%	3.68%
Weighted		[✂]%	[✂]%	[✂]%	[✂]%	2.50%	3.45%
Total mapped to products		6.56%				5.95%	
% of product revenue relating to 08 NTS / 09 PRS		100%				93%	
BDO calculated base percentage		6.56%				5.53%	
Variance		0.04%				0.01%	
BT Residential base percentages		6.60%				5.54%	

The Residential base percentages that BT used for the remainder of the PRS bad debt surcharge calculation are marginally different to these base percentages, i.e. 6.60% and 5.54%,most likely due to small rounding differences in calculation.

For the remainder of this review, we have used the residential base percentages provided by BT, i.e. base percentages of 6.60% and 5.54%.

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

Business

Business revenues were only reported from the CSS system, so no weighting was required to calculate the Business base percentages. These are outlined in Table 6 below.

TABLE 6 – CALCULATION OF BUSINESS BASE PERCENTAGES

	08 NTS				09 PRS	
	P056	P313	P314	P346	P059	P315
CSS	[✂]%	[✂]%	[✂]%	[✂]%	0.39%	0.88%
Total mapped to products	3.27%				1.27%	
% of product revenue relating to NTS / PRS	100%				55%	
BDO calculated base percentage	3.27%				0.70%	
Variance	(0.01%)				-	
BT Residential base percentages	3.26%				0.70%	

PRS products P059 and P315 also contain revenue not directly relating to the PRS bad debt surcharge, e.g. Timeline and Personal Numbering Services revenue. For business calls, these comprised 45% of P059 and P315 revenues, so these were adjusted for in the calculation of the base percentage.

The business NTS base percentage that BT used for the remainder of the PRS bad debt surcharge calculation is marginally different to the BDO calculated base percentage, i.e. 3.26%, most likely due to small rounding differences in calculation.

For the remainder of this review, we have used the business base percentages provided by BT, i.e. base percentages of 3.26% and 0.70%.

Residential / Business base percentages

In the 2008/09 financial year, there was a large bad debt provision movement that could not be specifically allocated to either Residential or Business revenues. As such, BT calculated combined Residential / Business base percentages that could be applied to total provision movements to allocate costs to 08 NTS and 09 PRS.

For consistency, BT has followed the same approach in 2009/10, even though provision movements have been allocated specifically as either Residential or Business provision movements in this year. The calculation of the combined Residential / Business base percentage has been done by aggregating the Business base percentages and Residential base percentages for 08 NTS and 09 PRS, as outlined by Table 7 below.

TABLE 7 - CALCULATION OF RESIDENTIAL/BUSINESS BASE PERCENTAGE

	Bus. base %	Res. base %	Business provision movement (£k)	Residential provision movement (£k)	Total	
08 NTS	3.26%	6.60%	[✂]	[✂]	[✂]	5.70%
09 PRS	0.70%	5.54%	[✂]	[✂]	[✂]	4.24%
			[✂]	[✂]	[✂]	

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

BDO commentary and findings

Calculations

Weightings

Although other methods of calculating the weighting for the Residential base percentages could be used, e.g. total sampled revenue on each system, due to the differences in the way that revenue is reported for each system, the amount written off is considered to be the most appropriate method.

Residential and Business base percentages

As outlined on the previous pages, the residential and business base percentages used by BT are slightly different to those calculated by BDO.

To test the impact of this difference, we have recalculated BT's estimated PRS bad debt surcharge using the BDO calculated base percentages for both business and residential customers.

It was found that the use of BDO's calculated base percentages, including adjustments to the allocation of bad debt write backs (page 53), would result in the estimated PRS bad debt surcharge reducing to 5.22%.

Combined Residential / Business base percentages

The calculation of the combined Residential / Business base percentages is actually an unnecessary step in 2009/10, due to the provision movements being specifically allocated as either Business or Residential. The mechanics of the calculation have been applied correctly, however, and the allocation of costs relating to provision movements to 08 NTS and 09 PRS calls (see Step 5 on page 46) is unchanged by including this step, so this is deemed to be reasonable.

Source data

Within Step 4 of the methodology, the key numbers which have been used are as follows:

- Percentages of revenues attributable to different 08 NTS and 09 PRS products – The revenue apportionments to 08 NTS and 09 PRS have been correctly extracted from Step 3 of the methodology and are, therefore, considered to be reasonable
- Business and Residential provision movements – The total business and residential provision movements have been agreed to BT's management accounts. They are, therefore, considered to be reasonable.

Conclusion

When the PRS bad debt surcharge calculation is undertaken using the base percentages calculated by BDO, it has been found that the surcharge derived is 5.22%. As such, BT's estimated surcharge percentage may be overstated by 0.03%.

Excluding these concerns, BT has applied Step 4 of the PRS bad debt surcharge methodology correctly for 2009/10.

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

STEP 5

Use base percentages to allocate bad debt costs to 08 NTS and 09 PRS calls

Introduction

The base percentages for Residential (NTS 6.60%, PRS 5.54%), Business (NTS 3.27%, PRS 0.70%) and Residential/Business (NTS 5.70%, PRS 4.24%) are used to allocate total bad debt costs to NTS and PRS calls.

To do this, base values are used, representing the element of total bad debt costs which relate to each category, i.e. Residential write-offs, Business write-offs and Residential/Business provision movements.

The NTS base percentage for each category is applied to the base value for that category, giving the bad debt cost allocated to NTS for that category. Likewise, the PRS base percentage for each category is applied to the base value for that category, giving the bad debt cost allocated to PRS for that category.

TABLE 8 – NTS & PRS COST ALLOCATIONS

Description	Base value (£k)	NTS base percentage	Cost allocated to NTS (£k)	PRS base percentage	Cost allocated to PRS (£k)
MF/M Bases driven by SWIFT data apportionments					
Residential (BDRES)	[✂]	6.60%	[✂]	5.54%	[✂]
Business (BDBUS)	[✂]	3.27%	[✂]	0.70%	[✂]
Residential/Business (BDBUSRES)	[✂]	5.70%	[✂]	4.24%	[✂]
Write backs (page 53)			[✂]		[✂]
Other MF Bases driving costs to NTS/PRS AS Products					
BDCFB (page 53)			[✂]		[✂]
Total MF/M costs			5,018		3,652
Provision movements at Retail Centre level			43		8
Total			5,061		3,660

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

Overview of BT's application of the methodology

The costs allocated to NTS and PRS residential write-offs, business write-offs and residential and business provision movements are outlined in Table 8 on the previous page.

Additional adjustments are then made to these cost allocations for:

- Write backs – These relate to money received from customers for debts that had previously been written off.
- BDCFB – According to BT, the Customer Focused Billing (BDCFB) adjustment relates to bad debts written off against customers on the One Bill system, a system used for larger business customers. The costs allocated to NTS and PRS have been increased using this adjustment to reflect the bad debt cost relating to business accounts on the One Bill system (see page 53).
- Provision movements at Retail Centre level – This relates to a few minor adjustments that have been made to provisions at retail centre level.

BDO commentary and findings

Calculations

We have reviewed the arithmetic accuracy of the costs allocated to 08 NTS and 09 PRS within Table 8 and found these to be reasonable.

Source data

There are a variety of different numbers which are used within Step 5 of the methodology. These have been examined and our assessment of these are as follows:

- Base values for Residential, Business and Residential/Business – The adjustment for write backs has been reconciled to BT Retail management accounts as outlined on page 52.
- NTS and PRS base percentages – The BT base percentages have been correctly extracted from Step 4 of the methodology and, subject to our concerns identified there, are considered to be reasonable.
- Adjustment for Write backs – The adjustment for write backs has been reconciled to BT Retail management accounts. Slight variances have been identified between BT's allocation of write backs to NTS and PRS and BDO's calculated allocation. The impact of this has been assessed on page 53.
- Adjustment for BDCFB – The adjustment for BDCFB has been reconciled to BT Retail management accounts as outlined on page 53.
- Adjustment for Provision movements at Retail Centre level – The amount is immaterial and does not have an impact on the calculated surcharge percentage.

Conclusion

Subject to the concerns expressed on page 45 about the base percentages used by BT and the allocation of write backs to NTS and PRS products, BT has applied Step 5 of the PRS bad debt surcharge methodology correctly for 2009/10.

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

STEP 6

Calculate 'excess' bad debt relating to 09 PRS calls by deducting 'standard' bad debt on 08 NTS calls

Introduction

09 NVNs are not only PRS calls, they are also part of the NTS Retail Uplift call volumes. As such, an element of any bad debt relating to these calls is covered by the NTS retail uplift, i.e. the standard level of bad debt on chargeable NTS calls.

The PRS bad debt surcharge is levied to reflect the fact that the incidence of bad debt on 09 PRS calls is higher than it is on other NTS calls, e.g. 08 NVNs, and that the NTS retail uplift is not sufficient to cover this difference.

To ensure the PRS bad debt surcharge is not double counting the 'standard' level of bad debt, however, it is necessary to exclude 'standard' bad debt from the surcharge calculation. Step 6 therefore requires calculation and deduction of the 'standard' level of bad debt on 09 PRS calls to derive 'excess' 09 PRS bad debt.

Overview of BT's application of the methodology

BT has calculated the 'standard' bad debt for 09 PRS calls in 2009/10 as £82k. Given that total bad debt apportioned to 09 PRS calls in Step 5 was £3,660k, this means that the 'excess' bad debt relating to 09 PRS calls for 2009/10 was £3,578k. This is shown in Table 9 opposite.

TABLE 9 – EXCESS BAD DEBT RELATING TO 09 PRS

Total bad debt apportioned to 09 PRS calls (Table 8)	£3,660k
Of which standard level (Table 10)	£82k
Excess 09 PRS bad debt	**£3,578k**

Table 10 below outlines how the 'standard' level of bad debt on 09 PRS calls in 2009/10 was calculated, by:

- Dividing the total bad debt apportioned to 08 NTS calls by the total 08 NTS call minutes volume to give the cost per minute attributable to bad debt on 08 NTS calls
- Multiplying the cost per minute attributable to bad debt on 08 NTS calls by the total 09 PRS call minutes volume to give the 'standard' level of bad debt on 09 PRS calls.

TABLE 10 – STANDARD LEVEL OF BAD DEBT ON PRS CALLS

Total bad debt apportioned to NTS calls (Table 8)	£5,061k
NTS call minutes volume (million minutes)	6,462
Pounds per minute attributable to bad debt (£ pm)	£0.00078
PRS call minutes volume (million minutes)	105
Standard level of bad debt on PRS calls	**£82k**

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

BDO commentary and findings

Calculations

We have reviewed the arithmetic accuracy of the calculations for 'standard' and 'excess' levels of bad debt on 09 PRS calls, finding these to be reasonable.

Source data

Within Step 6 of the methodology, the key numbers which have been used are as follows:

- Total bad debt apportioned to NTS and PRS calls – The total bad debt apportionments to NTS and PRS have been correctly extracted from Step 5 of the methodology and are, therefore, considered to be reasonable.
- NTS and PRS call minutes volumes – The PRS call minute volumes have been agreed as the chargeable volumes reported by BT for 2009/10 and validated within Appendix B2 of this report. As such, they are deemed to be reasonable. For the NTS volumes, there is a small variance between the two totals used (7 million minutes). This variance has no impact on the resulting PRS bad debt surcharge calculated.

Conclusion

BT has applied Step 6 of the PRS bad debt surcharge methodology correctly for 2009/10.

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

STEP 7

Calculate the 'excess' bad debt relating to 09 PRS calls as a proportion of total 09 PRS revenue, i.e. the PRS bad debt surcharge

Introduction

The PRS bad debt surcharge is derived by calculating the 'excess' 09 PRS bad debt cost (from Step 6) as a proportion of total 09 PRS revenue. This essentially shows the percentage of 09 PRS revenue that is likely to be written off, over and above the normal level of bad debt on NTS calls.

Overview of BT's application of the methodology

BT has calculated the PRS bad debt surcharge in 2009/10 as 5.25%, as shown in Table 11 below.

TABLE 11 – PRS BAD DEBT SURCHARGE

Excess 09 PRS bad debt (Table 9)	£3,578k
09 PRS revenue (Table 12)	£68,159k
PRS bad debt surcharge	5.25%

BDO commentary and findings

Calculations

We have reviewed the arithmetic accuracy of the calculation for the PRS bad debt surcharge and have found this to be reasonable.

Source data

There are a variety of different numbers which are used within Step 7 of the methodology. These have been examined and our assessment of these are as follows:

- Excess 09 PRS bad debt – The 'excess' bad debt relating to 09 PRS calls has been correctly extracted from Step 6 of the methodology and is, therefore, considered to be reasonable
- 09 PRS revenue – 09 PRS revenue in 2009/10 has been reported as £68.2m, as shown in Table 12 below. Significant adjustments have been made to the ledgered revenue total of £77.7m, as outlined by Table 12 below. These adjustments are examined further on the following page.

TABLE 12 – PRS REVENUE

Total ledgered 2009/10	£77,676k
One Number revenue	£[✂]
Wholesale call revenue	£[✂]
Time Line	£[✂]
Paging	£[✂]
VOIP revenue re-assigned to PRS	£[✂]
Employee call allowance adjustment	£[✂]
09 PRS revenue	£68,159k

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

As outlined on the previous page, numerous adjustments have been made to the ledgered PRS revenue total to derive the 09 PRS total for the calculation.

The ledgered PRS revenue total is the total calls revenue, net of discounts, resulting from products P059 & P315. This total has been agreed to a Microsoft Excel based report provided by BT that has been extracted from its Aspire system. Due to the nature of the outputs from Aspire, i.e. MS Excel, we are unable to directly confirm the accuracy of the reported figures.

BT has explained the adjustments to this ledgered total as follows:

- One Number revenue – This relates to call revenue generated by retail customers that contact service providers on 070x numbers. BT's systems include them within products P059 & P315 but, as they are not PRS calls, they are not eligible for the PRS bad debt surcharge have been excluded from the calculation. The adjustment total of £[✂] has been agreed to a MS Excel report provided by BT as an extract from its Aspire system
- Wholesale call revenue - This relates to call revenue generated by the retail customers of BT Wholesale customers, e.g. Sky and TalkTalk, that contact service providers on PRS & other products. They are included within products P059 & P315 but are not PRS calls and are not eligible for the PRS bad debt surcharge . As such, they have been excluded from the calculation. The adjustment total has been agreed to a MS Excel report provided by BT as an extract from its Aspire system
- Time Line - This relates to call revenue generated by retail customers that contact the Time Line service on the 123 number. Timeline is a BT terminated product, so these calls are included within product P059, but as they are not PRS calls and are not eligible for the PRS bad debt surcharge, they have been excluded from the calculation. The adjustment total of £[✂] has been agreed to a MS Excel report provided by BT as an extract from its Aspire system
- Paging - This relates call revenue generated by retail customers that contact a Paging service on 076x numbers. They are included within products P059 & P315 but are not eligible for the PRS bad debt surcharge and, as such, have been excluded from the calculation. The adjustment total of £[✂] has been agreed to a MS Excel report provided by BT as an extract from its Aspire system
- VOIP revenue re-assigned to PRS – BT's CSCS data included small amounts of PRS revenue relating to VOIP calls which had been reallocated to Broadband Talk calls. As this was actually PRS revenue, it needed to be recognised within the surcharge calculation and BT has uplifted 09 PRS revenue by £[✂] to reflect this. The amount was extracted from systems by BT's regulatory finance team.
- Employee call allowance adjustment - Some BT Employees receive a free quarterly calls allocation of £[✂] each quarter. As BT does not receive revenue for these calls, the amount is deducted from PRS revenue. BT believed however, that the deduction of £[✂] that had been made in relation to this allowance had been overstated, so the adjustment was recalculated using residential base percentages. The recalculation suggested that only £[✂] of revenue should have been adjusted for, so the PRS revenue total was uplifted by £[✂] to reflect the difference.

Conclusion

We have discussed the nature of revenue adjustments with BT and have found these to be reasonable. In terms of agreeing the revenue totals to systems, we have only been able to agree these to MS Excel spreadsheet outputs as, from discussions with BT, this is the best evidence that is available.

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

RECONCILIATION OF BAD DEBT AMOUNTS USED TO MANAGEMENT ACCOUNTS

In the calculation of BT's estimated PRS bad debt surcharge percentage, as outlined on the previous pages, a number of bad debt write off, write back and provision movements figures have been used. To ensure that these have been used correctly, we have reviewed BT's reconciliation of these amounts to the Retail bad debt charge in BT management accounts.

Residential bad debt

Table 13 below show's BT's reconciliation of residential bad debt amounts used in the calculation to the management accounts total. The major variance between the two totals relates to £[✂] of write offs against to Mobility products that have been excluded from the calculation as they are not relevant to NTS or PRS products. The exclusion of this amount seems reasonable and has served to decrease BT's estimated PRS bad debt surcharge percentage.

TABLE 13 – Reconciliation of residential bad debt totals

	£'k	
Write offs	[✂]	Table 8, page 46
Write backs	[✂]	Table 15, page 53
Provision movement	[✂]	Table 7, page 44
TOTAL	[✂]	
Mobility	[✂]	Not relevant to NTS or PRS
Immaterial variance	(6)	
Residential charge per management accounts	[✂]	

Business bad debt

Table 14 below show's BT's reconciliation of business bad debt amounts used in the calculation to the management accounts total. The major variances between the two totals relate to £[✂] of write offs against Private Circuits products, £[✂] of write offs against SPU products and £[✂] of write offs against Mobility products that have been excluded from the calculation as they are not relevant to NTS or PRS products. The exclusion of this amount seems reasonable and has served to decrease BT's estimated PRS bad debt surcharge percentage.

TABLE 14 – Reconciliation of business bad debt totals

	£'k	
CSS driven		
Write offs	[✂]	Table 8, page 46
Write backs	[✂]	Table 15, page 53
Provision movement	[✂]	Table 7, page 44
CFB driven		
Write offs	[✂]	Table 16, page 53
TOTAL	[✂]	
Private Circuits, SPU & Mobility	[✂]	Not relevant to NTS or PRS
Immaterial variance	9	
Business charge per management accounts	[✂]	

APPENDIX A2
2009/10 PRS bad debt surcharge calculation

Allocations of bad debt amounts to NTS and PRS products

Write backs

Tables 7 and 8 on pages 44 and 46 highlight how write offs and provision movements have been allocated to NTS and PRS products, both for business and residential customers. They do not, however, highlight how write backs have been allocated to NTS and PRS products.

