Wholesale charges for Number Translation Services & Premium Rate Services

NTS Retail Uplift charge control and PRS Bad Debt Surcharge

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Further consultation

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Section 1

Summary

Introduction

1.1 This consultation concerns the wholesale pricing of Number Translation Services (NTS) and Premium Rate Services (PRS). Broadly speaking, NTS calls are calls made to 08 and 09 numbers, while PRS calls are calls made to 09 numbers[1]. These numbers provide individuals and organisations with access to a wide range of services, including sales lines, customer service/enquiries, information and entertainment services. Most of the retail price which consumers pay for calling these services is passed to the operator which terminates the call, who may then pay a share to the call recipient, or "service provider". Such payments may then be used to fund the provision of services, or for example to offset the costs of running a call centre.

1.2 Because BT has significant market power ('SMP') in the UK market for wholesale call origination[2], it is required by regulation to originate NTS calls on behalf of other providers of communications services. Where the caller is a BT retail customer, we regulate the amount BT can retain from the retail price for retailing these calls on behalf of other providers. BT's total revenues from the provision of these wholesale services are around £25m a year.

1.3 The previous controls on these charges were set in 2005 and expired in September 2009. We consulted on proposals for new controls in July 2009[3], to coincide with our fixed narrowband services wholesale markets review under which the NTS Call Origination condition is set, but have had to revise and update our proposals because the bad debt cost and NTS call volume data supplied by BT proved to be inaccurate. This has resulted in an extended delay.

Summary of our proposals

1.4 We are consulting on the charge control proposals set out below, which would apply over the period to September 2013. The end of the control period will then coincide with the end of the period covered by the findings of the fixed narrowband services wholesale market review:

- NTS Retail Uplift: we propose a price cap within the range RPI+0.0% to RPI+4.0%, across freephone and chargeable calls, with a preferred estimate of RPI+2.0%. In addition the retention for freephone for calls would not be allowed to exceed that for chargeable calls. This compares with the 2005 caps, which were RPI+4.5% for freephone and RPI-6.5% for chargeable NTS calls;

[1] As explained later in the document, for certain purposes, some 08 numbers are classified as PRS numbers. However, for the purposes of this consultation, only calls to 09 numbers are considered as PRS services.
[2] Except in the Hull area
[3] *Wholesale charges for Number Translation Services and Premium Rate Services, NTS Retail Uplift charge control and PRS Bad Debt Surcharge* (28 July 2009) available at http://stakeholders.ofcom.org.uk/binaries/consultations/nts/summary/ntscondoc.pdf

- PRS Bad Debt Surcharge: we propose that the surcharge should be no more than 5.2% of retail revenue. This compares with the maximum rate of 3.03% set in 2005.

Summary of revised approach and analysis: NTS Retail Uplift RPI-X control

1.5 Our proposals for the structure of this control remain unaltered from July 2009. However, we propose to make a number of changes to the approach used to set the value of X.

We propose to reattribute BT's generic sales and marketing costs

1.6 In its regulatory costing system BT attributes sales and marketing costs (and most other retail costs) to services on the basis of gross revenues. We propose instead to attribute sales and marketing costs using revenues net of outpayments to third parties. The rationale for the adjustment is that the purpose of BT's sales and marketing activity is to increase profits rather than revenues, and that an attribution based on gross revenues would be excessive, given the low margins earned on NTS calls.

1.7 This adjustment has a very significant impact on the value of X: without it, the price cap would be around RPI+19%, instead of RPI+2.00%. However, we believe the rationale is sound and it is consistent with the method used to set the 2005 cap.

1.8 We did not propose this adjustment in the 2009 consultation because the available BT data showed the net revenues on NTS calls to be negative. In justifying our 2009 approach, we noted that the overall attribution of retail costs to NTS calls appeared to be reasonable – the pence per minute attribution to NTS calls was significantly lower than the average for all calls. However this is no longer the case, as BT's downward revision of its NTS call volume estimates has pushed up the unit cost of NTS calls. We therefore consider there to be a strong case for reverting to the 2005 approach, and re-attributing costs on the basis of net revenues.

1.9 We propose a number of other changes to the way the level of X is set. The most noteworthy of these changes, which are less material to the value of X than the reattribution of generic sales and marketing costs, are highlighted below.

We propose to allow BT to recover all of its (re-attributed) generic sales and marketing costs

1.10 In our 2005 Statement[4] and July 2009 proposals we excluded 20% of generic sales and marketing costs on the grounds that this expenditure was aimed at stimulating calling rates and was not relevant for NTS calls, for which demand depends largely on the service provided. We included sales and marketing costs aimed at the acquisition and retention of customers, since these do benefit NTS service providers. We do not propose to make an equivalent adjustment this time around as we have

[4] *Charges between Communications Providers: Number Translation Services Retail Uplift charge control and Premium Rate Services bad debt surcharge* (28 September 2005) available at http://stakeholders.ofcom.org.uk/binaries/consultations/NTSfin/statement/statement_nts_uplift.pdf

not been able to identify any generic sales and marketing expenditure specifically designed to stimulate calling rates.

We propose to project BT's costs using a measure of BT's total retail service activity

1.11 The information supplied by BT indicates that the retail costs attributed to NTS calls do not reflect activities specific to NTS calls but are incurred to support a broad range of services. We therefore propose to project costs forward using a measure of BT's total retail service activity, as this is what is driving these costs, rather than NTS call volumes. On this basis, we estimate that volumes will decline by between 3.5% and 7.5% a year, with a preferred estimate of 5.5%.