As outlined by Table 15 below, the allocation of write backs to NTS and PRS has been made using the same residential and business base percentages that were used for allocating write offs to products.

TABLE 15 – WRITE BACK ALLOCATIONS TO NTS & PRS

Description	Write back amount (£k)	NTS base %	Allocated to NTS (£k)	PRS base %	Allocated to PRS (£k)
Residential write backs	[✂]	6.60%	[✂]	5.54%	[✂]
Business write backs	[✂]	3.27%	[✂]	0.70%	[✂]
BDO calculation			[✂]		[✂]
Variance			4		18
Total			[✂]		[✂]

Small variances have been identified between BT's allocations to NTS and PRS and those recalculated by BDO, possibly due to rounding differences. The combined impact of this and the variance in base percentages used is assessed on page 45.

BDCFB

Not all business customers are billed using BT's CSS system, as some larger business customers are billed using BT's One Bill system. To ensure that the bad debt cost relating to these customers has been included in the estimated PRS bad debt surcharge calculation, BT has made a Customer Focused Billing (BDCFB) adjustment to the costs allocated to NTS and PRS. This is outlined by Table 16 below.

TABLE 16 – BDCFB ADJUSTMENT

Description	Write back amount (£k)	NTS base %	Allocated to NTS (£k)	PRS base %	Allocated to PRS (£k)
CFB driven	[✂]	8.70%	[✂]	1.63%	[✂]
BDO calculation			[✂]		[✂]
Variance			(39)		-
Total			[✂]		[✂]

The NTS and PRS base percentages used above were derived from business revenues from the Onebill system. A small variance has been identified between BT's allocations to NTS and the amount recalculated by BDO. As the variance primarily relates to NTS cost allocations, however, this has not had an impact upon the resulting PRS bad debt surcharge calculation.

Conclusion

The bad debt amounts used in the PRS bad debt surcharge calculation can be reconciled to BT Retail's management accounts totals and are deemed reasonable. The allocation of write backs to NTS and PRS may have resulted in a small overstatement in the estimated PRS bad debt surcharge percentage, as outlined on page 45.

BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

APPENDIX A3
2008/09 PRS bad debt surcharge calculation

APPENDIX A3
2008/09 PRS bad debt surcharge calculation

INTRODUCTION

BT has applied the methodology set out on page 30 to data from its financial systems for the 2008/09 financial year. Due to the nature of the financial information collated from BT's systems, however, the application of the methodology in 2008/09 is more complex than expected. This appendix of our report outlines whether:

- The mechanics of the methodology been applied correctly to arrive at the proposed surcharge of 5.24% for 2008/09?
- The financial information used to drive the calculation can be verified back to appropriate source data?

REDUCTION IN PRS BAD DEBT SURCHARGE PERCENTAGE

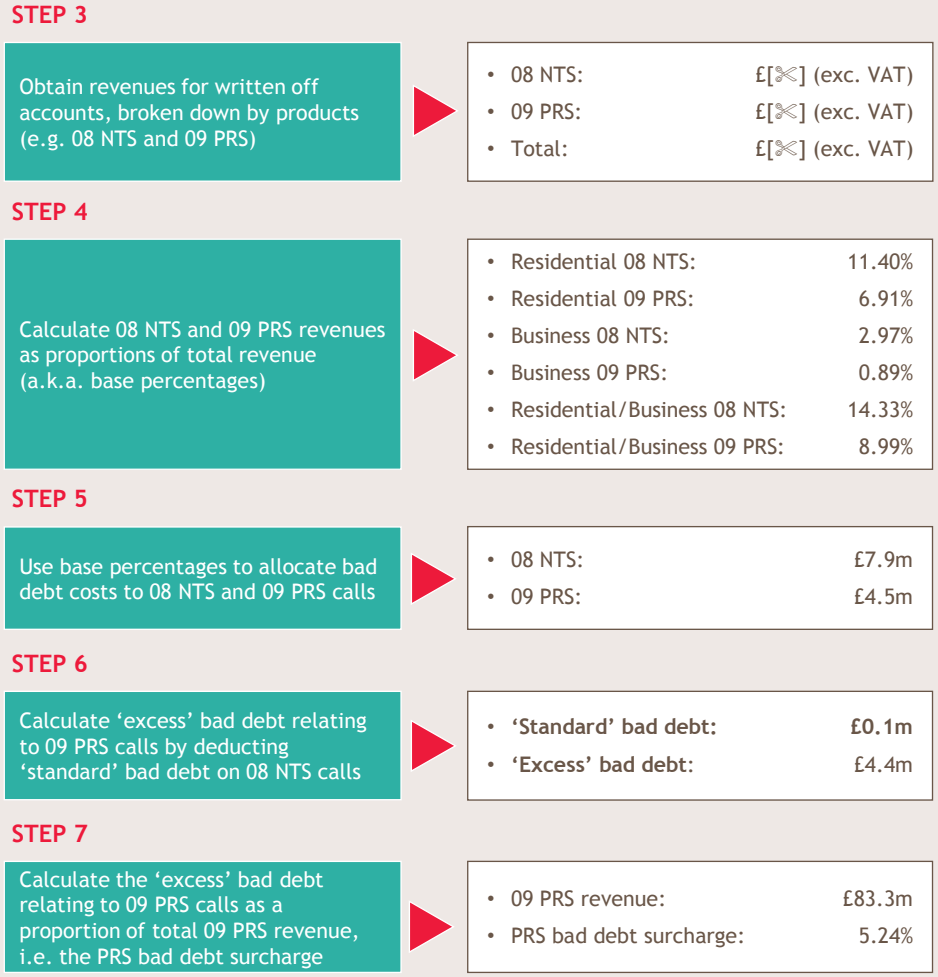
In October 2009, BDO were appointed to review BT's methodology and calculation of the PRS bad debt incidence for 2008/09, which formed part of the 2008/09 PRS bad debt surcharge calculation. This original calculation used Locality code and Sub-break code information to allocate revenue to PRS calls, resulting in a PRS bad debt surcharge of 9.74%. During our initial review, however, a number of issues were identified with BT's application of the methodology, including revenues being incorrectly categorised between NTS and PRS due to incorrect Locality code and Sub-break code mapping.

After queries were raised by Ofcom and BDO about the mapping of revenue to NTS and PRS products, BT determined that the original Locality code and Sub-break code information could not be relied upon for the purposes of the calculation. In addition, BT stated that it was not possible to correct the mapping of the Locality codes and Sub-break codes for the purposes of recalculating the surcharge.

As such, BT developed a new way of allocating revenues for 2008/09, resulting in a new proposed PRS bad debt surcharge of 5.24%. This was not an amendment to the methodology, merely an amendment to the way that the methodology was applied to BT's financial data.

A high level overview of this 2008/09 calculation is shown by Figure 5 opposite, and it is assessed on a step by step basis over the following pages.

FIGURE 5 – BT'S PRS BAD DEBT SURCHARGE CALCULATION: 2008/09



APPENDIX A3
2008/09 PRS bad debt surcharge calculation

EXPLANATION FOR THE REDUCTION IN PRS BAD DEBT SURCHARGE PERCENTAGE

As outlined on the previous page, BT's new application of the methodology for 2008/09 has resulted in a significant decrease in the proposed PRS bad debt surcharge to 5.24%. This can be explained as follows.

Attributed debt

The PRS bad debt surcharge is derived by calculating the 'excess' bad debt relating to PRS calls as a proportion of total 09 PRS revenue. In the initial calculation, £6.9m of bad debt costs were attributed as relating to PRS calls. In BT's amended calculation, only £4.5m of bad debt costs were attributed as relating to PRS calls.

The explanation for this is that, as outlined by our review of the original application of the methodology, 08 NTS revenues had been incorrectly categorised as 09 PRS revenues for the calculation. This was corrected for the calculation of the amended 5.24% surcharge by using Network Value Numbers to identify 08 NTS and 09 PRS revenues. As such, 09 PRS revenue for sampled accounts was lower in the amended calculation than in the original calculation, causing bad debts allocated to 09 PRS to reduce.

The reduction in attributed debt occurred even though the amended application of the methodology included both BT to BT and BT to other service provider revenues, whereas in the original 9.7% calculation, BT to BT revenue had been excluded. It was deemed that including both BT to BT and BT to other service provider revenues for the amended calculation was more appropriate, due to issues with accurately reporting these in isolation of each other.

Revenue

The 09 PRS revenue total used for the initial calculation was stated as £70.7m but this has increased to £83.3m for the amended calculation because, as outlined opposite, both BT to BT and BT to other service provider revenues have been included, whereas only BT to other service provider revenues were used for the initial calculation. BT to other service provider revenues alone have actually fallen.

Conclusion

As bad debts attributed to 09 PRS calls have decreased and total 09 PRS revenues have increased in the new calculation, the significant decrease in the PRS bad debt surcharge to 5.24% is to be expected.

APPENDIX A3
2008/09 PRS bad debt surcharge calculation

STEP 1

Select sample months

Introduction

Three months from the financial year are selected as a sample to provide the basis for the PRS bad debt incidence calculation.

Overview of BT's application of the methodology

The methodology requires that three representative months are selected for sampling, with all accounts written off during those months being included within the sample data set. In 2008/09, the three months selected by BT were April, May and June 2008.

The rationale for the sample selected in the 2008/09 period was that BT had agreed as part of Telecom Strategic Review to separate its billing system for retail customers from that used for its upstream customers (CSS).

Mass migration of retail customers to BT's new billing system (Avalon) started early 2008/9 but there were initial problems extracting customer spend data used in step 3 of the process. There was also a problem with the automatic account write off function on Avalon that resulted in BT Billing needing to manually write off large numbers of accounts in batches.

As a result of the system problems, BT continued to use data from the SWIFT system fed from the CSS system during quarter 1 of the 2008/09 accounting period. For the PRS surcharge calculation methodology, BT determined that it would be more sensible to use data for April, May and June 2008 for sampling as this data could be extracted from SWIFT.

BDO commentary and findings

As three sequential months were selected for the 2008/09 calculation, bad debt percentages may not be fully representative of the year as a whole. Choosing a spread of months throughout the year, such as March, August and December, is likely to provide more suitable information to base bad debt allocation on.

As the months selected are at the start of the year, this is more likely to mean that written off revenues relate to 2007/08 than 2008/09. In addition, we understand that BT normally selects its three sample months in December, choosing the sample from the previous nine months. Although this would allow for a wider spread of months within the sample than in 2008/09, this does mean that the months of January, February and March would never be included.

The exclusion of the three months immediately prior to BT's 31 March year end is likely to skew the data as it is reasonable to assume that some degree of adjustment to bad debt write offs, write backs and provisions occurs during this time as part of BT's year end close process.

Furthermore, we understand from our discussions with BT and PRS industry stakeholders that seasonality may have an impact on PRS call revenue, particularly shows such as X Factor, Britain's Got Talent and Strictly Come Dancing It is, therefore, important to ensure seasonality factors are considered by the sample. Whilst seasonality within the sampled accounts is considered at a later step in the methodology, the selection of three consecutive months does not allow for seasonality to be considered by the sample selection itself.

Conclusion

Whilst there are valid reasons supporting BT's selection of April, May and June 2008, the fact that these months are consecutive means that the seasonality of sampled accounts is not considered. As such the sample selected for 2008/09 may not be representative of the year as a whole and doubts exist over the accuracy of any calculation based on this sample.

APPENDIX A3
2008/09 PRS bad debt surcharge calculation

STEP 2

Identify written off accounts

Introduction

A list of all of the accounts which have been written off during the three months selected for sample is obtained from BT's Customer Service System (CSS).

Overview of BT's application of the methodology

In 2008/09, the sample months had [✂] accounts written off, with a total write off amount of £[✂].

The profile of the value of account balances written off during the three month sample period has been stratified and is shown in Table 17 opposite. Only 53.99% of the accounts written off had a balance of £100 or more, but these accounts represented 90.44% of the total value written off.

BDO commentary and findings

As outlined in Step 3 (page 59), the actual value of PRS related debt written off is not ascertained when calculating the PRS bad debt surcharge. Under BT's application of the methodology, it is the proportion of PRS revenue in the 12 months prior to the write off that is relevant for the incidence calculation.

Table 17 opposite highlights that 4.24% of the total number of accounts analysed had no more than £1 written off. These accounts contributed less than 0.001% of the total value written off. If these were accounts with high PRS usage they may have a disproportionate effect on the bad debt incidence as the full 12 month revenues for these accounts would be considered even though the debt write offs for these accounts were minimal.

TABLE 17 – AMOUNTS WRITTEN OFF: APRIL 08, MAY 08 & JUNE 08

Amount written off >	Amount written off <=	Number of accounts written off (%)	Amount written off (%)	Cumulative number of accounts written off (%)	Cumulative amount written off (%)
0.00	0.01	[✂]	[✂]	[✂]	[✂]
0.02	1.00	[✂]	[✂]	[✂]	[✂]
1.01	5.00	[✂]	[✂]	[✂]	[✂]
5.01	10.00	[✂]	[✂]	[✂]	[✂]
10.01	50.01	[✂]	[✂]	[✂]	[✂]
50.01	100.01	[✂]	[✂]	[✂]	[✂]
100.01	200.00	[✂]	[✂]	[✂]	[✂]
200.01	500.00	[✂]	[✂]	[✂]	[✂]
500.01	1,000.00	[✂]	[✂]	[✂]	[✂]
1,000.01	40,000.01	[✂]	[✂]	[✂]	[✂]

We have not yet been provided with bad debt write off values by month so cannot verify that the totals from the account write off lists for April, May and June 2008 agree to BT's financial systems.

Conclusion

Whilst we have no reason to doubt the lists of accounts that have been provided, these have not been verified back to monthly write off totals so we are unable to conclude with absolute certainty that the list of accounts for the 2008/09 sample is correct.

APPENDIX A3
2008/09 PRS bad debt surcharge calculation

STEP 3

Obtain revenues for written off accounts, broken down by products (e.g. 08 NTS and 09 PRS)

Introduction

Steps 4 and 5 of the PRS bad debt surcharge calculation methodology (page 63 - 66) allocate bad debt costs to 08 NTS and 09 PRS calls, based on the revenues for these call types as a proportion of total revenue. Step 3 requires extraction of revenue information to provide the basis for these calculations.

As outlined in Appendix A2, BT's CSS system is not able to provide data on the proportions of different types of product revenues within written off amounts. As an alternative, BT decided to review the revenues for written off accounts for a period of 12 months prior to the accounts' termination dates with a period of 3 months assumed to elapse between termination and the bill being written off. A period of 12 months was selected to eliminate seasonality within the revenue of sampled accounts.

Overview of BT's application of the methodology

Available revenue data

For BT's initial calculation of the 2008/09 PRS bad debt surcharge, information on the previous 12 months revenue for the sampled written off accounts was extracted from SWIFT. Due to BT's data retention policies, however, only 7 months data was available for the amended 2008/09 calculations, with the revenue information covering the period from September 2007 to March 2008 (i.e. the 7 months prior to April 2008).

Identification of revenue by product

For the original 2008/9 calculation of 9.7%, BT had used Locality code and Sub-break codes within its SWIFT system as the basis for identifying 08 NTS and 09 PRS calls. During our initial review, however, a number of issues were identified with Locality code and Sub-break code mapping, resulting in revenues being incorrectly categorised between 08 NTS and 09 PRS. In particular, non PRS revenues were found to have been included within the 09 PRS data provided, specifically revenue relating to 0844 and 0871 calls.

In light of these issues, BT has developed a new basis of identifying 08 NTS and 09 PRS values using Network Value Numbers (NVNs). NVNs are considered by BT to be a more appropriate way of identifying 08 NTS and 09 PRS calls. This is because each new number range requested by a Terminating Communications Provider is allocated a NVN and Network Value Description (or chargeband) that relates to the tariff charged to the calling customer.

Revenue reported

The total revenue for sampled accounts reported by BT for the seven month period was £[✂], with £[✂] being allocated as 08 NTS revenue and a further £[✂] being allocated as 09 PRS revenue. The 7 month revenue total equates to 60.22% of the 12 month revenue total of £[✂] which was reported during our initial review of the 9.7% calculation.

TABLE 18 – 7 MONTHS REVENUE FOR SAMPLED WRITTEN OFF ACCOUNTS

Revenue type	Total revenue (£)
08 NTS	[✂]
09 PRS	[✂]
Others (not relevant to this analysis)	[✂]
Total	[✂]

APPENDIX A3
2008/09 PRS bad debt surcharge calculation

BDO commentary and findings

Available revenue data

From the initial calculation's 12 month revenue reports, the revenue of accounts written off was spread over the period July 2006 to June 2008, as highlighted by Table 19 opposite. BT stated the reason that the amounts written off covered the period from July 2006 was due to different customers having a range of final bill dates. BT stated that another factor affecting the distribution was that, where part payments were made on an account, the write off of the account was deferred. The final bill for an account, therefore, may have been issued a number of months prior to the account write off.

A major concern must therefore exist over the use of only 7 month revenue data for the amended 2008/09 calculation. From Table 19 opposite, 39.78% of the total revenue arising on sampled written off accounts in the 12 months immediately prior to final bill date was incurred prior to September 2007. As such, this revenue will not be considered as part of the amended calculation, giving rise to two concerns:

- Monthly revenues may be impacted by seasonality factors and as the revenue reports no longer cover the whole year, any seasonality factors will no longer eliminated
- The number of months revenue examined for any account will be inconsistent due to the time lag between final bill dates and accounts being written off. From Figure 6 below, account (a) was written off in June 08 and had a final bill date of March 08, meaning that six months revenue data was available. In contrast, account (b) was written off in April 08 but had a final bill date of November 07, perhaps due to a part payment being made. In this example, only two months revenue data was available.

FIGURE 6 – AVAILABLE REVENUE DATA (EXAMPLES)

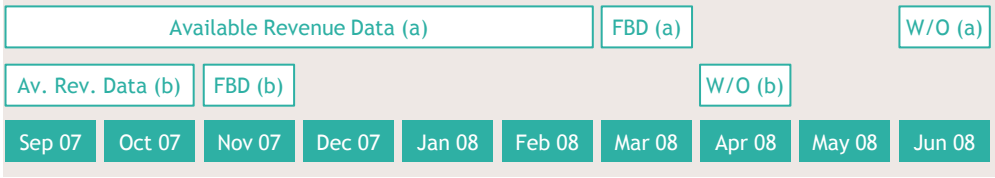


TABLE 19 – PRIOR 12 MONTHS REVENUE OF ALL ACCOUNTS WRITTEN OFF: APRIL – JUNE 08

Bill month	Revenue %	Cumulative revenue %
2006/07	[✂]	[✂]
2006/08	[✂]	[✂]
2006/09	[✂]	[✂]
2006/10	[✂]	[✂]
2006/11	[✂]	[✂]
2006/12	[✂]	[✂]
2007/01	[✂]	[✂]
2007/02	[✂]	[✂]
2007/03	[✂]	[✂]
2007/04	[✂]	[✂]
2007/05	[✂]	[✂]
2007/06	[✂]	[✂]
2007/07	[✂]	[✂]
2007/08	[✂]	[✂]
2007/09	[✂]	[✂]
2007/10	[✂]	[✂]
2007/11	[✂]	[✂]
2007/12	[✂]	[✂]
2008/01	[✂]	[✂]
2008/02	[✂]	[✂]
2008/03	[✂]	[✂]
2008/04	[✂]	[✂]
2008/05	[✂]	[✂]
2008/06	[✂]	[✂]
	[✂]	

APPENDIX A3
2008/09 PRS bad debt surcharge calculation

Identification of revenue by product

From our discussions with BT and analysis of the NVN data provided, BT's new methodology for identifying 08 NTS and 09 PRS calls seems to be a significant improvement on the previous Locality code and Sub-break code method.

BT generated a list of NVNs which are deemed to relate to either 08 NTS or 09 PRS calls and this was provided to BDO for review.

We reviewed the NVN listing provided to us by BT and tested it for accuracy by examining all NVNs over £100. The relevant NVNs were cross referenced to BT's Tariff guide to confirm that they were 08 NTS or 09 PRS numbers.

It was found that all NVNs allocated to 09 PRS were reasonable. Although one non PRS NVN, 003 – National, had been included within the 09 PRS data extracted from SWIFT, the revenue for this NVN was deducted from the SWIFT total as a reconciling item. BT's explanation for this was that BT has some test numbers on 09 numbers which are nominally charged at National Geographic call rates.

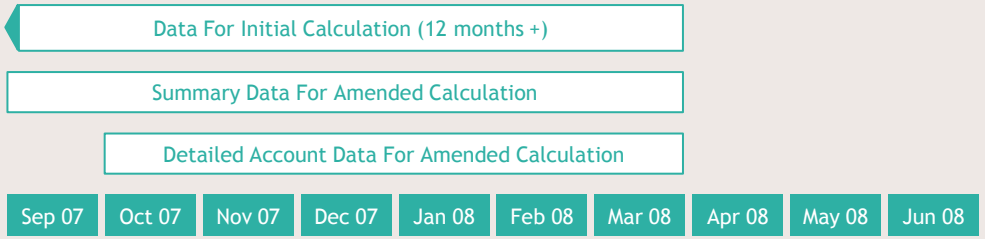
It was also found that the NVNs allocated to 08 NTS were reasonable. Although one seemingly non NTS NVN, 07699, had been included within the 08 NTS data extracted from SWIFT, BT informed us that Vodapage, who own the number range, decided to charge calling customers the local NTS call rate rather than the normal paging rates such as r rate (NVN 94). Given that total revenues for this NVN were minimal, the inclusion of this NVN as NTS is not deemed to have an impact upon the PRS bad debt surcharge calculation.

Revenue reported

The availability of summary and detailed information for the initial PRS bad debt surcharge calculation of 9.7% and the amended calculation of 5.24% is shown by Figure 7 opposite.

We were unable to obtain detailed account data to support the seven month revenue reports used by BT for the amended calculation as, due to BT's data retention policies, detailed information was only available for the period October 2007 to March 2008.

FIGURE 7 – AVAILABLE REVENUE DATA (BY TYPE)



We have, however, analysed the six months detailed data for October 2007 to March 2008, finding the monthly revenue totals to be consistent with the seven month summary revenue reports used by BT.

In addition, the monthly revenue totals were found to be consistent with the 12 month data supplied for the initial calculation, analysed by Locality code and Sub-break code. This was only on a total revenue basis and not by revenue type, however, as the 12 month revenue reports for the initial calculation allocated revenues to 08 NTS and 09 PRS in a different way to the new seven month revenue reports.

The revenue report used for the initial 2008/09 surcharge calculation stated that revenues on these accounts for the 12 months prior to their final bill dates totalled £[✂] excluding VAT.

The total value of amounts written off during the sample period of April to June 2008 was £[✂] including VAT. Assuming a VAT rate of 17.5%, this equates to approximately £[✂] excluding VAT.

BT stated that it was reasonable and not unexpected that written off amounts represented 85.5% of the previous 12 months revenue. BT commented that a fairly high percentage of revenue in the previous 12 months would be expected to be written off as BT has noted that a high proportion of bad debt relates to new customers. In addition, a pattern has been noticed that immediately prior to a customer defaulting, their usage often increases.

APPENDIX A3
2008/09 PRS bad debt surcharge calculation

Conclusion

Both the use of NVNs to identify 08 NTS and 09 PRS revenues, and BT's allocation of NVNs to 08 NTS and 09 PRS are considered to be reasonable.

As was the case with the selection of April, May and June 2008 as the sample months, there are valid reasons supporting BT's use of seven month revenue data for the PRS bad debt surcharge calculation. Issues with seasonality and inconsistent revenue information for accounts with different final bill dates, however, mean that doubts exist over the accuracy of any calculation based on this revenue sample.

Due to the major issues in relation to the availability of information outlined above, our verification of financial data has focused on the 2009/10 calculation rather than 2008/09 as it is not believed that reliance can be placed on the 2008/09 calculation.

APPENDIX A3
2008/09 PRS bad debt surcharge calculation

STEP 4

Calculate 08 NTS and 09 PRS revenues as proportions of total revenue (a.k.a. base percentages)

Introduction

The NTS and PRS revenue identified within Step 3 is calculated as a proportion of the total revenue of the sampled accounts. These revenue proportions, known as base percentages, are separated out into three categories:

- Residential
- Business
- Residential/Business

Global and BT Internal revenues are ignored as they comprise only 0.025% of total sampled revenue.

Overview of BT's application of the methodology

Residential

In the revenue data identified within Step 3, residential revenue is represented by account type 1 'Consumer'. As outlined by Tables 20 and 21 opposite, the base percentages for residential revenue are 11.40% for 08 NTS calls and 6.91% for 09 PRS calls.

Business

In the revenue data identified within Step 3, business revenue is represented by account type 3 'SME' and account type 4 'Corporate'. As outlined by Tables 20 and 21 opposite, the base percentages for business revenue are 2.97% for 08 NTS calls and 0.89% for 09 PRS calls.

TABLE 20 – 08 NTS REVENUE AS A PROPORTION OF TOTAL REVENUE

Account type	08 NVN revenue (£)	Total revenue (£)	08 NVN proportion of total
1 - Consumer	[✂]	[✂]	11.40%
3 - SME	[✂]	[✂]	2.97%
4 - Corporate	[✂]	[✂]	
5 - Global	[✂]	[✂]	
7 - BT Internal	[✂]	[✂]	
Total	[✂]	[✂]	

TABLE 21 – 09 PRS REVENUE AS A PROPORTION OF TOTAL REVENUE

Account type	09 restated NVN revenue (£)	Total revenue (£)	09 NVN proportion of total
1 - Consumer	[✂]	[✂]	6.91%
3 - SME	[✂]	[✂]	0.89%
4 - Corporate	[✂]	[✂]	
5 - Global	[✂]	[✂]	
7 - BT Internal	[✂]	[✂]	
Total	[✂]	[✂]	

APPENDIX A3
2008/09 PRS bad debt surcharge calculation

Residential/Business

For Step 5 in the process, the 08 NTS and 09 PRS base percentages are applied to base values, an element of BT's total retail bad debt cost, to derive a bad debt cost attributable to 08 NTS and 09 PRS.

Whilst there are specific base values for Residential and Business, a base value also exists for combined Residential and Business. BT's explanation for this is that some types of bad debt provision movement cannot be specifically allocated as being either Residential or Business and, as such, are allocated to a combined category.

Given that there is a combined Residential and Business base value, suitable 08 NTS and 09 PRS base percentages for Residential/Business need to be calculated to derive the appropriate bad debt cost attributable. As outlined by Table 22 below, this has been done by aggregating the Business base percentages and Residential base percentages for 08 NTS and 09 PRS. The resulting combined Residential/Business base percentages are 14.33% for 08 NTS and 8.99% for 09 PRS.

BDO commentary and findings

Calculations

We have reviewed the arithmetic accuracy of the 08 NTS and 09 PRS base percentage calculations for Residential and Business and found these to be reasonable.

The release of bad debt provision of £[✂] is a major adjusting item during the year and is likely to have caused a reduction in the bad debt costs allocated to NTS and PRS. We are unable to validate, however, whether this provision movement relates solely to the 2008/09 financial year.

Source data

There are a variety of different numbers which are used within Step 5 of the methodology. These have been examined and our assessment of these are as follows:

- Revenues by account type – The total revenue figure and the 08 NTS and 09 PRS revenue totals tie back to the revenue information reported from SWIFT in Step 3. As outlined within Step 4, due to issues with 2008/09 data reliability, focus has been on validating the 2009/10 calculation.
- Provision movements – The provision movements have been provided to us by BT but we have not been provided with a reconciliation of these amounts to management account totals. As outlined within Step 4, due to issues with 2008/09 data reliability, focus has been on validating the 2009/10 calculation.

Conclusion

Due to the major issues in relation to the availability of information outlined previously, our verification of financial data has focused on the 2009/10 calculation rather than 2008/09 as it is not believed that reliance can be placed on the 2008/09 calculation.

TABLE 22 - CALCULATION OF RESIDENTIAL/BUSINESS BASE PERCENTAGE

	Business base	Residential base	Business provision movement (£k)	Residential provision movement (£k)	Release of a bad debt provision for consumer WLR3	Total	
08 NTS	2.97%	11.40%	[✂]	[✂]	[✂]	[✂]	14.33%
09 PRS	0.89%	6.91%	[✂]	[✂]	[✂]	[✂]	8.99%
			[✂]	[✂]	[✂]	[✂]	

APPENDIX A3
2008/09 PRS bad debt surcharge calculation

STEP 5

Use base percentages to allocate bad debt costs to 08 NTS and 09 PRS calls

Introduction

The base percentages for Residential (NTS 11.40%, PRS 6.91%), Business (NTS 2.97%, PRS 0.89%) and Residential/Business (NTS 14.33%, PRS 8.99%) are used to allocate total bad debt costs to NTS and PRS calls.

To do this, base values are used, representing the element of total bad debt costs which relate to each category, i.e. Residential, Business and Residential/Business. The NTS base percentage for each category is applied to the base value for that category, giving the bad debt cost allocated to NTS for that category.

Likewise, the PRS base percentage for each category is applied to the base value for that category, giving the bad debt cost allocated to PRS for that category.

Overview of BT's application of the methodology

The costs allocated to NTS and PRS for each of the three categories in the 2008/09 calculation are outlined in Table 23 below. Additional adjustments are then made to these cost allocations for:

- BDCFB – According to BT, this relates to bad debts written off against customers on the Customer focussed Billing (CFB) product, a product aimed at larger business customers.
- Non MF/M costs in base – According to BT, this relates to bad debts that are not covered by the BDRES, BDBUS, BDBUSRES and BDCFB bases.

TABLE 23 – NTS & PRS COST ALLOCATIONS

Description	Base value (£k)	NTS base percentage	Cost allocated to NTS (£k)	PRS base percentage	Cost allocated to PRS (£k)
MF/M Bases driven by SWIFT data apportionments					
Residential (BDRES)	[✂]	11.40%	[✂]	6.91%	[✂]
Business (BDBUS)	[✂]	2.97%	[✂]	0.89%	[✂]
Residential/Business (BDBUSRES)	[✂]	14.33%	[✂]	8.99%	[✂]
Other MF Bases driving costs to NTS/PRS AS Products					
(BDCFB)			[✂]		[✂]
Total MF/M costs			8,500		4,553
Non MF/M costs in base			(604)		(60)
Total			7,895		4,493

APPENDIX A3
2008/09 PRS bad debt surcharge calculation

BDO commentary and findings

Calculations

We have reviewed the arithmetic accuracy of the costs allocated to 08 NTS and 09 PRS within Table 23 and found these to be reasonable.

Source data

There are a variety of different numbers which are used within Step 6 of the methodology. These have been examined and our assessment of these are as follows:

- Base values for Residential, Business and Residential/Business – The Residential and Business base values are the total bad debt costs that BT has reported relating to these customers. The Residential/Business base value relates to provision movements. As outlined previously, we have not verified these values back to supporting data / systems.
- NTS and PRS base percentages – The base percentages have been correctly extracted from Step 5 of the methodology and, as such, are considered to be reasonable, subject to our concerns expressed within Step 4.
- Adjustment for BDCFB – As outlined previously, we have not verified these values back to supporting data / systems.
- Adjustment for Non MF/M costs in base – As outlined previously, we have not verified these values back to supporting data / systems.

Conclusion

Due to the major issues in relation to the availability of information outlined previously, our verification of financial data has focused on the 2009/10 calculation rather than 2008/09 as it is not believed that reliance can be placed on the 2008/09 calculation.

APPENDIX A3
2008/09 PRS bad debt surcharge calculation

STEP 6

Calculate 'excess' bad debt relating to 09 PRS calls by deducting 'standard' bad debt on 08 NTS calls

Introduction

09 NVNs are not only PRS calls, they are also part of the NTS Retail Uplift call volumes. As such, an element of any bad debt relating to these calls is covered by the NTS retail uplift, i.e. the standard level of bad debt on NTS calls.

The PRS bad debt surcharge is levied to reflect the fact that the incidence of bad debt on 09 PRS calls is higher than it is on other NTS calls, e.g. 08 NVNs, and that the NTS retail uplift is not sufficient to cover this difference. To ensure the PRS bad debt surcharge is not double counting the 'standard' level of bad debt, however, it is necessary to exclude 'standard' bad debt from the surcharge calculation. Step 6 of the methodology calculates the 'excess' bad debt relating to PRS by eliminating the 'standard' bad debt on these calls.

Overview of BT's application of the methodology

BT has calculated the 'standard' bad debt for 09 PRS calls in 2008/09 as £115k. Given that total bad debt apportioned to 09 PRS calls in Step 6 was £4,493k, this means that the 'excess' bad debt relating to 09 PRS calls for 2008/09 was £4,378k. This is shown in Table 24 below.

TABLE 24 – EXCESS BAD DEBT RELATING TO 09 PRS

Total bad debt apportioned to 09 PRS calls (Table 23)	£4,493k
Of which standard level (Table 25)	£115k
Excess 09 PRS bad debt	£4,378k

Table 25 below outlines how the 'standard' level of bad debt on 09 PRS calls in 2008/09 was calculated, by:

- Dividing the total bad debt apportioned to 08 NTS calls by the total 08 NTS call minutes volume to give the cost per minute attributable to bad debt on 08 NTS calls
- Multiplying the cost per minute attributable to bad debt on 08 NTS calls by the total 09 PRS call minutes volume to give the 'standard' level of bad debt on 09 PRS calls.

TABLE 25 – STANDARD LEVEL OF BAD DEBT ON PRS CALLS

Total bad debt apportioned to NTS calls (Table 23)	£7,895k
NTS call minutes volume (million minutes)	12,784
Pounds per minute attributable to bad debt (£ pm)	£0.0006175
PRS call minutes volume (million minutes)	187
Standard level of bad debt on PRS calls	£115k

BDO commentary and findings

Calculations

We have reviewed the arithmetic accuracy of the calculations for 'standard' and 'excess' levels of bad debt on 09 PRS calls, finding these to be reasonable.

Source data

Within Step 7 of the methodology, the key numbers which have been used are as follows:

- Total bad debt apportioned to NTS and PRS calls – The total bad debt apportionments to NTS and PRS have been correctly extracted from Step 5 of the methodology and, subject to our concerns expressed within Step 5, are considered to be reasonable.

APPENDIX A3
2008/09 PRS bad debt surcharge calculation

- NTS and PRS call minutes volumes – The volume totals that have been used for the calculation are those that BT reported to Ofcom in it's initial information response. BT has now submitted revised volumes which should be used for this step in the calculation.

Conclusion

Due to the major issues in relation to the availability of information outlined previously, our verification of financial data has focused on the 2009/10 calculation rather than 2008/09 as it is not believed that reliance can be placed on the 2008/09 calculation.

APPENDIX A3
2008/09 PRS bad debt surcharge calculation

STEP 7

Calculate the 'excess' bad debt relating to 09 PRS calls as a proportion of total 09 PRS revenue, i.e. the PRS bad debt surcharge

Introduction

The PRS bad debt surcharge is derived by calculating the 'excess' 09 PRS bad debt cost (from Step6) as a proportion of total 09 PRS revenue. This essentially shows the percentage of 09 PRS revenue that is likely to be written off, over and above the normal level of bad debt on NTS calls.

Overview of BT's application of the methodology

BT has calculated the PRS bad debt surcharge in 2008/09 as 5.24%, as shown in Table 26 below.

TABLE 26 – PRS BAD DEBT SURCHARGE

Excess 09 PRS bad debt (Table 24)	£4,378k
09 PRS revenue (Table 27)	£83,311k
PRS bad debt surcharge	5.24%

BDO commentary and findings

Calculations

We have reviewed the arithmetic accuracy of the calculation for the PRS bad debt surcharge and have found this to be reasonable.