We propose to set an efficiency target for BT based on the efficiency of its retailing activities as a whole

1.12 We have two sources of evidence to inform our projection of BT's future efficiency gains. These are: recent past trends in the costs of retailing geographic calls; and benchmarking studies of BT's efficiency relative to comparable firms at an aggregate level. The former suggest that a rate of efficiency gain per year between 4.5% and 9%, with a central estimate of perhaps 6%, is reasonable, whilst the latter indicate that a rate of around 2.5% is likely to be appropriate.

1.13 In determining the proposed range we have placed more weight on the results of the benchmarking studies of aggregate efficiency. This is primarily to provide consistency with our volume forecast, which reflects volumes of all retail services. In addition, while BT appears to have reduced its real retail unit call costs by 9% per year in recent years, we consider that this is unlikely to be sustainable. The rapid reduction is probably due at least in part to the growth of other BT services such as broadband, which have borne an increasing share of such costs. In other words, the apparent reduction in the retail costs of NTS calls may be due partly to a reattribution, rather than to a real efficiency improvement. We therefore propose to use an efficiency range of 2.0% to 5.0%, with a preferred estimate of 2.5%.

Sensitivity of the value of X to differing assumptions

1.14 Our preferred case of RPI+2.0% reflects our central case volume decline of 5.5% a year combined with an efficiency target of 2.5%.

1.15 Our assessment of the plausible range for X has been informed by the sensitivity of the value of X to changes in three key inputs into our modelling: namely

- our estimate of costs relating to sales and marketing activities attributed by BT to NTS calls (range £7.4m to £9.4m). We re-attribute these costs on the basis of net revenue
- forecast volume changes (range 3.5% to 7.5% decline per year)
- efficiency target (range 2.0% to 5.0% annual improvement)

1.16 We propose a range for X of 0.0% to 4.0% where, with other assumptions at their central case values, 0.0% reflects a tougher efficiency target than the 2.5%, and

+4.0% reflects a smaller adjustment to the costs of sales and marketing attributed by BT to NTS calls.

We propose to set the PRS Bad Debt Surcharge using BT's 2009/10 data and to make no adjustment for efficiency

1.17 The separate PRS Bad Debt Surcharge allows for the fact that the cost of bad debt is significantly higher for PRS calls than for other calls.

1.18 We propose that the structure of the charge control remains a flat percentage of retail revenues to recover bad debt applicable to all PRS calls. Our latest estimate, which we propose to reflect in the price cap, is 5.2% of retail revenue. This is above the 3% applied in 2005 but well below the 9.7% consulted on in 2009. The 9.7% estimate was based on BT data which included several errors, which have since been corrected. BT's latest numbers have been the subject of an independent review by accountants BDO. In their report dated 21 January 2011 ('the BDO report[5]') they conclude that the estimate of 5.2% is fit for purpose[6].

1.19 BDO's review also included an assessment of the efficiency of BT's bad debt management practices, particularly to address the concerns triggered among stakeholders by the 9.7% estimate. BDO's view is that BT's bad debt management processes reflect good practice and do not contribute significantly to the unusually high level of bad debt on PRS calls[7].

Next steps

1.20 We are seeking stakeholders' views on our proposals, in particular:

- our approach to assessing the relevant costs and the charge control calculations. We have included questions about points on which we are particularly interested in stakeholders' views;
- the specific terms of the proposal controls; and
- our assessment of the impact of the proposed controls both on BT and on the wider NTS value chain.

1.21 Although this consultation contains important policy proposals, they will be of interest to a limited number of stakeholders who are likely to be aware of the issues. We have therefore allowed six weeks for responses to this consultation in accordance with our consultation guidelines[8]. Responses should be submitted (and received) by 5pm on **24 March 2011**. Please see Annex 1 for details of how to submit your response.

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[5] Available at http://stakeholders.ofcom.org.uk/binaries/consultations/nts-retail-uplift/annexes/charge-control-project.pdf.
[6] BDO report, page 15
[7] BDO report, page 15
[8] *Ofcom Consultation Guidelines* (November 2007) available at http://www.ofcom.org.uk/consult/consult_method/ofcom_consult_guide

1.22 Once we have received stakeholder responses we will analyse them fully. Our analysis of these responses will inform our final view about the proposals discussed in this consultation document. A statement will then be issued, setting out our conclusions.

Section 2

Introduction

2.1 The purpose of this section is to provide background on NTS calls, the regulatory framework and the role of the NTS Retail Uplift and PRS Bad Debt Surcharge. We also explain why we are re-consulting.

Number Translation Services

2.2 NTS calls are calls to numbers identified in the National Telephone Numbering Plan ('the Plan') as Special Services numbers (broadly, numbers that start with 08 and 09). Also included are calls to 0500 Freephone numbers which, whilst still in use, are not listed in the Plan as they are no longer available for new allocations. All NTS calls are examples of calls to non-geographic numbers where the number dialled does not relate to a specific geographic location. At a technical level, the NTS number dialled by a caller can be 'translated' by the terminating network to any of a number of different geographic numbers to deliver the call to its destination.

2.3 For a given NTS call, there can be several different CPs involved in conveying the call from the caller to the organisation or individual receiving the call. This includes an Originating Communications Provider ('OCP'), on whose network the call commences, and a Terminating Communications Provider ('TCP'), on whose network the NTS number resides. Where OCPs and TCPs do not interconnect directly with each other, there may also be a CP carrying the call between them. This is the transit CP and the service they provide is known as a 'transit' service.