Source data

There are a variety of different numbers which are used within Step 8 of the methodology. These have been examined and our assessment of these are as follows:

- Excess 09 PRS bad debt – The 'excess' bad debt relating to 09 PRS calls has been correctly extracted from Step 7 of the methodology and, subject to our concerns expressed within Step 7, is considered to be reasonable
- 09 PRS revenue – 09 PRS revenue in 2008/09 has been reported as £83.3m, as shown in Table 27 below. Significant adjustments have been made to the ledgered revenue total of £114.8m, relating to revenue types such as One Number, Wholesale, Timeline and Paging. Whilst we have discussed the nature of these adjustments with BT and consider that these do not constitute 09 PRS revenue, reported revenues have not been verified back to systems due to the previously discussed issues with the 2008/09 calculation.

TABLE 27 – PRS REVENUE

Total ledgered 2008/09	£114,849k
One Number revenue	£[✂]
Wholesale call revenue	£[✂]
Time Line	£[✂]
Paging	£[✂]
09 PRS revenue	£83,311k

Conclusion

Due to the major issues in relation to the availability of information outlined previously, our verification of financial data has focused on the 2009/10 calculation rather than 2008/09 as it is not believed that reliance can be placed on the 2008/09 calculation.

BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

APPENDIX A4
Credit management: Analysis

APPENDIX A4
Credit & bad debt management: Summary

CREDIT AND DEBT MANAGEMENT

Credit management refers to activities aimed at :

- Increasing revenue by extending credit to customers who are deemed a good credit risk, whilst
- Minimising risk of loss from bad debts by restricting or denying credit to customers who are not a good credit risk.

Debt management is a component of credit management, focusing more on the recovery of debt from customers whose bills are overdue and are considered unlikely to be recoverable.

From our discussions with BT in relation to its debt management processes and procedures, in addition to analysis of the PRS bad debt surcharge calculation methodology, we have identified that BT does not separately identify PRS debt from other debt in accounts which are written off.

The suggestion from BT is that PRS revenue is far more likely to result in bad debt than other types of retail revenue. Given the potentially high cost of PRS on individuals' bills, this would seem to be a reasonable assertion. Furthermore, the results of the PRS bad debt surcharge calculation would also seem to validate this.

As a result of the above, the main focus of this review is BT's credit and debt management processes to establish a reasonable level of assurance that they do not contribute significantly to the higher level of bad debt relating to PRS calls than other call types.

BT has, throughout this review, demonstrated that reasonable credit management processes and controls are in place to efficiently manage their debt. Based on the information provided by BT, staff have reasonable motivation, support and controls in place to enable them to make decisions and manage customer interaction appropriately. The technology (although not tested) appears to manage the flow of information and route the customer through a variety of scenarios adequately. Processes and procedures are well documented and again demonstrate good practice.

In addition, we have been able to validate that BT apply a good level of rigour to monitoring, measuring and analysing the performance of the various functions to ensure they maintain effective credit management processes.

As BT does not treat PRS bad debt differently to any other form of bad debt, it was necessary to consider all of BT's credit management processes during this review.

OUR APPROACH

Stage 1 - Understanding

Meetings with key BT staff in relation to bad debt enabled our team to establish a high-level understanding of the customer end-to-end cycle through management representation.

Stage 2 - Validation

During this stage of the process we validated our understanding of BT's processes, controls and policies, working through the stages from customer acquisition, service follow up/customer in-life to customer termination. This particular stage required BT to provide evidence to support our more detailed discussions, capturing people, processes and technology.

Stage 3 - Effectiveness

Having developed a high-level understanding of the customer end-to-end cycle in stage 1 and validated our understanding through documentary review in stage 2 we seek to evaluate the effectiveness of BT's bad debt management processes and procedures through review of BT's own internal performance data. These measures include KPIs as well as other analysis/data reports which BT's management uses to evaluate and measure the effectiveness of key functions within bad debt management.

APPENDIX A4
Credit & bad debt management: Approach

Stage 1 – Establishing our understanding of BT's credit management process

This stage involved meetings with key BT staff in relation to customer management and, in particular, senior staff responsible for BT's bad debt management processes. Our understanding was based on management representation to enable our team to establish a high-level understanding of the customer end-to-end cycle.

Due to the scale of BT's customer base of around 15 million customers, ranging from individual customers with a single phone line to government departments and some of the world's largest multinationals, BT's approach is designed for optimisation. BT's model for customer relationship management therefore, relies heavily on technology to route the customer through the various credit management processes, which include:

- Customer acquisition
- Payment options
- Collections cycles
- Proactive call monitoring
- Query handling.

There are a series of large teams which deal with most enquiries; customer services deal with most calls but, on occasion, may redirect the call to a specialist.

The main teams involved in the process are:

- (Inbound) – customer services - general enquiries
- Outbound team/Holistic Approach to Reluctant Payers (HARP) team - obtain settlement
- High value accounts (HVA) and Artificially Inflated Traffic (AIT) Monitoring team – looking for excessive spend.

Within customer services, not all advisors are trained to deal with all products and all have different levels of authority to deal with customer enquiries including complaints. Ultimately there is a complaints team in place where a customer can be routed with their full history tracked on the system.

This approach would suggest that BT is working to ensure optimal utilisation of its customer service advisers in the management of general enquiries, coupled with the use of technology to facilitate the routing of customers through the process.

Customer services are supported by a number of front and back office systems which include:

- SWIFT - This system is an integrated data warehouse used by BT Retail which holds customer details, billing and revenue data. It has been, hitherto, the single source of data for BT Retail Marketing. The database allows BT Retail to analyse all its Customer Service System (CSS) based customers
- OWL - Knowledge Management System designed to support customer service advisors during day to day customer enquiries
- CSS – Customer Service System. This is BT's largest and mainframe computing system. It manages all aspects of Customer Service, including BT Billing
- Easiserve/Easypay – web-based application used for taking card payments & setting up direct debits
- Autodialler – used to connect to outbound calls and present calls to the agents desktop. The advisor interface with the dialler is an MS-DOS prompt screen
- Project HARP web-based reporting tool – used to record action taken on decision maker contacted calls
- SMART – to facilitate the promotion of CCRA (Credit Card Recurring Authority) and Pay & Call.

APPENDIX A4
Credit & bad debt management: Approach

Stage 2 - Validation

Having established an overview of BT's approach to credit management, we sought to validate our understanding through the review of documentation that supports BT's processes, controls and policies, working through the various stages from customer acquisition, service follow up/customer in-life and customer termination.

This particular stage required BT to provide evidence to support our Stage 1 discussions, capturing people, processes and technology. Documentation was made available to our team, including:

- Flowcharts of processes and controls
- Documented process narratives
- Policies and procedures documentation which supports BT's retail consumer billing process.

Although we have not seen one specific BT 'bad debt procedures manual', BT provided our team with sufficient examples including BT's Credit Management Consumer Operational Procedures manual. This document covers bad debt within a section and various bad debt policies including a 'Bad Debt Provisions and Write-offs' document, suggesting that BT has reasonable bad debt management processes and controls in place.

BT has provided BDO with much of the information we would expect to see during a review of bad debt management processes and controls (i.e. staff monitoring and reward schemes, staff induction information and performance scorecards).

We would expect, however, as with similar organisations to BT, that it keeps complete, updated and succinct credit management and bad debt policies and procedures in a single comprehensive reference point. Our review has been somewhat convoluted due to the piecemeal way the documentation was provided and a result contributed to the extended time taken to ensure our complete understanding and validation of, not only the end to end process, but the supporting documentation.

We have looked at the end to end process of the customer 'in life' and reviewed examples of BT's policies and processes as follows:

- Credit management policies examples including:
  - New acquisition policy
  - Bad debt provision policy
  - Invoicing procedure
  - Late payment charge policy
  - Payment option strategy.
- Credit management processes examples including:
  - Debt collection – overview
  - Supervisor process
  - Modifying billing process
  - Billing enquiry process
  - Reconnection request process.
- Customer services policies examples including:
  - Staff Training
  - KPI's monitoring
  - Continuous improvement.

APPENDIX A4
Credit & bad debt management: Approach

Stage 3 - Effectiveness

During this high-level review, we have been able to gain, through discussions and document review, a reasonable level of comfort that BT ensure the bad debt process is not conducted in isolation of other credit management or customer engagement processes and, for the most part, demonstrates good practice.

It is our understanding that BT conducts a number of internal reviews, including the acquisition policy, by using scorecards (which fit behind the external credit checks). The scorecards are matched to the business environment and are, therefore, constantly updated.

The acquisition team receive a detailed level of management information, which they can refer to when updating scorecards to ensure the scores are appropriate for each customer and the business environment. In addition, BT conducts historical financial modelling, where they go back 6 months/1 year in order to review performance and introduce new policies. For example, they look at sales take up, how many applications go to first reminder, how many applications go to call bars etc. The BT customer acquisition team works with BT finance to collect this data.

In addition, we have reviewed examples of BT's service performance model, bad debt trend analysis and customer services manager and agent scorecards. These examples demonstrate that BT do conduct a good level of analysis and evaluation as to the effectiveness of their credit management process. In addition, BT have produced documentary evidence of the way analysis that is collected feeds in to monthly management information reports to ensure that each part of the process is performing against agreed KPI's.

BT's performance measurement is derived from a number of factors that include:

- Standard accounting ratios and metrics
- Internal reporting traditions
- Systems capabilities.

Management's decision making is further informed by auditors reports, suppliers such as DCAs and outsource partners, and a variety of external consultants engaged to help BT identify improvement opportunities in the bad debt and working capital areas.

BT's debt performance is measured in terms of standard accounting metrics which relate debt to revenue and which also examine pockets of debt in age bands. At a lower level, this extends to analysing debt not progressing through standard timescales. Each specific activity within credit management is assessed in relation to the value and volume of debt that moves through to a subsequent stage of follow up and the costs of the process to the business.

BT's bad debt is measured initially in relation to sales value. Volumes, values and average values of defaulting customers are continually reported, in addition, further measures are routinely analysed to help understand customer behaviour, end to end process and improvement opportunities. These include:

- Default by credit score
- Default by tenure
- Revenue components of defaulting customers
- Default by value band
- Default by bill frequency
- Default by payment option
- Default by generic product grouping.

It would appear from the information provided that BT do evaluate and monitor all aspects of their credit management process and, therefore, BT are able to measure effectiveness of their bad debt management processes and procedures.

APPENDIX A4
Credit & bad debt management: Observations

OBSERVATIONS

Given the findings outlined on the previous pages, we believe that BT's general debt management processes and controls do not significantly contribute to the higher level of bad debt relating to PRS calls than other call types. There are, however, some observations which may contribute to some extent to a high level of bad debt within PRS. These are as follows:

- By not considering PRS specifically in terms of its credit & bad debt management processes and procedures, there is a possibility that BT may not identify some cases of unusual/peak PRS usage which, in turn, may contribute to an increased level of the overall bad debt.
- As BT's (HVA) High Value Accounts team appear to focus on high value accounts and unusual activity, there is a possibility the team might be missing out on the middle tier of customers. BT has to balance the risk of not contacting individuals, however, with the risk of 'false positives', whereby customers who are genuinely making a lot of PRS calls, which they intend to pay for, are contacted and may consider this to be intrusive. In addition, as the team monitors activity by account rather than product, this doesn't enable effective monitoring of trends and anomalies in product usage.
- Although the processes and controls around customer acquisition are reasonable and demonstrate good practice (see page 83), it should be noted that, to all intents and purposes, BT appears to extend an open ended line of credit to some customers who have a good payment history / credit record, by way of not establishing a call or credit limit unless requested or in special cases.

  By way of comparison, the credit card industry has guidelines (Banking Code in March 2005) which are built around industry responsible lending practices, and what are known as 'low and grow' policies. This encourages responsible borrowing and allows cardholders to manage their credit and improve their credit record over time. We do not know what percentage of BT customers do not have limits on their account or whether the majority of debt BT write offs can be attributed to customers with no limits on their accounts, but establishing a 'low and grow ' policy for all BT customers might be something for BT's consideration.
- This process of applying limits to new customers is further supported by BT's analysis that it is new customers that generate proportionally higher bad debt. BT are therefore planning to review their current customer acquisition policy in order to address this issue.
- BT plan to extend the use of monthly billing in specific segments, they continue however, to offer the option of quarterly billing and manual payments. Quarterly billing in particular can contribute to the phenomenon known as "bill shock". In some cases customers with a low credit score are offered a usage limit and monthly billing if they refuse the various DD options available to them. BT should consider widening this policy to all customers not on direct debit.
- BT currently have a number of planned initiatives that include:
  - Credit management segmentation
  - Acquisition policy change - consumer
  - Integrated acquisition policy – business
  - Compulsory DD for specific business segments.

BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

APPENDIX A5
Credit management: Overview

APPENDIX A5
Credit management overview

Internal management pages 78 - 80

BT applies best practice across all disciplines within credit management.

Below is set out, at a high level, the key elements of the bad debt governance approach within BT Retail.

The overall governance of BT's bad debt relies on a variety of policies, analysis, reporting, organisations and processes.

Key elements of this are listed below and are each covered in more detail in the following pages

Retail Billing - Consumer Billing Process

BT has [✂] different credit classes, (see pg 81) which each follow a specific debt collection process set out below. There is no specific process for the collection of PRS bad debt, there is a general collection process.

In simplistic terms a customer on a monthly billing who fails to pay could have a total of [✂] days calling before they are prevented from making any more calls. It stands to reason that a customer on a quarterly billing cycle will be able to make calls for up to [✂] days before out bound calls are barred. BT have polices and procedures in place to help customers, however, and a number of special measures to manage unusual or excessive usage.

In general, BT's debt collection lifecycle consists of the following thirteen stages listed below which are covered in more detailed on pages 81 - 82.

1 - 4 Credit management

- S1 - [✂] days Bill production / invoice
- S2 - [✂] days 1st reminder (voice)
- S3 - [✂] days LPC raised
- S4 - [✂] days 2nd reminder

5 - 7 Contact and save

- S5 - [✂] days OCB - direct to advisor
- S6 - [✂] days HARP team 'Save call'
- S7 - [✂] days TOS - (ICB)

8 - 9 Termination of service

- S8 - [✂] days Termination notice
- S9 - [✂] days Cessation & final notice

10 - 13 Bad debt management

- S10 - Solicitors letter
- S11 - DCA first placement
- S12 - DCA second placement
- S13 - Prosecutions

APPENDIX A5
Credit management: Overview of key internal elements

The following section sets out at a high level the key elements of bad debt within BT Retail.

We believe that the examples we have see are sufficient to validate BT's ongoing assessment of the effectiveness of their credit and bad debt management processes

1. Planning and Forecasting

Overall bad debt performance is first and foremost understood in relation to a planning process. BT's rolling 5 year plans and annual budgets are generated and agreed between business units. In terms of bad debt, overall targets are generated at the level of key customer facing units. The ratio between bad debt charge and revenue is a key performance indicator (KPI) and where possible this is related to a broader view of industry standards.

Bad debt budgets are held, in the first instance at the billing level within the BT retail organisation. However, billing acts as a cost centre and all costs and plans are recharged to customer facing channels. This ensures that bad debt plans relate to channel strategy and that costs are allocated appropriately to channel P&Ls.

Ultimately bad debt targets are agreed between the retail chief finance officer, the director of billing and the channel managing directors. Plans are underpinned by specific details of volume and price movements and project deliverables.

Current planned initiatives include:

- Credit management segmentation
- Acquisition policy change - consumer
- Integrated acquisition policy – business
- Compulsory DD for specific business segments
- Changes to debt collection agency panel
- Extended use of monthly billing in specific segments.

2. Internal team structures

BT retail billing is split into business units that reflect the sales channels and teams that provide services across all channels. In relation to bad debt there is a small team responsible for the development and coordination of plans across all business units and also for reporting and root cause analysis. This team works closely with other billing teams responsible for:

- Acquisition policy and processes
- Credit management policy and processes
- Debt collection agency management and processes.

In addition, the bad debt team works closely with other teams and individuals outside of the billing organisation structure responsible for usage monitoring and bad debt provision policy and calculation.

3. Product design

As new products are developed and brought to market each has unique bad debt potential generated as a result of the technical possibilities which arise, the additional credit which may or may not be extended, or the specific terms and conditions of sale.

Billing and BT security are represented in key stages of product launch to ensure that risks are mitigated where appropriate and understood and built into future plans.

4. Bad debt provision policies

Bad debt provisions are calculated monthly according to agreed percentages of debt which vary according to business unit, age and whether the debt relates to a live or ceased service. In addition to these general rates, specific provisions are made in known cases relating particularly to identified fraud, business insolvency and other intelligence. Bad debt provision rates and policies are owned by BT Finance and are subject to regular external audit scrutiny. Movements in bad debt provisions are posted to bad debt at the channel level on a monthly basis.

APPENDIX A5
Credit management: Overview of key internal elements

5. Key billing processes

- **Acquisition Policy** - Early life customers comprise the largest segment of bad debt and the inherent risk associated with acquiring new customers is mitigated through a series of acquisition policies that are agreed between the billing organisation and each business unit. Typically these policies reference credit scores, and historic service and employ as mitigation elements such as payments in advance, deposits, recommended payment options, usage levels and specific contract terms. Acquisition policy is typically assessed with reference to take up, customer churn and bad debt and is aimed at maximising EBIT.
- **Credit Management -** The credit management process represents the various actions taken to collect billed revenue and to manage credit risk. Processes are agreed with business units and represent a series of timed notifications and restrictions of service which occur according to measures of business risk. As with acquisition policy, credit management processes are aimed at maximising EBIT. Each stage and action within a process is assessed with reference to its effectiveness in collecting debt and preventing customers moving to subsequent stages whilst overall effectiveness is measured in relation to cash flow metrics such as debtor days on the one hand and customer retention and churn on the other.
- **Debt Management -** The debt management process represents the various actions taken to collect billed revenue after customer accounts have ceased. These processes are agreed with business units and generally involve reminders, legal letters and the employment of third party debt collection agencies with agreed placement strategies. Typically, debt is actually written off at a point after allocation to a DCA although subsequent payments after write off offset the values written off.

6. BT security and usage monitoring

In addition to the key billing functions which seek to control bad debt, BT Security have a role to play in two broad areas.

1. BT Security monitors high usage of BT Retail products and actively intervenes in order to verify customer ability and intent to pay. Where necessary BT Security restricts and potentially ceases accounts.
2. In a more general sense BT Security will manage and follow up specific security threats which may involve BT Retail, responding to events and intelligence, carrying out investigations and dealing with both the Police and the legal system.

In either role BT Security will, where appropriate, invoke industry agreed AIT processes to prevent the outward flow of funds to potential fraudulent operators. BT Security also undertakes investigation of high value bad debt cases to identify potential issues and causes.

BT's HVA team monitor what they consider to be excessive usage and identify high risk customers. They are trained to identify unusual, irregular or peaks of call activity. The high value accounts team often deals with PRS calls, as these calls are high value and are often associated with high value bills.

Where unusual call activity is identified, BT will try to contact the customer to discuss high usage, to clarify whether the usage is real or fraudulent (without the bill payer's consent). If BT is unable to contact the customer they will often apply a full or partial bar (i.e. a PRS bar) to lines to reduce the risk of bill non-payment.

Where calls are legitimate but customers need help controlling their usage, PRS bars and international call bars are frequently agreed on an ongoing basis to help customers manage future expenditure.

The high value accounts team monitors accounts on a total usage basis, and does not specifically monitor usage by product (i.e. they do not specifically monitor PRS calls). However, due to the high cost of PRS calls, the high value accounts monitored often contain PRS.

APPENDIX A5
Credit management: Overview of key internal elements

7. Governance meetings

Meetings between BT Billings and business units take place at least monthly and cover the range of services and charges that billing provides. These include:

- Working capital
- Acquisition policy
- Churn
- Cost reviews.

Within BT Billing there is a weekly bad debt call involving the director of billing, senior billing managers, process managers and finance managers, that monitors bad debt results, deals with issues arising and focuses on the delivery and assessment of current and future improvement initiatives.

In addition, there is a billing cost transformation board, which meets monthly and is attended by the retail chief finance officer, the director of billing and a number of senior billing managers. Bad debt costs are, by some margin, the largest single component of billing costs.

On a quarterly basis billing performance is reviewed at operational reviews with the BT Retail CEO; bad debt performance is a key item of review.

8. Reporting and root case analysis

A number of both regular and ad hoc outputs exist to serve the various individuals, teams and meetings involved in the end to end management of bad debt. These include:

- Key financial reports by business unit
- Bad debt provision schedules
- Working capital reports
- Aged debt analysis
- Customer application volumes by credit score
- Customer acquisition volumes by credit score
- Acquisition volumes by bill frequency and payment method
- Default rates by credit score
- Customer churn by product
- Volumes of credit management actions by type
- Values and average values of credit management actions by type
- Volumes, values and average values of unpaid ceased customer debt
- Volumes and values of business insolvencies
- Volumes and values of cases allocated to debt collection agencies
- DCA performance by debt type and comparing different agencies
- Bad debt by value band
- Bad debt by product group
- Bad debt by credit score
- Bad debt by tenure
- Bad debt volumes and costs by bill frequency
- Key cost components of bad debt.

Over and above the aforementioned, ad hoc reporting is generated to measure the effectiveness of specific improvement initiatives and to identify items such as default propensities as impacted by any number of potential inputs such as early termination charges, connection charges, bill value, etc.

9. Benchmarking and consultancy

BT has, at various points, undertaken benchmarking and consultancy covering areas including bad debts. Benchmarking has typically been coordinated through external consultancy firms in particular, Mercer Whilst Mars have assessed BT's bad debt most recently.

APPENDIX A5
Retail Billing - Consumer Billing Process

Retail Billing - Consumer Billing Process

BT has [✂] different credit classes, each following a specific debt collection process. The way in which debt is collected depends on the credit class assigned to the specific customer. Although there are various debt collection processes, depending on the credit class assigned to the customer, there is no specific process for collecting PRS debt. In general, BT's debt collection lifecycle consists of the following:

S1 - [✂] days Bill production / invoice

Customers are normally billed on a quarterly basis, i.e. every three months. Customers can request to be billed monthly, but this is less common. Bills are due for immediate payment.

S2 - [✂] days 1st reminder (voice)

[✂]

S3 - [✂] days LPC raised

[✂]

S4 - [✂] days 2nd reminder

[✂]

S5 - [✂] days OCB - direct to advisor

A customer's line is restricted to outgoing calls barred if payment is not received [✂] days after the original invoice is sent out. [✂]

S6 - [✂] days HARP team 'Save call'

[✂]

S7 - [✂] days TOS - (ICB)

Incoming calls are barred if payment is not received [✂] days after the initial invoice is sent out.

S8 - [✂] days Termination notice

[✂]

S9 - [✂] days Cessation & final notice

[✂]

APPENDIX A5
Retail Billing - Consumer Billing Process

S10 - Solicitors letter

[✂]

S11 - DCA first placement

[✂], the debt is allocated to a debt collection agency, [✂]

S12 - DCA second placement

[✂]

S13 - Prosecutions

[✂]

BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

APPENDIX A6
Credit management: Good practice

APPENDIX A6
Credit management: good practice

Ultimately, the key to managing debt is to reduce the opportunity for a customer to go beyond the agreed initial level of debt. It is not only good practice but good business sense to ensure robust policies, procedures and controls are in place to prevent bad debt arising in the first place, thereby avoiding the need to chase the debt and follow the debt collection process.

For the purposes of this review we consider good practice to be a technique, method, process, activity or initiative which is considered by many to be more effective at delivering a particular outcome than any other. The technique, method, activity etc, is considered good practice once this repeatable procedure has been proven over time through increased numbers of similar business applying the same technique, method etc. The concept of good practice is that with good processes, KPI's and monitoring a desired outcome can be delivered with fewer problems and have a positive outcome.

The list of actions, initiatives and processes shown below have been drawn from a variety of sources and represent good practice within credit management. Divided into four key areas, BT have been able to demonstrate they do apply good practice within their credit management process.

General

- Key Performance Indicators (KPIs) for all critical billing and debt measures
- High visibility of KPIs and performance against them - reporting to senior management on a regular basis and communicating to staff regularly
- Rigorous and methodological approach to delivering change and improvements
- A continuous improvement regime
- Measuring and monitoring collections performance.

Debt Prevention

- Increasing number of options for customers to be made aware of their bill
- Freephone available for consumers' self-help
- Setting up direct debits immediately following the consumer's account going live, and continuing to operate the arrangement even if there are billing issues in order to prevent a build up of debt
- Proactive procedure for dealing with large bills
- Regularly and formally soliciting consumer research and feedback and using this to improve the billing/collection process
- Cause and effect analysis of consumer's complaints
- Active attempts to analyse and segment consumer base to allow different approaches to both prevention and recovery.

Debt Management

- Recognising action is required early in the recovery process. Consumers in receipt of red reminder invited to call specialist debt collection teams, not a general call centre
- Training in a 'holistic approach' to debt including drawing parallels with everyday life issues that staff can relate to
- Taking real account of consumers' ability to pay - Payment options
- Segmenting consumers throughout the debt path
- Tailoring collections treatment paths for each customer segment.

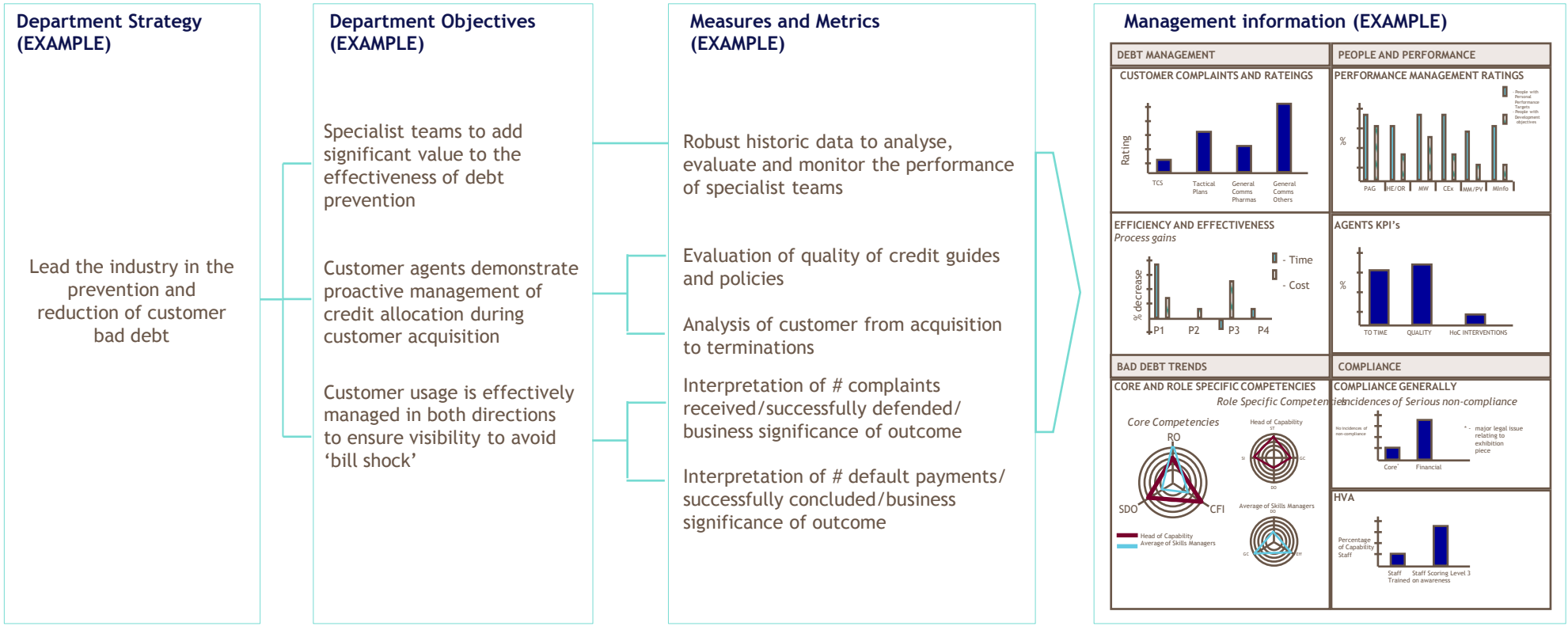
Measures to help defaulting consumers

- Proactively identifying defaulting customers
- Close links developed with social services
- Customers who are, or have been, identified as defaulting are handled separately across the debt process
- Documented defaulting training and consumer identification for agents
- Specific points of contact within the company for customer agencies
- Separate team for managing defaulting customers who are in debt manned by highly experienced staff.

APPENDIX A6
Credit management: BT examples of good practice

Figure 8 below represents BT's approach to credit management through defining the business strategy, objectives, measures and metrics feeding into management information to enable informed decision making. This example is the type of thought process BT have gone through, to ensure they have fully understood the necessary inputs, outputs and measures required to assess the effectiveness of their bad debt management processes.

FIGURE 8 – EXAMPLE APPROACH TO CREDIT MANAGEMENT



APPENDIX A6
Credit management: BT examples of good practice

Payment options

All debts are due on presentation of an invoice. BT has a range of payment product options in place to allow customers to pay in advance of future bills to help alleviate the risk of bad debt. These payment products include:

- Monthly Payment Plan by Direct Debit – where the cost of the bill is split into monthly payments, but the customer is billed quarterly
- Whole Bill Direct Debit – where full bill payment is made on presentation of the bill. This can be quarterly or monthly
- BT Payment Card – where a customer can make payments towards their bill at any 'PayPoint' outlet, often found in supermarkets, newsagents and petrol stations. Any payments made using the BT Payment Card are then credited against the customer's next bill.

BT trains credit management staff on the terms of their payment options strategy and ensures staff promote payment options to customers.

In addition, BT states that its prime aim is to 'get all customers onto an automated payment method' (BT's payment option strategy). This will help to reduce the risk of bad debt and can help the customer avoid late payment charges or reconnection charges in the future.

Interim billing

Interim bills are sent to customers with high usage, which often relates to PRS. An interim bill limit is agreed with a customer up front and this is often £[✂]. If a customer's spend exceeds this amount an interim bill is sent to the customer. If payment is not received from the interim bill, follow up procedures to collect debt are commenced. For more information on follow up procedures, see page 77.

These interim bills are designed to protect BT against excessive spend, which often relates to PRS. However, interim bill limits are not set up for all customer accounts. This is a significant weakness as BT's policy is inconsistent across its customer base. By not placing interim bill limits on all customer accounts, BT is increasing its risk of not identifying and resolving customer payment problems early and is exposing itself to an increased risk of debt being irrecoverable.

Usage alert

When a 'new' customer, who has not had service from BT in the previous 12 months, applies for BT service they will be subject to an external credit check and a series of automatic CSS background checks. Once these have been completed satisfactorily a usage alert will apply to customers who decline BT's preferred payment option.

- An interim bill will be produced when the calls reach the usage alert limit
- [✂]
- [✂]
- [✂]
- Usage Alert amounts may not be increased or decreased.

Fraud detection

The BT high value accounts team monitors the usage patterns on all its lines. If fraud is detected, through BT's 'Sheriff application' the line may be restricted to bar outgoing calls immediately to avoid the build up of further debt until BT can contact the customer and establish the reasons for this abnormal usage.

If appropriate, BT will then investigate further to establish if fraud is taking place. Where fraud is involved, details are referred to BT Security and to BT Wholesale, where AIT procedures are likely to be invoked. For more information on AIT, please see page 92.

From our discussions with BT and supporting documentation, BT has a specific fraud detection policy in place and outlines what incidents are determined to be fraudulent.

APPENDIX A6
Credit management: BT examples of good practice

Develop a highly motivated team of debt management specialists

Organisations with successful debt management departments work hard to establish a team of highly skilled and knowledgeable debt collection staff. They consider these individuals on a par with sales staff and ensure appropriate goals and performance indicators are put in place to encourage good performance. When reward programmes are in place for debt collections staff, performance and debt collection is often enhanced.

Organisations demonstrating good practice take a holistic approach to sales and debt management, whereby staff are encouraged to consider the implications to the business of not applying an appropriate credit limit to new customers. Taking a holistic firm wide approach ensures that products are only provided to customers who are likely to be able to pay for them, minimising the risk of bad debt.

More knowledgeable staff often help to improve efficiency within the debt management process, whilst motivated employees are more likely to take an interest in the work of their colleagues and the overall aims and objectives of the department and company.

BT has a number of mechanisms in place to reward and motivate customer service staff. For example, managers are rewarded according to how well they perform against scorecards and receive bonuses based on meeting targets. BT also operates an ad hoc award scheme, whereby customer service agents can be nominated by other staff to receive gifts or vouchers for exceptional performance.

Special measures, e.g. the HVA team and AIT monitoring, are particularly relevant in the case of PRS bad debt, as customers with high PRS usage are likely to have higher value bills and, as such, are more likely to be dealt with by these teams.

Customer segmentation

Good practice suggests that organisations should track customers' financial situations and identify all anomalies/unusual usage. Where this can be broken down to product level, this should be done, and high risk products monitored as well as accounts.

Organisations with successful debt collection often segment accounts receivable according to risk. Segregating customers into high, medium and low risk allows for better management of debts. However, organisations need to ensure that they are segmenting customers appropriately, both from the outset and throughout the customers' engagement with the organisation.

To ensure proper segmentation, organisations consider:

- Customer credit rating scores
- Total income & expenditure
- Payment behaviours and trends
- Predicted customer behaviour.

During our initial review of BT's segmentation policies and procedures, it was considered that BT would benefit from improved customer segmentation. BT has now reported that it is developing and implementing a new segmentation strategy, which has included moving more than a million customers to new credit classes so far.

Maintain current customer credit ratings

Good practice companies implement cost-effective credit check procedures and detailed credit scoring models to assess the financial stability and standing of potential customers. To ensure this information is up-to-date, companies will automate the credit management process to ensure relevant financial information is available. This up-to-date credit information enables the company to monitor and mitigate risk.

Our understanding is that BT conduct credit checks on customers/potential customers applying for new services, but that this information is not updated during the course of the customer's relationship with BT (unless they apply for new services).

APPENDIX A6
Credit management: BT examples of good practice

Automatic payment methods

Good practice companies in telecommunications are now reducing the risk of non payment of bills by ensuring all customers pay by direct debit/automatic payment methods.

BT encourages all customers to pay by direct debit and states its 'prime aim is to get all… customers onto an automated payment method'. BT, however, considers customer choice to be an important factor and have not considered forcing customers to pay by automated processes.

Customer acquisition policy

[✂]

[✂]

Review and improvement of customer acquisition policy

BT reviews agents' scorecard results and updates them regularly to ensure that customer requirements are being adequately met and that scorecards are measuring appropriate factors relevant to the business environment.

BT has supplied our team with sufficient and appropriate examples of how it supports staff through training and knowledge sharing between teams. BT also conducts its own internal review and evaluation of performance goals whereby the customer acquisition team works with the finance team to conduct historical financial modelling analysis to review the customer acquisition policy. For example, the teams analyse sales take up, the number of applications which go to first reminder, the number of applications which go to call bars etc. This information is used to review performance and update the acquisition policy and improve scorecards. As a result of this analysis BT are currently reviewing their customer acquisition policy.

BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

APPENDIX A7
Credit management: Special measures

APPENDIX A7
Credit management: Special measures

Holistic Approach to Reluctant Payers (HARP) team - overview

The HARP Team provide a reminder for payment of telephone accounts to consumer PSTN and broadband customers for non-payment of an outstanding invoice. [✂]

Background to establishing HARP

[✂]

Overall HARP objectives

- [✂]

APPENDIX A7
Credit management: Special measures

High Value Accounts (HVA) team - Overview

[✂]

BT has a high value accounts team in place to monitor excessive usage and identify high risk customers. They are trained to identify unusual, irregular or peaks of call activity, using a BT system known as Sheriff. The high value accounts team often deals with PRS calls, as these calls are high value and are often associated with high value bills.