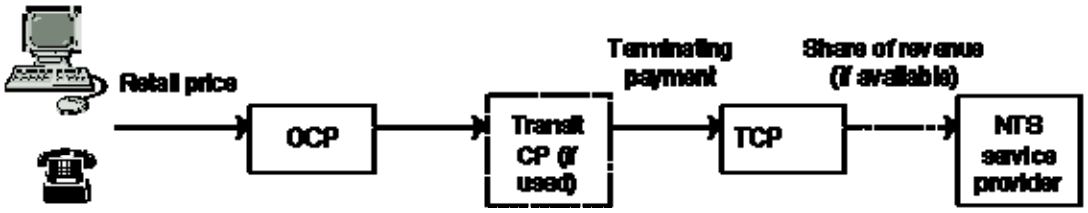
2.4 A key feature of NTS is that the regulatory framework makes revenue sharing possible between the TCP and the organisation or individual receiving the call. In this way, the regulatory regime supports the use of NTS as a micro-payment mechanism for the various services which can be accessed via 08 numbers. The caller pays the OCP for the call. The OCP, having deducted an amount to recover its origination and retailing costs from the retail revenue, passes on the remainder as a terminating payment to the TCP, who is then able (subject to commercial viability) to share some of this revenue with the individual or organisation using the NTS number, the Service Provider ('SP'). Depending on the price of the call and the type of service being provided, the revenue share may wholly finance or partially offset the cost of providing the service.

2.5 One exception concerns calls to 0870 numbers. Following our April 2009 regulatory statement entitled *"Changes to 0870"*[9] 0870 calls were removed from the scope of NTS regulation with effect from 1 August 2009. As a consequence revenue sharing is no longer supported on this number range.

2.6 We describe this flow of money as the NTS value chain. This is illustrated in Figure 1 below.

[9] http://www.ofcom.org.uk/consult/condocs/0870calls/0870statement/

Figure 1: Stages of the NTS value chain



2.7 08 and 09 numbers are used by organisations in both the private and public sectors to provide a wide range of services. Types of services include information services, technical help lines, access to telephone banking, sales and customer service lines, and dial-up pay-as-you-go internet services. Higher priced services are typically offered on 09 numbers and include chatlines, TV voting lines, access to competitions and adult entertainment services

The current regulatory framework for NTS calls

The current framework stems from BT's SMP in wholesale call origination

2.8 The current regulatory framework for NTS calls was established in an Oftel determination published in 1996[10] with the aim of encouraging the growth in the provision of access to new and cheaper value- added services via the telephone. This was achieved by transferring the retail profit from the call from the OCP (which retains the profit in the case of geographic calls) to the TCP who in turn could choose to share some of this profit with their SP customers. SPs could then use that revenue share to fund innovative services. This framework for NTS calls has been incorporated into the overall regulatory framework for telecommunication services as established by the Communications Act 2003 ('the Act').

2.9 Under the Act we are required periodically to reassess competitive conditions in each of the markets we regulate. On 15 September 2009 we published a statement in relation to our "Review of the fixed narrowband services wholesale markets"[11] (the 2009 Wholesale Market Review Statement[12]), setting out the final conclusions of our review of the markets for wholesale services provided over fixed public narrowband networks.

2.10 In relation to NTS calls, the key conclusions of the 2009 Wholesale Market Review Statement for the purposes of this consultation are that:

i) there is a market for wholesale call origination on a fixed narrowband network in the UK, excluding the Hull Area;

ii) BT has SMP in this identified market;

[10] http://stakeholders.ofcom.org.uk/binaries/enforcement/competition-bulletins/closed-cases/all-closed-cases/749342/BTs_Interim_charges.pdf

[11] *Review of the fixed narrowband services wholesale markets, Statement on the markets, market power determinations and remedies including further consultation* (15 September 2009) http://stakeholders.ofcom.org.uk/binaries/consultations/wnmr_statement_consultation/summary/main.pdf

[12] We note there was a further consultation element in the 2009 Wholesale Market Review Statement. However this is not relevant to these charge control proposals.

iii) BT should be subject to an obligation to provide NTS call origination ('the NTS Condition') as a remedy to its SMP in this market;

iv) the NTS Retail Uplift and PRS Bad Debt Surcharge provided for in the NTS Condition should be subject to charge controls, the details of which were being addressed in a separate consultation.

2.11 Other remedies were also imposed in the 2009 Wholesale Market Review Statement including cost orientation, non-discrimination and a requirement to notify charges, terms and conditions.

We have imposed the NTS Condition

2.12 The NTS Condition requires BT to originate and to retail NTS calls on behalf of the terminating operator on fair and reasonable terms, conditions and charges. It allows BT to retain charges that relate to

- call origination and conveyance[13];
- a Retail Uplift designed to recover BT's reasonable costs for retailing NTS calls; and
- a PRS Bad Debt Surcharge to reflect the higher incidence of bad debt on PRS calls.

2.13 Under Condition AAA3 the charges for each of these three elements must be cost-orientated.

0A key objective of price capping is to prevent excessive charging by BT

2.14 BT's charges for NTS call origination, including the retail uplift, are subject to cost orientation and non-discrimination obligations. However, we consider that, by themselves, these remedies may not be the most effective way to prevent excessive charging whilst maintaining incentives for efficiency. We therefore aim to set the NTS Retail Uplift and the PRS Bad Debt Surcharge price caps at a level which prevents BT from charging excessively for the retail activities involved in originating NTS calls.

The current structure of charges for recovering BT's retail costs

2.15 There are two distinct charges, one relevant to all NTS calls and one which only applies to PRS calls

- A flat rate pence per minute ('ppm') wholesale charge for originating[14] calls to end users (the NTS Retail Uplift); and

[13] The arrangements governing BT's charges for these services are set out in Review of BT's Network Charge Controls (15 September 2009) available at http://stakeholders.ofcom.org.uk/binaries/consultations/review_bt_ncc/statement/nccstatement.pdf.