[✂]

APPENDIX A7
Credit management: Special measures

Artificially Inflated Traffic

Artificially Inflated Traffic ('AIT') is defined in BT Standard Interconnect Agreement Annex E as "any situation where calls:

- Are made, generated, stimulated, and/or prolonged for the direct or indirect benefit of any entity (including a natural person) operating, hosting or otherwise connected with a telecommunication service as a result of any activity by or on behalf of such entity; and
- Result in a calling pattern which is disproportionate to the overall amount, duration and/or extent of calls which would be expected from:
  - a good faith usage; or
  - an acceptable and reasonable commercial practice relating to the operation of Telecommunications Systems."

Given the nature of AIT and its possible implications in relation to bad debts, it is prudent to consider within the context of this report whether the existence of AIT has a significant impact upon the PRS bad debt incidence calculation.

BT treats AIT in two separate ways, depending on whether the case is deemed to be fraudulent or not. BT has not provided us with a clear policy outlining when AIT traffic is categorised as fraudulent but our understanding is that there are two main types of AIT:

1. Where a customer is bogus from the outset
2. Where someone has used a customer's phone line without consent

From BT's perspective only the first type of AIT is deemed to be fraudulent.

Where an instance of AIT is categorised as fraudulent and recognised as such it will be removed from both revenue and debt and does not result in a bad debt charge. As such, fraudulent AIT will have no impact on the PRS bad debt surcharge.

Where dialled values are not very high (at the account level), however, it is unlikely that fraud will be recognised and proved.

Where an instance of AIT is not deemed to be fraudulent, e.g. where dialled values are high but fraud cannot be proved, this is treated in the same manner as any other traffic. As a result, AIT is included within total revenues and any amount written off in relation to this will be included within the bad debt charge.

Table 28 below provides a simplified overview of an extract from the calculation, used to determine PRS revenues as a proportion of total revenues.

TABLE 28 – SIMPLIFIED PRS BAD DEBT INCIDENCE CALCULATION

Type of revenue	£
PRS revenue (Normal)	(a)
PRS revenue (AIT)	(b)
Non PRS revenue (Normal)	(c)
Non PRS revenue (AIT)	(d)
Total revenue	**(e)**

Within this simplified extract, the sum of normal and AIT PRS revenue, (a) and (b), is calculated as a percentage of total revenue (e). This provides the 'base percentage' of PRS revenue in relation to total revenue (page 30), which is then subsequently used within the PRS bad debt incidence calculation. Theoretically, therefore, the inclusion of AIT within total revenues would have an impact upon the base percentage and the resulting PRS bad debt incidence.

Our understanding from interviews with BT employees, however, is that AIT in relation to both PRS and other services, (b) and (d), is no more than 1%, so it has virtually no impact upon the calculation of the 'base percentage'. BT has not provided us with evidence of this, however, so we are unable to confirm this assertion.

BAD DEBT AND RETAIL REVENUES FOR NTS CALLS

APPENDIX A8
Credit management: Write offs, write backs & provision changes

APPENDIX A8
Credit management: Write offs, write backs & provision changes

Process for identifying bad debt write offs, write backs and provision changes

Bad debt write offs

Policy for write off

BT confirmed that a consistent policy was applied for 2007/08, 2008/09 and 2009/10. The policy was to write off all outstanding debt on accounts that ceased services (either through a voluntary basis or non payment) which remained outstanding 90 days after final bill production.

In the event of a customer withholding specific charges relating to PRS it is likely that the charges will ultimately have be waived and credited against revenue. BT consider that, if this did not occur, it is possible but highly unlikely that a customer's complete service would be ceased for non payment. In such circumstances, any bad debt would be apportioned across the full range of revenue products, using the bad debt base percentages.

Analysis of the amounts written off to period revenue was earned

An analysis of the account balances written off in each year by the period to which the invoice was raised was requested, to understand the possible timing effect between the bad debt expense and revenue.

We were informed by BT, however, that the analysis is not possible but that write off occurs 90 days after final bill production. Revenue will therefore be recognised at least 90 days before write off but, in most cases, is likely to be spread over a period between three and nine months before write off.

Bad debt write backs

Policy for bad debt write back

BT confirmed that a consistent policy was applied for 2007/08, 2008/09 and 2009/10. All payments made post write off were credited back against the write off charge without reference to products. This reduced the overall write off charge and was allocated to each product using the bad debt base percentages.

Analysis of the amounts written back

Amounts are written back whenever they are received. BT stated that, from previous experience, amounts are generally received in the first six months following write off, although some payments continue to be received more than two years later.

Bad debt provision changes

Policy for bad debt provision

BT's policy for provisioning is to calculate and provide for debt using pre-determined rates based on the age of debt. Each month end, BT's billing team obtains debtor balances from the Customer Service Systems (CSS) and process the provision required.

[✂]

The level of provision required is calculated by taking the provision percentage rates (as shown in the tables below) and multiplying these by the bad debt for the relevant age bands (excluding VAT). These provision percentage rates are general and not PRS specific. It is these provision percentage rates that were applicable for the calculation of the 2009/10 PRS bad debt surcharge calculation.

TABLE 29 – NON DEBT MANAGEMENT

Age band	Rates
0 to 3 months	[✂]%
3 to 6 months	[✂]%
6 months +	[✂]%

TABLE 30 – DEBT MANAGEMENT

Age band	Rates
0 to 3 months	[✂]%
3 months +	[✂]%

APPENDIX A8
Credit management: Write offs, write backs & provision changes

These provision percentage rates are calculated based on debt collection and write offs, loss rates, levels of debt and risk levels.

These percentage rates are reviewed annually, with the last review in September 2009, and are updated where necessary.

To ensure all factors are dealt with in the correct period, BT also has 'top-up' provisions. These are used when debts have already been written off, but could not be processed before the month end. Top ups are also used when there is an error with one of the 29 CSS databases, which is rare.

The provision figures are audited by BT's auditors, PricewaterhouseCoopers.

Analysis of bad debt provision changes

Provision is made against debt at all points after it is recognised, originally with a provision for "unbilled debt" (which is offset against revenue) and then the bad debt provision. With a 90 day billing cycle, this will mean that, on average, a bad debt provision will appear 45 days after revenue recognition and will then grow in percentage terms as the debt ages.

Bad debt write offs, write backs and provision changes by system

BT has provided a schedule of bad debt write offs, write backs and provision changes by system for 2009/10 which is summarised in Table 31 opposite. Whilst the total bad debt charges of £62,475k and £29,060k, for residential and business respectively, have been agreed to Tables 13 and 14 (page 52), there are variances in the individual write off, write back and provision movement totals.

BT has provided a reconciliation between the summary outlined in Table 13 opposite and the management accounts totals used for the calculation of the PRS bad debt surcharge. It was not within the scope of this review to audit this reconciliation.

TABLE 31 – BAD DEBT WRITE OFFS, WRITE BACKS AND PROVISION CHANGES BY SYSTEM

	Write offs (£k)	Write backs (£k)	Provision Movements (£k)	TOTAL (£k)
Consumer				
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
Business				
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]

NTS RETAIL CALL MINUTE VOLUMES AND IMPACT ON ASSOCIATED COSTS

APPENDIX B1
Overview of NTS retail call minute volumes

APPENDIX B1
Overview of NTS retail call minute volumes

INTRODUCTION

BT's NTS retail call minute volumes, used for the calculation of the NTS retail uplift and the PRS bad debt surcharge, should only include retail NTS calls that originate from BT customers. These call volumes are separated into two types:

- BT to BT NTS calls
- BT to OCP NTS calls.

Due to the way that call volumes are reported by BT's systems, however, some call types need to be eliminated from the data obtained to derive the correct call minute volumes for the year. This section of our report examines:

- The six types of retail NTS calls, including an assessment of whether and how they should be included within the final NTS retail call minute volumes
- The data sources for BT's NTS retail call minute volumes.

RETAIL NTS CALL TYPES

1. BT to BT NTS Calls

This type of call is made from one BT customer to another.

FIGURE 10 - BT TO BT NTS CALL

Inclusion within NTS retail call minute volumes

As these calls originate from BT customers, they should be included within NTS retail call minute volumes, specifically BT to BT NTS call volumes.

2. BT to OCP NTS Calls

This type of call is made from a BT customer to a customer of an Originating Communications Provider (OCP).

FIGURE 11 - BT TO OCP NTS CALL

Inclusion within NTS retail call minute volumes

As these calls originate from BT customers, they should be included within NTS retail call minute volumes, specifically BT to OCP NTS call volumes.

3. BT to OCP (ported from BT) NTS Calls

This type of call is made from a BT customer to an OCP customer who has ported their number from BT. As such, the call is routed via a BT Intelligent Network.

FIGURE 12 - BT TO OCP (PORTED FROM BT) NTS CALL

Inclusion within NTS retail call minute volumes

As these calls originate from BT customers, they should be included within NTS retail call minute volumes. Although they are routed via a BT Intelligent Network, these calls ultimately terminate with an OCP customer. As such, they should be included within BT to OCP NTS call volumes.

APPENDIX B1
Overview of NTS retail call minute volumes

4. BT to BT (ported from OCP) NTS Calls

This type of call is made from a BT customer to another BT customer, but one who has ported their number from an OCP. As such, the call is routed via an OCP's Intelligent Network.

FIGURE 13 - BT TO BT (PORTED FROM OCP) NTS CALL

Inclusion within NTS retail call minute volumes

As these calls originate from BT customers, they should be included within NTS retail call minute volumes. Although they are routed via an OCP Intelligent Network, these calls ultimately terminate with a BT customer. As such, they should be included within BT to BT NTS call volumes.

5. OCP to BT NTS Calls

This type of call is made from an OCP customer to a BT customer.

FIGURE 14 - OCP TO BT NTS CALL

Inclusion within NTS retail call minute volumes

As these calls originate from OCP customers, they should not be included within NTS retail call minute volumes.

6. OCP to OCP (ported from BT) NTS Calls

This type of call is made from an OCP customer to another OCP customer, but one who has ported their number from BT. As such, the call is routed via a BT Intelligent Network.

FIGURE 15 - OCP TO OCP (PORTED FROM BT) NTS CALL

Inclusion within NTS retail call minute volumes

As these calls originate from OCP customers, they should not be included within NTS retail call minute volumes.

APPENDIX B1
Overview of NTS retail call minute volumes

REGULATORY COSTING SYSTEM NTS CALL VOLUMES

According to BT, it obtained NTS retail call minute volume information for its initial responses to Ofcom information requests from a variety of regulatory costing system sources. These sources were different for BT to BT NTS calls and BT to OCP NTS calls.

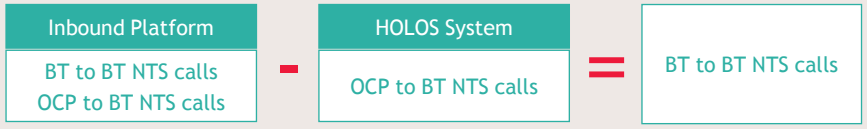
BT to BT NTS Calls

For BT to BT NTS calls, information from two separate systems is used to calculate volumes.

BT has used its Inbound Platform (page 117), also known as a voice termination platform, to identify call minute volumes for all retail NTS calls terminating with BT customers. The Inbound Platform cannot identify where a call originated and, as such, these call volumes include both BT to BT NTS calls and OCP to BT NTS calls (pages 97 and 98).

BT has then separately identified OCP to BT NTS call minute volumes using its HOLOS reporting system (page 116). By deducting these OCP to BT NTS call minute volumes from the total NTS call minute volumes terminating with BT customers, the resulting call volumes relate to BT to BT NTS calls. This is shown by Figure 16 below.

FIGURE 16 - BT TO BT NTS CALL VOLUME DERIVATION



BT to OCP NTS Calls

Extraction of BT to OCP NTS call minute volumes is far simpler than for BT to BT calls, as this information is recorded by BT's HOLOS system (page 116).

BT to BT Geographic and Fixed To Mobile (FTM) Calls

Within BT's regulatory reporting to Ofcom, call minute volumes are reported for BT to BT Geographic and FTM calls. These volumes are extracted directly from BT's CSCS system. These calls are not retail NTS calls.

APPENDIX B1
Overview of NTS retail call minute volumes

OPERATIONAL NTS CALL VOLUMES AND DATA SOURCES

Retail NTS call volumes are a key component of the calculations for the NTS retail uplift and the PRS bad debt surcharge. As such, it is vital that the correct call volumes are extracted and used.

As outlined on the previous page, BT reported call volumes in relation to NTS calls within its original responses to Ofcom information requests. BT considers the initially reported regulatory costing system NTS call minute volumes, however, to be inappropriate for the NTS retail uplift and PRS bad debt surcharge calculations. This is because the regulatory NTS call minute volumes:

- Are derived using non BT retail call origination systems and include volumes relating to wholesale calls, not just retail calls
- Are not adjusted for volumes relating to numbers ported to or from BT, specifically volumes relating to Average Porting Conveyancing Charges (APCC) and Non Geographic Number Portability (NGNP).

As such, the retail NTS call volumes for the NTS retail uplift and PRS bad debt surcharge calculations that BT reported to Ofcom within its revised information response are management accounting volumes. These are referred to as operational NTS volumes. These operational NTS volumes have been extracted from BT's systems in a different way to the regulatory volumes outlined on the previous page, primarily using BT's CSCS system.

The sources of the operational NTS volumes are as follows:

- Data supplied for original S135 for call forecasting purposes: BT retail originated comprising all main call types for Residential & Business customers sourced from CSCS data ([✂]% of total retail volumes)
- Featurenet/Internal Use/Payphones/Unclassified: This was supplied by BT's Reporting, Planning and Analysis (RPA) team in India. It is sourced from CSCS using Powerhouse ([✂]% of total retail volumes)
- Hosted Voice: Not captured in the above. No volumes directly captured. Revenue is extracted from Geneva Billing System, fed by platform switches. A 3 pence per minute revenue assumption is used to convert to volume ([✂]% of total retail volumes).

In the following sections of this report, the operational NTS call volumes for 2009/10 (page 101), 2008/09 (page 104), and 2007/08 (page 106) are reviewed in more detail.

In addition, given the significant difference between the regulatory NTS call minute volume for 2008/09 of 12,969 million minutes and the operational NTS call minute volume for 2008/09 of 8,418 million minutes, BT's explanations for the variance have been reviewed and analysed (page 108).

NTS RETAIL CALL MINUTE VOLUMES AND IMPACT ON ASSOCIATED COSTS

APPENDIX B2
2009/10 NTS retail call minute volumes

APPENDIX B2
2009/10 NTS retail call minute volumes

INTRODUCTION

BT has reported that the operational call minute volume of chargeable NTS calls in 2009/10 was 6,567 million minutes. The breakdown of this volume is shown by Table 32 below, with 6,462 million minutes relating to 08 NTS calls and 105 million minutes relating to 09 PRS calls.

Freephone NTS calls comprised a further 3,365 million minutes.

SOURCE DATA

As outlined on page 100, the call volume data for 2009/10 has been extracted from CSCS. The only exception to this is for Hosted Voice volumes, as this data is not actually recorded by any of BT's systems. Hosted Voice volumes have been calculated by extracting Hosted Voice revenues from BT's Geneva billing system and using an assumption of three pence per minute to calculate the number of minutes.

As part of this review, we have, where possible, validated the extraction of NTS retail call minute volumes for 2009/10 from BT's systems.

CSCS (INCLUDING FEATURENET)

BT provided Microsoft Excel spreadsheets to support the reported volumes for 2009/10. Within these spreadsheets, the total volumes outlined by Table 32 below for 08 NTS and 09 PRS calls were reconciled to listings of reports from the CSCS system. We reviewed these spreadsheets to ensure that the totals were correctly capturing the volumes from the CSCS report listings. No issues were identified.

To validate that the report listings from CSCS were accurate, a sample of reports from both the CSCS and Featurenet categories were selected for testing. The annual totals for these reports were agreed to direct report outputs from BT's Powerhouse system (used for reporting CSCS data).

A total of 39 reports and 1,831 million minutes out of a total CSCS and Featurenet volume of 6,445 million minutes (28.4%) were tested within our sample. It was found that the variance between BT reported volumes for CSCS and Featurenet and those confirmed to systems by BDO was less than 0.01%. As such, it was deemed that CSCS and Featurenet volumes had been extracted correctly.

TABLE 32 – 2009/10 CHARGEABLE NTS CALL VOLUMES

	08 NTS									09 PRS		
	BT to CP			BT to BT					Total	Bt to BT	Bt to CP	Total
	P313 Local	P314 Nat'l	Total	P056 Local	P056 Nat'l	P056 Data	P346 Data	Total		P059 PRS	P315 PRS	
CSCS	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Featurenet	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Hosted Voice	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other (e.g. payphone)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
TOTAL	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	6,461.8	[✂]	[✂]	104.7

APPENDIX B2
2009/10 NTS retail call minute volumes

HOSTED VOICE

BT offers its Corporate and Government customers a service called Hosted IP Telephony, (an IP based voice service which utilises a customers LAN and WAN). The platforms have underlying technologies which are based on either Nortel or Cisco carrier grade switches. The current MIS from these platforms enable BT to capture the billed revenue for the calls but do not currently provide detailed call volume information

Of the calls made by these customers, some relate to NTS. As such, for calculating NTS volumes for 2009/10, BT has had to estimate and include volumes in relation to Hosted Voice NTS calls.

Using the NTS revenue arising from Hosted Voice calls BT has assumed that the average revenue achieved for these calls is three pence per minute (ppm). As total NTS revenue generated from these calls for the year was £[✂], this resulted in an estimated Hosted Voice volume of [✂] minutes.

The revenue data was agreed to financial information provided by BT product finance and the assumption of three ppm was tested.

Whilst more robust third party evidence for the revenues would have been preferred, we understand from BT that this is not readily available. It should be noted that Hosted Voice volumes make up less than [✂]% of total chargeable NTS volumes and, as such, these volumes have not been validated further.