[14] As in previous consultations and statements we continue to refer to *originating* calls. However it is clear that BT originates some NTS calls which it does not in fact retail, most notably in relation to its white-label Wholesale Calls service. Only the calls that BT itself *retails* would incur the charge for the NTS Retail Uplift.

- The PRS Bad Debt Surcharge which recognises the higher level of bad debt on PRS calls

The previous charge controls have now expired

2.16 The previous charge controls expired in September 2009. Prior to that a 4-year charge control had been in place. The NTS Retail Uplift for chargeable calls was subject to a price cap of RPI -6.5% and the Uplift for freephone calls to a price cap of RPI +4.5%. The level of the PRS Bad Debt Surcharge was 3.03% of the retail call price.

2.17 BT maintained the its charges for the NTS Retail Uplift and PRS Bad Debt Surcharge at levels consistent with the previous charge controls until the end of March 2010. At that point, it notified TCPs of an increase in the level of the PRS Bad Debt Surcharge to 5.24% with effect from 1 July 2010. A number of TCPs failed to agree to this increase and BT referred a dispute under section 185 of the Act for Ofcom to resolve on 5 January 2010. BT has subsequently withdrawn its referral of the dispute pending further negotiations as a result of this consultation.

We published our first consultation on 28 July 2009

2.18 We published our initial proposals for the NTS Retail Uplift and PRS Bad Debt Surcharge on 28 July 2009[15] ('the July 2009 Consultation'). We proposed a price cap of between RPI+1.5% and RPI+4.5% for the NTS Retail Uplift, covering both chargeable and freephone calls, and a PRS Bad Debt Surcharge of 9.7%.

2.19 We indicated in the July 2009 Consultation, however, that we anticipated obtaining updated regulatory accounting information for 2008/09 during the consultation period. We further indicated that we planned to commission an independent review of BT's PRS bad debt information. The July 2009 Consultation set out our intention to scrutinise the additional accounting information and take account of the independent review's findings when updating the NTS Retail Uplift RPI-X model and PRS bad debt calculations.

We have obtained further evidence and conducted further analysis since our first consultation

We extended the scope of our independent consultant's review

2.20 The consultation prompted immediate concern from stakeholders. Their primary concern was the proposed level of the PRS Bad Debt Surcharge: stakeholders did not believe that BT could be efficient with an incidence of bad debt at that level, and wanted greater clarity about what constituted bad debt and whether any particular types of services and/or SPs were particularly problematic.

2.21 We therefore extended the deadline for responses to 25 September 2009, a few days before the then charge controls were due to expire, and agreed with BT that it would not notify new prices until 1 January 2010 at the earliest. We also extended the

[15] *Wholesale charges for Number Translation Services and Premium Rate Services, NTS Retail Uplift charge control and PRS Bad Debt Surcharge*, available at http://stakeholders.ofcom.org.uk/binaries/consultations/nts/summary/ntscondoc.pdf

planned scope of the independent review to cover BT's bad debt management practices, engaging BDO, a firm of accountants, to undertake the review.

2.22 On 15 January 2010 BT informed us that it had discovered that, in applying its bad debt attribution methodology, it had incorrectly coded some revenues as PRS call revenues when they were in fact revenues from other types of NTS calls.

2.23 On 22 February 2010 BT provided us with a written report on its view of the incidence of bad debt and the associated level of PRS Bad Debt Surcharge. The report made clear that the bad debt charge had been incorrectly calculated. PRS revenues were also revised downwards. There were consequences for the NTS Retail Uplift as debt previously labelled as PRS bad debt was re-classified as bad debt on other NTS calls. The report stated that BT's revised estimate of the level of PRS Bad Debt Surcharge was 5.25%

2.24 BDO delivered a report to us on 28 February 2010 setting out the results of their review of BT's original numbers (those supporting a Surcharge of 9.7%). In light of the additional information received from BT, we therefore instructed BDO to prepare a further report to review, among other things, BT's revised information.

In parallel to BDO's review we sought to gain an understanding of the nature and causes of PRS bad debt

2.25 In October 2009 we sent a formal information request to BT to obtain data which would help us to gain a better understanding of the nature of PRS bad debt. We asked BT to analyse the service composition of the largest balances on disconnection, to drill down to individual numbers dialled and to obtain from the PhonepayPlus number checker[16] the names of the service providers involved. In November 2009, we sent the same information request to all other major retailers of PRS calls as well as to KCOM plc. We have found[17] KCOM to have SMP in the market for call origination on a fixed narrowband network in the Hull Area.

In addition it became evident that call volumes populating our NTS Retail Uplift RPI-X model had been overstated by 30%

2.26 In September 2009 we obtained 2008/09 accounting information from BT to update the base year of our RPI-X model from 2007/08 to 2008/09. The X obtained from the updated version of the model fell within the range proposed in the July 2009 Consultation.

2.27 BT's call volumes are a critical input into the calculation of the overall value of X as it is in effect the unit costs (ultimately set by references to forecast efficient costs at the end of the charge control period divided by associated volumes), when compared to current prices, which determine the value of X.

2.28 For the purposes of generating an estimate of X we used two different sets of NTS call volume data from BT, which whilst being ultimately derived from the same source, were prepared for different purposes:

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[16] PhonepayPlus is responsible for the day to day regulation of PRS services. On its website (http://www.phonepayplus.org.uk/output/default.aspx) it offers a facility to enable consumers to identify the service provider from the telephone number dialled.
[17] in the 2009 Wholesale Market Review Statement

- Regulatory accounting volumes ('wholesale'); and
- Retail billing[18] volumes ('retail').

2.29 We used the regulatory accounting volumes to populate our RPI-X model with base year volumes as these should have been consistent with the attribution of retail costs figures we had been given. We used the retail billing volumes to project base volumes to the proposed end of the charge control. The retail billing volume data was available at number range level and therefore much more suitable for use in the NTS volumes forecasting we were undertaking at the time.

2.30 To ensure the robustness of our analysis, we compared the two sets of volume data and found that the regulatory accounting volumes were 20% higher than the retail billing volumes. We sought to find out why there appeared to be such a discrepancy. BT explained the discrepancy as being due to the call volumes associated with NTS calls ported away from BT being erroneously included in BT to CP volumes.

2.31 We asked BT to provide a comprehensive reconciliation by broad NTS call type between the 2008/09 call volume minutes it had supplied in September 2009 and its latest view of these volumes. BT supplied this information on 14 June 2010. According to BT's revised view, overall NTS volume estimates were 30% lower than previously supplied. For the category most significant for determining the overall level of X - the BT-to-CP NTS call volumes[19] - the volumes had fallen by 40%.

2.32 BT's reconciliation showed that the previous overstatement of volumes was attributable to the erroneous inclusion of data for two categories of call as explained further below:

- Wholesale Calls; and
- Ported NTS calls.

BT counted volumes which it originated but did not retail within its retail volumes

2.33 Wholesale Calls are a white label service provided by BT Wholesale to other retailers including network-based service providers and resellers. The volumes BT originally supplied incorrectly included these volumes for NTS calls. BT originates these calls but does not retail them and therefore it would be for the purchasing CPs to recover the costs involved in retailing these calls, not BT. Only BT NTS calls that BT retails are subject to the proposed charge control.

Some NTS calls ported both to and from BT were counted more than once as they passed through its network

2.34 When a retail customer[20] of a communications provider seeks to switch to another provider and asks to keep their existing telephone number, a process known as

[18] In BDO report these are referred to as 'operational' volumes
[19] As explained more fully at 5.92 and 5.93 we use the unit costs for BT to CP chargeable NTS calls to establish the cost base for all NTS calls (except for bad debt which is handled separately).
[20] The retail customer referred to here is the called party who contracts with a service provider to host its NTS numbers. It does not refer to the calling party who dials an NTS number (who is the customer of the retail telephony provider).

number portability is used. The communications provider losing the customer is known as the 'donor CP' and the provider gaining them as the 'recipient CP'.

2.35 When a call is routed to a non-geographic number that has been ported, the call is first routed to the donor CP because the originating network knows only that the number originally belonged to them as the 'range holder'.

2.36 When the call reaches the donor network it interrogates a call routing database to find out where the call should be sent to. In this example, however, instead of routing the call directly to a geographic number belonging to the retail customer it is instructed to route it instead to the network of the recipient CP. When it reaches the recipient's network, the recipient interrogates its own database and routes the call to the retail customer's geographic number.

2.37 It is possible for the retail customer as owner of the non-geographic number to change networks more than once in which case the above process is repeated until the final recipient CP is reached. In some cases the retail customer may have chosen to return to the CP that it originally used. In BT's case calls may be routed away from BT's network and then back to it again increasing the likelihood that the call may be counted twice. Alternatively, to save paying a series of portability charges, the range holder, as the original provider, may employ a process known as 'call trapping' to stop the call leaving its network in the first place.

2.38 Appendix B5 of the BDO report goes into more detail on the various scenarios surrounding this process which led to the overstatement of the NTS volumes retailed by BT.

<u>At face value these two factors would have had a substantial impact on the value of X</u>

2.39 As the reduction in volumes was not accompanied by a reduction in the retail costs attributed to NTS calls, it appeared to imply a sharp increase in unit costs, suggesting that the price cap proposals would need to be revised, to accommodate a value of X well outside the range set out in the July 2009 Consultation.

2.40 We also found that our calculation of average prices for the NTS Retail Uplift at the outset of the control needs to be revised upwards by 10% on account of the different time of day profile between the volume information originally supplied for 2009/10 and that based on the revised basis of preparation (i.e. all NTS calls retailed by BT) This situation arose because the proportion of the daytime calls, for which the NTS Retail Uplift charge is higher, rose from 57% of total NTS minutes to 71%.

It became apparent that we would need to take account of 2009/10 information before concluding

2.41 By the time the errors in the attribution of bad debt and the identification of PRS revenues, and the mis-statement of NTS volumes had been identified we were well into 2010.

2.42 We sent an update note to stakeholders who had responded to the July 2009 Consultation saying that by the time we would be able to conclude, 2009/10 data would be available and that we therefore intended to base our revised proposals for the PRS Bad Debt Surcharge on 2009/10 data.

2.43 There was a further delay in that, on account of a change in its retail billing systems, BT was not able readily to produce service level bad debt information based on 2009/10 data until 20 September 2010. It was not able to provide explanations to BDO supporting its methodology and calculations until 8 October 2010.

We commissioned a further independent review of BT's numbers, this time also covering BT's NTS call volumes data

2.44 The first independent review covered:

- BT's methodology for the 9.7% PRS Bad Debt Surcharge, which was based on 2008/09 accounting data, and the calculations based on this methodology; and
- BT's bad debt management practices

2.45 Because the first review had focused on the 9.7% estimate of PRS bad debt, which had subsequently been revised, its findings were of limited value. We therefore commissioned BDO to undertake a further review, covering:

- BT's methodology for the 5.24% PRS Bad Debt Surcharge, which was based on BT's revised 2008/09 accounting data, and the calculations based on this methodology;
- As above but for the 2009/10 data;
- Some further analysis of BT's bad debt management practices; and
- BT's revised NTS volume figures and an estimate of the impact that these would have on previously provided costs.