Using the CSCS data provided, it was found that the actual revenue achieved for NTS calls was, on average, 3.5 ppm. Whilst BT's assumption of three ppm does not seem unreasonable, using 3.5 ppm would result in a reduction in the Hosted Voice volume of [✂] minutes ([✂]% of total chargeable NTS minutes for 2009/10).

Given the small magnitude of the variance identified, BT's estimate of [✂] minutes for Hosted Voice in 2009/10 was not deemed to be unreasonable.

OTHER (E.G. PAYPHONE)

These volumes are highly immaterial and have not been examined further.

FREEPHONE

BT has reported that the freephone call minutes volume for 2009/10 was 3,365 million minutes.

The total call minutes volume of Freephone NTS calls reported by BT to Ofcom in its Fixed Telecommunications Market Data Reports for 2009/10 was 5,426 million minutes, but this total included [✂] minutes of data calls and [✂] minutes of Wholesale calls, as outlined by Table 33 below.

TABLE 33 – 2009/10 FREEPHONE NTS CALL VOLUMES

	Volume (million minutes)
	5,426
Data calls	[✂]
	[✂]
Wholesale calls (23.9%)	[✂]
Freephone NTS calls	**3,365**

BT has explained that the [✂] minutes of data calls relate to Flat Rate Internet Access Call Origination (FRIACO), where a user pays a subscription fee and, as such, are not subject to an NTS retail uplift retention. These volumes are therefore not considered to be appropriate to include within Freephone NTS volumes.

The switch that captures Freephone volume is an old system that does not have the capacity to distinguish between a call originated on the BT network by a BT retail customer or a Wholesale customer. As Wholesale calls are excluded from BT's Retail uplift, BT has excluded these from reported Freephone NTS volumes. This is based on the ratio of NTS Chargeable Wholesale calls to Total Chargeable NTS Calls ([✂]%), with data being reported from BT's accounting separation system.

NTS RETAIL CALL MINUTE VOLUMES AND IMPACT ON ASSOCIATED COSTS

APPENDIX B3
2008/09 NTS retail call minute volumes

APPENDIX B3
2008/09 NTS retail call minute volumes

INTRODUCTION

BT has reported that the operational call minute volume of chargeable NTS calls in 2008/09 was 8,418 million minutes.

The breakdown of this volume is shown by Table 34 below, with 8,286 million minutes relating to 08 NTS calls and 132 million minutes relating to 09 PRS calls.

SOURCE DATA

As outlined on page 100, the call volume data for 2008/09 has been extracted from CSCS. The only exception to this is for Hosted Voice volumes, which have been calculated using an assumed revenue rate of three pence per minute.

We have agreed the volumes reported by BT for 2008/09 back to supporting spreadsheets. Validation of volumes back to source systems, however, has focused on the 2009/10 financial year as it is these volumes that are relevant for the 2009/10 PRS bad debt surcharge calculation.

As such, we are unable to confirm with certainty that 2008/09 volumes have been correctly extracted and reported from BT's systems, although we have not identified any specific evidence to doubt this.

TABLE 34 – 2008/09 CHARGEABLE NTS CALL VOLUMES

	08 NTS									09 PRS		
	BT to CP			BT to BT					Total	Bt to BT	Bt to CP	Total
	P313 Local	P314 Nat'l	Total	P056 Local	P056 Nat'l	P056 Data	P346 Data	Total		P059 PRS	P315 PRS	
CSCS	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Featurenet	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Hosted Voice	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other (e.g. payphone)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
TOTAL	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	8,286.5	[✂]	[✂]	131.9

NTS RETAIL CALL MINUTE VOLUMES AND IMPACT ON ASSOCIATED COSTS

APPENDIX B4
2007/08 NTS retail call minute volumes

APPENDIX B4
2007/08 NTS retail call minute volumes

INTRODUCTION

BT has reported that the operational call minute volume of chargeable NTS calls in 2007/08 was 11,591 million minutes.

The breakdown of this volume is shown by Table 35 below, with 11,420 million minutes relating to 08 NTS calls and 171 million minutes relating to 09 PRS calls.

SOURCE DATA

As outlined on page 100, the call volume data for 2007/08 has been extracted from CSCS. The only exception to this is for Hosted Voice volumes, which have been calculated using an assumed revenue rate of three pence per minute.

We have agreed the volumes reported by BT for 2007/08 back to supporting spreadsheets. Validation of volumes back to source systems, however, has focused on the 2009/10 financial year as it is these volumes that are relevant for the 2009/10 PRS bad debt surcharge calculation.

As such, we are unable to confirm with certainty that 2007/08 volumes have been correctly extracted and reported from BT's systems, although we have not identified any specific evidence to doubt this.

TABLE 35 – 2007/08 CHARGEABLE NTS CALL VOLUMES

	08 NTS									09 PRS		
	BT to CP			BT to BT					Total	Bt to BT	Bt to CP	Total
	P313 Local	P314 Nat'l	Total	P056 Local	P056 Nat'l	P056 Data	P346 Data	Total		P059 PRS	P315 PRS	
CSCS	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Featurenet	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Hosted Voice	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other (e.g. payphone)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
TOTAL	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	11,420.2	[✂]	[✂]	170.4

NTS RETAIL CALL MINUTE VOLUMES AND IMPACT ON ASSOCIATED COSTS

APPENDIX B5
Reduction in 2008/09 NTS retail call minute volumes

APPENDIX B5
Reduction in 2008/09 NTS retail call minute volumes

REGULATORY AND OPERATIONAL NTS RETAIL CALL MINUTE VOLUMES

As outlined on page 100, although NTS call minute volumes are reported in BT's responses to Ofcom information requests, these figures include volumes in relation to wholesale calls and do not adjust for numbers that have been ported to or from BT.

For the purposes of the NTS retail uplift and the PRS bad debt surcharge, the call minute volumes that BT has provided are operational NTS volumes. BT considers these to be accurate NTS retail call minute volumes and generates these volumes from its systems separately from the regulatory volumes.

In the regulatory NTS figures, the total volume of 09 PRS call minutes was 187 million minutes and the total volume of other NTS call minutes was 12,782 million minutes. This gave a total volume of retail NTS calls of 12,969 million minutes.

In the operational NTS figures however, the total volume of 09 PRS call minutes was only 132 million minutes and the total volume of other NTS call minutes was only 8,287 million minutes. This gave a total volume of retail NTS calls of only 8,418 million minutes.

As Ofcom was originally provided with the regulatory NTS volumes for 2008/09 by BT, this section of our report examines BT's reconciliation between the original submission of 12,969 million minutes to the operational NTS volume submission of 8,418 million minutes.

Although operational and regulatory volumes are derived from BT's base calls data, they have been produced in different ways, using different reporting systems and, as such, BT has informed us that there is no conducive method to producing a 100% reconciliation between the two totals. Table 36 below outlines the items considered to be reconciling items by BT.

TABLE 36 – 2008/09 CHARGEABLE NTS CALL VOLUMES RECONCILIATION (MILLION MINUTES)

	BT to CP NTS calls				BT to BT NTS calls						All
	P313 Local	P314 Nat'l	P315 PRS	Total	P056 Local	P056 Nat'l	P056 Data	P059 PRS	P346 Data	Total	Total
Regulatory NTS volumes originally reported to Ofcom	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	12,969
1. BT originated Wholesale calls				[✂]						[✂]	[✂]
2. OCP originated calls ported away from BT				[✂]						[✂]	[✂]
3. BT originated calls ported to BT				[✂]						[✂]	[✂]
4. Average porting conveyance charge (APCC) volumes				[✂]						[✂]	[✂]
5. FF ported calls included within chargeable calls				[✂]						[✂]	[✂]
6. Personal numbering service (PNS) volumes				[✂]						[✂]	[✂]
7. Overstatement of BT to BT volumes				[✂]						[✂]	[✂]
8. Internal use calls				[✂]						[✂]	[✂]
8. Reconciling differences				[✂]						[✂]	[✂]
Operational NTS volumes provided by BT (page 105)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	**8,418**

APPENDIX B5
Reduction in 2008/09 NTS retail call minute volumes

The information available to support the 2008/09 adjustments is limited and, whilst showing the overall impact of the adjustment, does not break this down by product.

Given the significant limitations of reconciling these two volume totals, our work has focused upon understanding the reasons for the adjustments.

ADJUSTMENTS

1. BT originated Wholesale calls

From 2009/10, Wholesale calls have been separately identified as a product within BT's systems. In 2008/09, however, Wholesale calls were included within Business products.

As the relevant NTS volumes are Retail volumes, an adjustment needs to be made to the extracted 2008/09 call volume total to remove Wholesale calls. Any adjustment for BT originated Wholesale needs to cover two call types:

- BT to OCP Wholesale calls
- BT to BT Wholesale calls.

BT to OCP Wholesale calls

Reduction: [✂] minutes

BT to OCP Wholesale calls originate on BT lines but are made by customers that have left BT to an OCP that takes Wholesale calls from BT.

As outlined on page 116, information on BT to OCP calls is directly captured and reported by BT's HOLOS system.

Given that wholesale calls are not within the definition of retail NTS calls, BT's explanation for this adjustment is considered to be reasonable.

BT to BT Wholesale calls

Reduction: [✂] minutes

BT explained that, when calculating BT to BT NTS calls for regulatory volumes, as outlined on page 100, wholesale calls were included. As for BT to OCP wholesale calls, given that wholesale calls are not within the definition of retail NTS calls, BT's explanation for this adjustment is considered to be reasonable.

2. OCP originated calls ported away from BT

Reduction: [✂] minutes

This adjustment relates to calls made by OCP customers to other OCP customers that have ported their numbers from BT, i.e. Retail NTS call type 6 'OCP to OCP (ported from BT) NTS calls' from Appendix B1 (page98), as shown by Figure 17 below.

BT explained that when such an OCP to OCP NTS call is made, the transfer of the call from a BT Intelligent Network to the OCP customer means that the volume is recorded and is included within regulatory volumes.

As outlined in Appendix B1, these volumes are not valid retail NTS volumes and should not be included within operational NTS volumes. BT's explanation for this adjustment is therefore considered to be reasonable.

FIGURE 17 - OCP TO OCP (PORTED FROM BT) NTS CALL

APPENDIX B5
Reduction in 2008/09 NTS retail call minute volumes

3. BT originated calls ported to BT

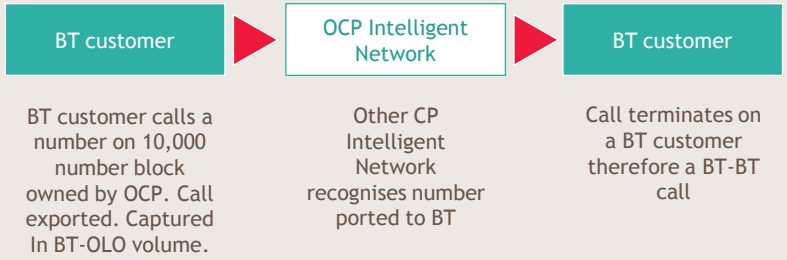
Reduction: [✂] minutes

This adjustment relates to calls made by BT customers to other BT customers that have ported their numbers from an OCP, i.e. Retail NTS call type 4 'BT to BT (ported from OCP) NTS Calls' from Appendix B1 (page98), as shown by Figure 18 below.

As outlined in Appendix B1, these volumes are valid retail NTS volumes and should be included within operational NTS volumes. BT has reported, however, that these volumes are double counted by its systems and therefore need to be adjusted for within operational volumes. This is because when a call made from a BT customer to the OCP Intelligent Network, the call volume is counted. Then, when the OCP Intelligent Network transfers the call to another BT customer, this volume is also counted.

Given that it is only appropriate for these calls to be counted once within operational volumes, BT's explanation for this adjustment is considered to be reasonable

FIGURE 18 - BT TO BT (PORTED FROM OCP) NTS CALL



4. Average porting conveyance charge (APCC) volumes

Reduction: [✂] minutes

An APCC is paid to the porting operator by BT for calls that terminate on BT's network. This is to cover the porting costs incurred by the OLO in porting the call to BT.

The reason why these BT terminating volumes were included in the BT-OLO regulatory product is that a payment is made to the OLO as is the case with BT-OLO calls (ported & non ported). Where a call termination payment is made, that is accounted for in the BT-OLO regulatory products.

As the volumes that are recorded for APCC are not specifically volumes relating to retail NTS calls, it is considered reasonable to adjust for these.

5. FF ported calls included within chargeable calls

Reduction: [✂] minutes

As with adjustment 2, this adjustment relates to calls made by OCP customers to other OCP customers that have ported their numbers from BT. The difference between adjustment 2 and adjustment 5, however, is that the adjustment 5 volumes relate to freephone calls whereas adjustment 2 relates to chargeable calls.

As with adjustment 2, these calls are not within the definition of retail NTS calls. As such, BT's explanation for this adjustment is considered to be reasonable.

6. Personal numbering service (PNS) volumes

Reduction: [✂] minutes

PNS calls are not included within the definition of retail NTS calls, which is why PNS volumes are adjusted for within the reconciliation of PRS revenue for the year. As such, BT's explanation for this adjustment is considered to be reasonable.

APPENDIX B5
Reduction in 2008/09 NTS retail call minute volumes

7. Overstatement of BT to BT volumes

Reduction: [✂] minutes

As outlined on page 99, information from two separate systems is used to calculate BT to BT regulatory NTS volumes.

BT used its Inbound Platform to identify call minute volumes for all retail NTS calls terminating with BT customers. BT then separately identified OCP to BT NTS call minute volumes using its HOLOS reporting system. By deducting the OCP to BT NTS call minute volumes from the total NTS call minute volumes terminating with BT customers, the resulting call volumes relate to BT to BT NTS calls.

Having reviewed the OCP to BT NTS call volume reported for 2008/09, BT realised that these appeared too low and that they had been under-reported by BT's HOLOS system. As a result of the OCP to BT NTS call volume understatement, the resulting BT to BT NTS call volume had been overstated within regulatory volumes.

BT calculated the understatement of the OCP to BT NTS call volume for the year by HOLOS and reduced regulatory volumes to adjust for this. As such, BT's explanation for this adjustment is considered to be reasonable.

7. Internal use calls

Reduction: [✂] minutes

These calls are NTS calls made by internal BT users, rather than external retail customers. As such, these calls are not within the definition of retail NTS calls and BT's explanation for this adjustment is considered to be reasonable.

9. Reconciling differences

Increase: [✂] minutes

As outlined on page 109, BT has informed us that there is no conducive method to producing a 100% reconciliation between regulatory NTS volumes and operational NTS volumes. This balance of [✂] minutes represents the remaining variance that BT is not specifically able to identify the cause of.

NTS RETAIL CALL MINUTE VOLUMES AND IMPACT ON ASSOCIATED COSTS

APPENDIX B6
BT's systems for recording call revenues and volumes

APPENDIX B6
BT's systems for recording call revenues and volumes

INTRODUCTION

From 2008/09, BT migrated over 60% of its Residential customers from the CSS retail billing system to a new system. This new system is known as Geneva or Avalon. As a result of the migration, the customers managed by each system, or stack, between 2007 and 2010 were as follows:

TABLE 37 – CUSTOMERS ON EACH RETAIL BILLING SYSTEM: 2007/08

CSS (Old Stack)	Geneva (New Stack)
Business customers	-
Residential customers	-

TABLE 38 – CUSTOMERS ON EACH RETAIL BILLING SYSTEM: 2008/09 & 2009/10

CSS (Old Stack)	Geneva (New Stack)
Business customers	Migrated Residential customers (>60%)
Non-migrated Residential customers (<40%)	-

Given that Residential customers were managed by two separate billing systems in 2008/09 and 2009/10, BT has had to extract data from both systems to provide information on call minutes volumes.

CSS RETAIL BILLING SYSTEM

As outlined opposite, the CSS system managed all Business and Residential customers in 2007/08, and all Business and non-migrated Residential customers in 2008/09 and 2009/10.

The capture and reporting of information by the 'old stack' system is outlined by Figure 19 below.

Calls made by customers, either Residential or Business, are routed through switches. Every day, call information data is "polled" or drawn off of the switches by a piece of software known as a Mediator. The Mediator feeds the data into SDP, BT's pricing engine, which subsequently feeds it into CSCS and CSS.

CSS is BT's retail billing system for the 'old stack' and CSCS is a system that compiles call statistics. These systems then feed into IOTA, which compiles channel revenue information (not relevant to this review), and subsequently into Powerhouse, which is the primary tool used by BT for reporting call volume data.

As such, the call minute volume information reported by BT for the 'old stack' has been collated from the Powerhouse system.

FIGURE 19 – OLD STACK: CSS BILLING SYSTEM

APPENDIX B6
BT's systems for recording call revenues and volumes

GENEVA/ABSALON RETAIL BILLING SYSTEM

As outlined on the previous page, more than 60% of Residential customers were migrated to the 'new stack' Geneva/Avalon retail billing system from 2008/09.

The capture and reporting of information by the 'new stack' system is outlined by Figure 20 below.

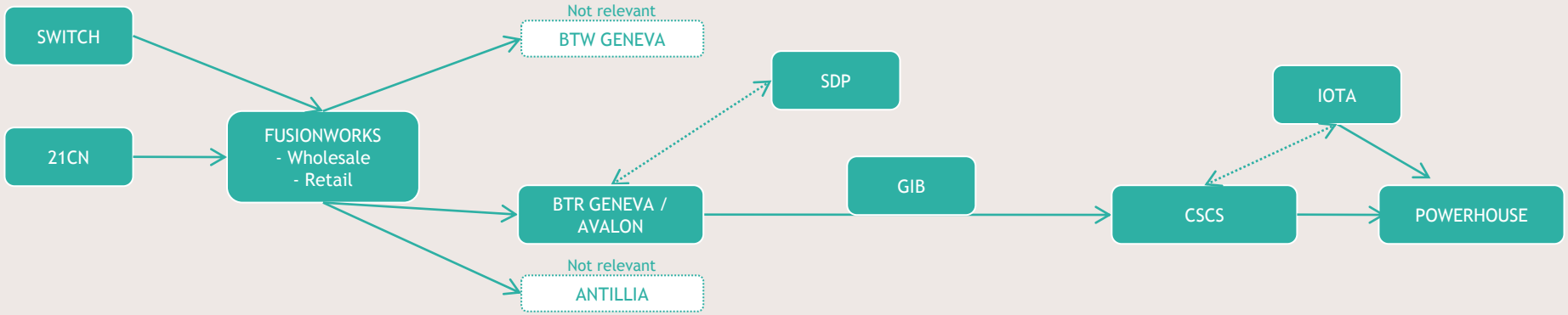
Calls made by Residential customers that have been migrated onto the 'new stack' are again routed through switches. Every day, call information data is "polled" or drawn off of the switches by a new piece of software known as a Fusionworks. Fusionworks polls data for:

- Retail Residential calls which are fed into the BTR Geneva/Avalon billing system
- Retail Business calls which are fed into the Antillia billing system (not currently live as Business customers not yet migrated)
- Wholesale calls which are fed into BTW Geneva billing system (not relevant to this review).