2.46 BDO started the second review in June 2010 and provided us with its draft second report on 19 November 2010.

2.47 On 3 November 2009, before BDO started work in earnest on the first review of BT's numbers, we held a session with PRS stakeholders who were able to explain their concerns to BDO in person. On 29 November 2010, BDO presented the findings of its second review of BT's bad debt to PRS stakeholders.

We are now consulting on a fresh set of proposals

2.48 We have now developed proposals for the level of the NTS Retail Uplift and PRS Bad Debt Surcharge based on 2009/10 data. Our overall approach has not changed significantly but there have been some major changes to the underlying data, as explained above. We therefore consider that, in light of the significance of the effect of those changes, it is appropriate to conduct a further consultation on the level of the charge controls for the NTS Retail Uplift and PRS Bad Debt Surcharge. In our view, those changes are sufficiently material, in terms of both the evidence base and the reasoning supporting our revised proposals, to have an important effect on the outcome of the consultation and it is therefore appropriate to give stakeholders an opportunity to comment on the revised proposals.

We are undertaking a strategic review of non-geographic calls services which may ultimately lead to the abolition of these charge controls

2.49 NTS calls are the most significant category of calls which fall within the broader category of non geographic calls. Included in this broader category are DQ calls and 03 calls which also rely on number translation technology but are not subject to the revenue sharing regime arising from BT's NTS Condition.

2.50 On 30 April 2010 we published a Call For Inputs as the initial step in our consideration of whether and if so how regulation of non-geographic calls services should be modified or reduced, in the interests of consumers. We want any reform to enhance (or at least preserve) the features consumers value, and to encourage new services for the benefit of consumers.

2.51 On 16 December 2010 we published a consultation document entitled *"Simplifying Non-Geographic numbers*[21]" in which we sought views on a range of possible ways in which the issues we identified, primarily caused by poor price transparency for consumers, could be addressed. One of the objectives of the policy work underlying this consultation was to remove the need for constant regulatory intervention to address either BT's wholesale market position or the near constant series of disputes. Accordingly we wish to move away from having to prescribe the levels of BT's wholesale charges for the NTS Retail Uplift and PRS Bad Debt Surcharge. It is therefore possible that this set of charge controls on BT will be the last.

2.52 We intend to conclude on this policy work in 2011. If we decide to change the regime, the implementation of a new policy would be likely to take a further 1-2 years.

2.53 As a result, we currently envisage that the existing regime, including price caps on the NTS retail uplift and PRS Bad Debt Surcharge, is likely to continue until 2013, the proposed expiry date of the controls. If we were to implement a new policy before then we would take steps to amend or revoke these controls, as appropriate.

Structure of the document

2.54 This document is structured as set out in the table below, which briefly explains the purpose of each of the Sections and Annexes.

Sections	Title	Purpose
1	Summary	• to briefly introduce and summarise our key proposals
2	Introduction	• to give some background on NTS calls, set the scene for the proposed charge controls and summarise the links to other projects
3	Legal framework for charge controls	• to outline the legal framework within which we operate when setting charge controls
4	Approach to NTS Retail Uplift	• to discuss our proposed approach (i.e. form and structure) to setting an RPI-X control on BT's NTS

[21] http://stakeholders.ofcom.org.uk/consultations/simplifying-non-geo-numbers/

Sections	Title	Purpose
	charge control framework	Retail Uplift
5	Estimation of the NTS Retail Uplift price cap	• to discuss how we propose to estimate the level of the value of X
6	Revised proposals for the PRS Bad Debt Surcharge	• to discuss our proposed approach to setting a bad debt surcharge retention on PRS calls
7	Implementation of the proposed new SMP conditions	• to explain how our proposals meet the legal tests and how we plan to implement the proposed charge controls
8	Monitoring of charge control compliance	• to set out how we plan to monitor compliance with the proposed charge controls as well as their interaction with other regulatory remedies
Annexes		
1-4	Standard consultation document annexes	• to explain how to respond to this consultation (annex 1) • to explain Ofcom's consultation principles (annex 2) • Consultation response cover sheet (annex 3) • Consultation questions (annex 4)
5	Respondents to July 2009 Consultation	• List of names of respondents
6	Impact of proposals on NTS value chain	• to explain our approach to estimating the impact of our proposals on the NTS value chain
7	Treatment of base year data in NTS Retail Uplift RPI-X model	• to describe the nature of the costs incurred by BT in retailing NTS calls • to describe the adjustments we propose to make to BT source data for the base year
8	Estimation of final year unit costs in NTS Retail Uplift RPI-X model	• to explain how we propose to estimated the level of final year unit costs, and in consequence to establish the value of X, based on approach set out in section 4
9	Calculation of the level of the PRS Bad Debt Surcharge	• to define the bad debt to be recovered by BT via both the NTS Retail Uplift and PRS Bad Debt Surcharge • to describe how our proposed level for the Surcharge has been calculated
10	Legal Framework	• to set out the relevant legal framework and tests we must satisfy before imposing the SMP remedies
11	Legal Instrument: Notification of proposed SMP conditions	• to formally notify stakeholders of our proposals to set and modify SMP service conditions
12	Glossary	• to explain less familiar terms used in this consultation

Section 3

Legal framework for charge controls

Introduction

3.1 In this section we outline the legal framework in which we operate when considering charge controls as an SMP[22] services condition. The legal framework is set out in more detail at Annex 10.

Our proposals stem from the 2009 Wholesale Market Review Statement

3.2 The scope of this consultation is based on the market definitions and SMP findings made in our 2009 Wholesale Market Review Statement published on 15 September 2009[23]. Insofar as is relevant to this consultation, we identified the supply of wholesale call origination on a fixed narrowband network in the United Kingdom (excluding the Hull area) as a separate market and concluded that it was appropriate to impose SMP services conditions on BT. Those conditions included a requirement to provide NTS Call Origination.

3.3 We also concluded that it was appropriate to impose charge controls on the amount which BT could withhold in respect of the NTS Retail Uplift and the PRS Bad Debt Surcharge. In reaching that decision, we set out the basis for our conclusions and how the relevant legal tests were met for the setting of SMP services conditions including the imposition of charge controls in sections 15 and 16. That analysis is equally relevant to the imposition of the controls themselves through this document and further analysis to support this position is set out in the following sections.

3.4 In our notification in Annex 7 to the 2009 Wholesale Market Review Statement, we revoked the existing NTS Condition (SMP condition AA11) and applied a new condition in similar form to the new market definition of wholesale call origination on a fixed narrowband network in the UK, excluding the Hull Area, in SMP condition AAA11[24]. AAA11 differed from AA11 in that it did not include a specific level of the PRS Bad Debt Surcharge.

3.5 Having concluded that the imposition of charge controls in respect of the NTS Retail Uplift and the PRS Bad Debt Surcharge is appropriate, this consultation makes proposals as to the levels of the charge controls which should be imposed and the wording of the conditions used to implement those proposals. Annex 11 to this consultation sets out the detail of the proposed conditions to be applied to BT for the purposes of implementing the controls the NTS Retail Uplift and the PRS Bad Debt Surcharge.

SMP conditions must satisfy tests set out in the Act

[22] Significant Market Power. An undertaking will be deemed to have SMP if either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.

[23] http://stakeholders.ofcom.org.uk/binaries/consultations/wnmr_statement_consultation/summary/main.pdf

[24] in Schedule 1 of Annex 7 of the 2009 Wholesale Market Review statement

3.6 Ofcom's power to set SMP services conditions derives from sections 45 and 87 of the Act. Section 45 grants Ofcom the power to impose SMP conditions whilst section 87 sets out the subject matter which any SMP services condition may cover. This includes, at section 87(9), the ability to impose price controls as part of an SMP services condition.

3.7 In setting or modifying any SMP services condition, Ofcom has to ensure that the proposed condition or modification complies with the various tests set out in the Act, and in particular sections 47 and 88, taking full account of the relevant provisions of the EU Communications Directives, and that we are acting consistently with our duties under sections 3 and 4 of the Act.

Section 88

3.8 Where Ofcom has determined that a person has SMP in a relevant market, the imposition of price controls is authorised under section 87(9)(a) of the Act provided the conditions set out in section 88 of the Act are met.

3.9 Section 88(1) provides that Ofcom may only impose such conditions where there is a relevant risks of adverse effects arising from price distortion and where the condition is appropriate for the purposes of:

i) promoting efficiency;

ii) promoting sustainable competition; and

iii) conferring the greatest possible benefits on end users.

3.10 Under section 88(3), there are relevant risks of adverse affects arising from price distortion where a dominant provider[25] may fix and maintain prices at an excessively high level or impose a price squeeze with adverse consequences for end-users. In assessing whether this is the case, section 88(2) requires us to take account of the extent of the investment made by the dominant provider.

Section 47

3.11 Where we have concluded that the tests in section 88 are met, we may impose price controls. However, the precise terms of the conditions used to implement those controls must comply with the requirements of section 47 of the Act. Under section 47, Ofcom must not set or modify a condition imposed under section 45 unless we are satisfied that it is:

i) objectively justifiable;

ii) not such as to discriminate unduly;

iii) proportionate; and

iv) transparent.

[25] i.e. the provider with SMP.

We must act in accordance with our duties in sections 3 and 4 of the Act

3.12 We must also consider the extent to which any proposals are consistent with our general duties under section 3 of the Act and our obligations under the Community requirements set out in section 4.

3.13 Our principal duty under section 3 requires us to further the interests of citizens in relation to communication matters and to further the interests of consumers, where appropriate by promoting competition. Section 4 obliges us to act in accordance with the Community requirements. Where there is conflict between our section 3 general duties and our obligations under section 4 the latter has precedence. Those duties are set out in greater detail in Annex 10.

We need to balance a number of objectives

3.14 The effect of the obligations set out above is to require us to balance a number of policy objectives when considering our proposals, including:

- preventing excessive pricing by BT;
- supporting effective competition in related markets, including for NTS termination/hosting and service provision
- allowing BT to recover costs efficiently incurred in providing the service;
- providing incentives to enhance efficiency;
- generating a stable business environment; and
- minimising the costs associated with imposing, and subsequently monitoring, the charge controls.

3.15 We set out in more detail in the following sections how we have considered each of those objectives in deciding upon the proposals contained in this consultation.

We have carried out an impact assessment

3.16 The analysis presented in Sections 4, 5, 6 and 7 and Annexes 6, 7, 8 and 9 of this consultation represents an impact assessment as required by section 7 of the Act.

3.17 Impact assessments provide a way of assessing different options for regulation and showing why a particular option has been preferred. Section 7 requires Ofcom to carry out impact assessments where its proposals would be likely to have a significant impact on businesses or the general public, or where they involve a major change in Ofcom's activities. However, as a matter of policy, Ofcom is committed to carrying out and publishing impact assessments in relation to the great majority of its

policy decisions. For further information about Ofcom's approach to impact assessments, see 'Better policy-making: Ofcom's approach to Impact Assessment'[26].