The BTR Geneva/Avalon system communicates with SDP, BT's pricing engine which is also used by the 'old stack, and supplies call statistics information to CSCS via GIB. As with the 'old stack', CSCS feeds this data into IOTA, which compiles channel revenue information (not relevant to this review), and subsequently into Powerhouse, which is the primary tool used by BT for reporting call volume data.

As such, the call minute volume information reported by BT for new 'old stack' has also been collated from the Powerhouse system.

FIGURE 20 – NEW STACK: GENEVA / AVALON BILLING SYSTEM



APPENDIX B6
BT's systems for recording call revenues and volumes

CALLS BETWEEN BT AND OCPs

Calls between BT and OCPs, whether these be calls from BT customers to OCP customers, or calls from OCP customers to BT customers, can be separately identified by BT's systems.

As outlined on page 114 calls made by customers, either Residential or Business, are routed through switches. When these calls are made to customers who aren't customers of BT, i.e. OCP customers, a specific type of switch is used. This type of switch is called an Interconnect switch. In addition, when an OCP customer calls a BT customer, these calls are also routed through an Interconnect switch.

Given that calls between BT and OCPs are all routed through Interconnect switches, BT is able to collate specific information on these calls. The capture and reporting of information for these calls is outlined by Figure 21 below. As with BT to BT calls, information on calls between BT and OCPs is drawn off of switches daily by a Mediator. Where the information is drawn from an Interconnect switch, however, the information is fed into BT's INCA pricing engine rather than SDP.

This information is fed into BT's Genius billing system and volume data is captured by BT's HOLOS reporting system. As such, information on NTS calls made by BT customers to OCP customers and NTS calls made by OCP customers to BT customers can be obtained from the HOLOS system.

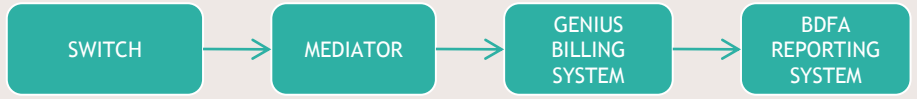
FIGURE 21 – CALLS BETWEEN BT AND OCPs

WHOLESALE CALLS

BT's Interconnect switches can't separately identify Wholesale calls. As a result, a separate method for capturing and reporting Wholesale call volumes has to be used. This is outlined by Figure 22 below.

Once again, call information is drawn off of switches daily by a Mediator. The information is fed into the Genius billing system and call volume data is captured and reported by BT's BDFA reporting system.

FIGURE 22 – WHOLESALE CALL VOLUMES



APPENDIX B6
BT's systems for recording call revenues and volumes

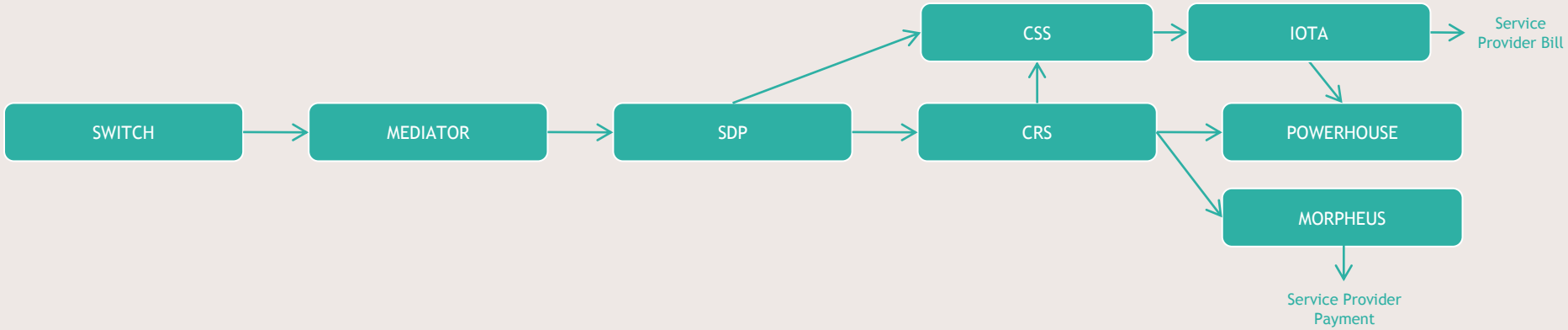
INBOUND CALLS

As well as capturing information on outgoing calls, BT's systems also capture information on incoming calls. Information on all calls that terminate with BT customers are captured by BT's inbound platform, also known as a voice termination platform. The inbound platform cannot, however, identify whether calls originate from BT customers or from OCP customers, merely that they are calls that terminate with a BT customer.

The capture and reporting of information by the 'old stack' system is outlined by Figure 23 below.

As with outbound calls, a Mediator draws information from switches daily and feeds this into the SDP pricing engine. This subsequently provides information to CSS for billing and to CRS for call statistics, plus IOTA and Morpheus for Service Provider bills and payments. Powerhouse is again used as the primary tool for reporting call volume data.

FIGURE 23 – OLD STACK: CSS BILLING SYSTEM



APPENDIX C1
Specification of service set out by Ofcom

APPENDIX C1
Specification of service set out by Ofcom

Review specification – Bad debt and retail revenues for NTS calls

1.1 Objective

The purpose of this review is to provide:

1.1.1 An assessment of the relevance, reliability and comparability of the information provided by BT from all sources including section 135s used to support

- the calculation of BT latest estimate of the level of the incidence of bad debt on PRS calls for 2008/09 and 2009/10
- the level of bad debt and retail revenues attributed to other NTS calls

1.1.2 A review of BT's explanations & analysis of the reasons

- why the estimate of the incidence of PRS bad debt for 2008/09 has fallen from 9.7% to [x] % of revenue
- for the changes in the attribution of bad debt and revenues to NTS calls for 2008/09

1.2 Outputs

The main output of the review will be a report to Ofcom providing;

Relevance, reliability and comparability

1.2.1 An assessment of the fairness and objectivity of the underlying cost attribution methodology used to attribute retail bad debt to PRS calls in aggregate ("BT to OCP PRS calls" (BT product group P315) and "BT to BT PRS" calls (BT product group Value Call P059)) setting out the key features of the methodology and the basis on which the assessment was made

1.2.2 Verification that BT correctly applied its chosen attribution methodology to the relevant inputs to arrive at the levels of bad debt for 2008/09 and 2009/10 provided to Ofcom for PRS calls and other NTS calls

1.2.3 Verification that BT correctly attributed its revenues to PRS and other NTS calls for 2008/09 and 2009/10 in the information supplied to Ofcom.

1.2.4 A commentary on any statistical sampling technique used to attribute bad debt across retail product groups including an assessment of the reliability of the sampling processes used for 2008/09 and 2009/10.

1.2.5 An opinion on whether the bad debt attributed to the following call types is properly matched to the corresponding year's revenue for the financial years 2008/09 and 2009/10

- PRS calls
- other NTS calls

1.2.6 Observations on trends, for example any significant trend movements, any exceptional 'one-off' items and an opinion on whether the incidence of bad is likely to continue in the period April 2010 to September 2014 at levels seen in 2008/09 and in 2009/10.

1.2.7 If appropriate, to identify and comment on any other factors or evidence that supports or potentially questions the robustness of BT's calculations of the incidence of bad debt on PRS and other NTS calls.

BT's bad debt management processes & procedures

1.2.2 An opinion on whether BT's approach to PRS bad debt management is in line with best practice.

1.3 Other material to give context to the outputs

In addition to the main findings set out above, we anticipate that the report will provide a comprehensive explanation and commentary of the work undertaken to prepare the report including

APPENDIX C1
Specification of service set out by Ofcom

Bad debt: definition

1.3.1 An outline description of the transactions and other events which BT recognises as giving rise to a bad debt charge.

The report should address the following transactions and other events which PRS stakeholders have raised:

- the giving credit to a retail customer who raises concerns with BT regarding the validity of particular PRS calls; and
- BT's setting and revision of bad debt provisions

Bad debt: accounting

1.3.2 An outline description of the elements of BT's retail bad debt charge which

- distinguishes between elements originating on BT's different retail billing systems; and
- distinguishes between amounts written off, written back and movement between provisions

Attribution methodologies across services

1.3.3 A description setting out all key elements of the attribution methodology applied, input data used and calculations adopted by BT for 2008/09 & 2009/10 to

- attribute retail bad debt to its retail regulatory product groups including those containing NTS calls
- classify retail call revenues as relating to NTS calls, and if so, which retail regulatory product group they should be recorded within

The description should highlight any changes in the methodology between 2008/09 and 2009/10.

Incidence of bad debt across call types

1.3.4 An evaluation of the incidence of bad debts for PRS, other NTS calls and to other retail calls such as local, national and calls to mobile calls

A commentary on the reasonableness or otherwise of significant differences.

Bad debt: BT's exercise of judgement in provisioning

1.3.5 An analysis and commentary of the key judgements and estimates made by BT in preparing and provisioning bad debts for this service in 2009/10, noting any differences in implementation between 2008/09 and 2009/10.

This will include ascertaining and questioning BT on general movements in bad debts and the reasons for those movements

Revenue definition

1.3.6 An outline description of the elements of BT's PRS and other NTS call revenues

The report should address the following transactions and other events which PRS stakeholders have raised:

- BT's retail revenues withheld under its AIT (artificial inflation of traffic) procedures

BT's management of debt

1.3.7 A description of BT's retail telephony bad & doubtful debt management processes and disconnection procedures including those which relate exclusively to PRS calls.

This description to include the following actions where applicable:

- setting monetary call limits
- increasing the level of periodic payment under payment plans

APPENDIX C1
Specification of service set out by Ofcom

- setting late payment charges
- suspension of outgoing calls
- suspension of incoming calls
- disconnection
- prosecution of non-payers
- requiring security deposits or advanced payment
- active fraud monitoring
- invoking of the artificial inflation of traffic (AIT) procedure
- outsourcing unpaid accounts to debt collection agencies
- referral to PRS service providers as required under general condition 14 and the PayphonePlus code when your customer is dissatisfied with services accessed via a PRS number

Review specification – NTS retail call minute volumes and impact on associated costs

2.1 Objective

The purpose of this review is to provide:

2.1.1 An assessment of the relevance, reliability and comparability of the information provided by BT from all sources including section 135s used to support the retail call minute volumes for NTS calls for the base year (currently 2008/09) of the RPI-X charge control model and the previous year.

2.1.2 An assessment of the impact the change in volumes from those originally supplied should have for BT's estimate of the associated retail costs excluding bad debt.

2.1.3 A review of BT's explanations & analysis of the reasons why BT's view of volumes have fallen from [x] billion minutes to [y] billion minutes for 2008/09

2.2 Outputs

The main output of the review will be a report to Ofcom providing;

Relevance, reliability and comparability

2.2.1 Verification that BT has

- correctly identified and then extracted from its source systems, and where necessary further analysed, the call volume minutes as provided to Ofcom which relate to NTS calls for 2007/08, 2008/09, and 2009/10
- the volumes so provided are relevant, reliable and comparable with each other

2.2.2 A calculation of the estimated impact that the drop in reported NTS call volume minutes should have on the previously provided cost information provided to Ofcom.

2.2.3 Observation on trends, for example any significant trend movements, any exceptional 'one-off' items in NTS call volumes between 2007/08 and 2008/09 prepared on a consistent basis

APPENDIX C1
Specification of service set out by Ofcom

2.3 Other material to give context to the outputs

In addition to the main findings set out above, we anticipate that the report will provide a comprehensive explanation and commentary of the work undertaken to prepare the report including

Source operational systems

2.3.1 An outline description of the various source systems that BT uses to source NTS call volume minutes, including

- INCA
- Outbound Platform
- CSCS
- Sources supporting freephone volumes supplied quarterly by BT to support Ofcom market data

Processing of raw volume data

2.3.2 A description of how BT has processed the raw data taken from source systems to provide the NTS call volume figures it has supplied to Ofcom.

The description should highlight any changes in sources and processes between 2007/08, 2008/09 and 2009/10.

Drop charge calls

2.3.3 A description of how BT measures drop charge calls for the purposes of recording NTS call minutes volumes. Drop calls are estimated to account around one third of all PRS revenues.

Volumes: BT's exercise of judgement

2.3.4 An analysis of commentary on the key judgements and estimates made by BT in identifying and summarising NTS call minute volumes

Retail cost attribution methodologies excluding bad debt

2.3.5 A description of the most significant of those retail cost attribution methodologies applied by BT to costs items which are not attributed to different call types directly in line with call volume minutes for 2008/09.

GENERAL

APPENDIX C2
Definitions

APPENDIX C2
Definitions

INTRODUCTION

The definitions appearing in this section are intended to help readers understand the meaning of terms used in the main part of the document. Readers should understand that in the rapidly-changing technology environment, these terms do not always have standard meanings and, as such, may be used in different ways by different individuals. Our definitions apply only to this document.

DEFINITIONS

AIT

Artificially Inflated Traffic ('AIT') is defined in BT Standard Interconnect Agreement Annex E as "any situation where calls:

- Are made, generated, stimulated, and/or prolonged for the direct or indirect benefit of any entity (including a natural person) operating, hosting or otherwise connected with a telecommunication service as a result of any activity by or on behalf of such entity; and
- Result in a calling pattern which is disproportionate to the overall amount, duration and/or extent of Calls which would be expected from:
  - a good faith usage; or
  - an acceptable and reasonable commercial practice relating to the operation of Telecommunications Systems."

Bad debt

Bad debt is debt that is unlikely to be paid. When debts are classified as bad, they are charged as an expense in the owed company's financial statements. This bad debt charge is made up of three elements:

- Bad debt write offs – Amounts that the company is certain that it won't recover and, as such, are removed from its books. Write offs are a cost to the business and increase the bad debt charge. Bad debt write offs are net of VAT.
- Bad debt write backs – Cash received in relation to debts that had previously been written off. Write backs are an income for the business as a cost had previously been incurred when the debts were written off. As such, write backs decrease the bad debt charge. Bad debt write backs are net of VAT.
- Bad debt provision movements – When a company believes that some of its debt will not be recoverable but is not certain enough to write off these amounts, it makes a provision against them in its accounts. Any increase in the provision represents an expense to the company and increases the bad debt charge, whilst any decrease in the provision represents an income for the company and decreases the bad debt charge. Bad debt provision movements are gross of VAT.

Base Percentages

In the context of BT's PRS bad debt surcharge calculation, base percentages reflect sampled 08 NTS revenue and 09 PRS revenue as a proportion of total sampled revenue.

BDO

BDO LLP.

BT

BT plc.

APPENDIX C2
Definitions

CSS (Customer Service System)

Customer Service Systems (CSS) manages all aspects of Customer Service on the Public Switched Telephone Network (PSTN), from order capture and Job Management, fault handling, work management and billing. CSS deals with engineering time through National Job Recording (NJR) system; CSS also supports network management, call itemisation, Issue Handling and line testing. The CSS headquarters system allows national changes (e.g. new Products) to be configured in a uniform, speedy and cost effective manner.

Locality codes

Locality codes are a way in which revenue data can be reported from BT's SWIFT system. This was used for BT's original calculation of the PRS bad debt surcharge but issues were identified with the integrity of this data.

NTS

Number Translation Services (NTS) calls provide a micro-payment mechanism for a wide variety of value added services, as well as a means of access to these services. Current arrangements for NTS enable calls to 08 and 09 non-geographic telephone numbers to be used by businesses and other organisations to provide a wide range of telephone services e.g. pay-as-you-go dial-up internet access, telephone banking, tele-voting and business contact services.

PRS

Premium Rate Services (PRS) are a form of micro-payment for paid for content, data services and value added services that are subsequently charged to your telephone bill. Whilst PRS calls are also NTS calls, they specifically relate to higher tariff 09 non-geographic telephone numbers.

PRS bad debt surcharge

A surcharge set by Ofcom and levied by BT onto PRS providers to reflect the higher levels of bad debt cost it incurs in relation to PRS calls than other NTS calls.

Sub-break codes

Sub-break codes are a sub set of the Locality codes by which revenue data can be reported from BT's SWIFT system. This was used for BT's original calculation of the PRS bad debt surcharge but issues were identified with the integrity of this data.

SWIFT

This system is an integrated data warehouse used by BT Retail that holds customer details, billing and revenue data. It has been hitherto the single source of data for BT Retail Marketing. The database allows BT Retail to analyse all its Customer Service System (CSS) based customers.

For Siebel Oneview handled customers, the equivalent set of data is held in the SWIFT successor system, EDW (Enterprise Data Warehouse), and SWIFT exports all its data to that system. EDW went live during May 2007 with the commencement of Consumer mass migration from CSS to Siebel Oneview which commenced late June 2007.The current feed from SWIFT to Accounting Separation should be re-engineered to use EDW instead and the SWIFT feed switched off. When SWIFT is switched off, all the feeds from CSS systems will be diverted to EDW where the build of EDW has not already replicated these. SWIFT also supplies the data used by the Campaign Management Tool (CMT), used for targeting Consumer customer marketing campaigns and will be able to measure their effectiveness, by allowing pre and post campaign analysis. CMT was also replaced during 2007 by Siebel Marketing.

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