3.18 Pursuant to section 7, an impact assessment must set out how, in our opinion, the performance of our general duties (within the meaning of section 3 of the Act) is secured or furthered by or in relation to what we propose.

3.19 The decision made in the 2009 Wholesale Market Review Statement that a charge control for the NTS Retail Uplift and PRS Bad Debt Surcharge should be imposed was subject to an impact assessment. The proposals made in this document relate to how the control should be implemented. They are made for the purpose of and in connection with the carrying out of our functions and are important, having a significant impact on BT and other CPs on whose behalf BT retails calls. We have therefore undertaken an impact assessment. We discuss the options available to us, how they meet our statutory obligations, how they impact on competition and stakeholders, and whether there are any equality considerations.

We have screened our proposals for their impact on equality

3.20 Equality impact considerations are an integral part of our assessment of the options available to us. We have not however carried out separate equality impact assessments in relation to race, gender or disability; the wider equality characteristics in section 149 of the Equality Act 2010; or under the Northern Ireland Equality Scheme. This is because we are not aware that the proposals being considered here, which are technical in nature and will affect all industry stakeholders equally, would have a different impact on people of different gender or ethnicity; on disabled consumers; on the wider equality characteristics in section 149 of the Equality Act 2010; or on consumers in different parts of the UK or consumers on low incomes.

[26] http://stakeholders.intra.ofcom.local/binaries/consultations/better-policy-making/Better_Policy_Making.pdf

Section 4

Approach to NTS Retail Uplift charge control framework

Introduction

4.1 The purpose of this section is to set out our latest proposals relating to the form and structure of the NTS Retail Uplift charge control. We also explain how we propose to take account of the views of stakeholders as expressed in their responses to the July 2009 Consultation in relation to our previous set of proposals.

4.2 Our revised proposals, including the value of X to be discussed in the next section, would be implemented by imposing a new condition on BT. We set out the proposed new condition in Annex 11.

4.3 In July 2009, we proposed that the form of the charge control should be an RPI-X style control comprising of a single basket covering both chargeable and non-chargeable NTS calls. We proposed a price cap of between RPI+1.5% and RPI+4.5%, to run for 4 years up until September 2013. In addition we proposed that there should be no one-off change to the level of NTS Retail Uplift charges at the outset of the control and as a result the Uplift should follow a glidepath to our measure of BT's forecast costs at the end of the charge control.

4.4 The previous charge control lapsed on 30 September 2009. Since then BT has refrained from revising the NTS Retail Uplift.

4.5 In the remainder of this section, following a brief discussion of objectives, we consider a range of issues related to the form and structure of the charge control. For each issue, we recap on the approach proposed in July 2009, before considering stakeholder responses and setting out any further analysis and our provisional conclusion.

The objectives for the charge control

4.6 As set out in paragraph 3.14 above, we have a number of policy goals to balance when setting charge controls, including the promotion of efficiency, sustainable competition and conferring the greatest benefit on end users. In developing our proposals for the NTS Retail Uplift charge control, we have had particular regard to the following objectives:

- preventing excessive pricing by BT;
- supporting effective competition in related markets, including for NTS termination/hosting and service provision
- allowing BT to recover costs efficiently incurred in providing the service;
- providing incentives to enhance efficiency;

- generating a stable business environment; and
- minimising the costs associated with imposing, and subsequently monitoring the charge controls.

We still propose to apply an RPI-X form of control until 30 September 2013

4.7 The 2009 Wholesale Market Review Statement concluded that there should be a charge control in respect of BT's retention to cover its costs of retailing NTS calls.

4.8 Charge controls can take a number of forms including, for example, a determination of a price for a single service for a fixed or indeterminate period or an RPI-X style control with a single X applicable to a range of services lasting for a number of years.

We believe that an RPI-X style of charge control best meets our regulatory objectives

Summary of July 2009 proposal and associated rationale

4.9 In July 2009, we proposed to set an RPI-X charge control.

4.10 An RPI-X control limits the maximum increase in BT's charges to the rate of inflation (RPI) minus X%. Ofcom sets X to bring BT's charges into line with projected costs at the end of the charge control period.

4.11 We provisionally concluded that this form of charge control enhanced economic efficiency whilst at the same time promising stakeholders predictable pricing and minimising the costs on us and other stakeholders, most notably BT, associated with imposing the charge control. This proposal was also in line with other charge controls we have imposed on BT.

4.12 We provisionally rejected the alternative of determining the level of the charge based on BT's latest costs on an annual basis because it would involve more frequent intensive scrutiny of BT's costs and would provide inferior incentives for efficiency improvement.

4.13 We asked the following question

Question 2: Do you agree that an RPI-X control is the appropriate form of charge control for the NTS Retail Uplift?

Consultation responses

4.14 Most respondents to our July 2009 Consultation agreed that an RPI-X control is the appropriate form of charge control for the NTS Retail Uplift. However, there were concerns regarding the proposed length of the charge control period. These concerns are discussed below in paragraphs 4.31 to 4.36.

4.15 AIME, however, while agreeing with the principle of setting an RPI-X control also suggested that we should set the charge control annually.

Our further analysis and provisional conclusion

4.16 We note that a large majority of respondents to the July 2009 Consultation were supportive of a charge control in the form RPI-X. However, in order to consider AIME's concerns we have reviewed our assessment of the relative merits of an RPI-X style control versus determining charges on an annual basis. Whilst AIME was supportive of an RPI-X control, the effect of an annual determination of the charge would be to set a specified price cap for each year of the price control period.

4.17 We consider that the factors set out at paragraph 4.11 and 4.12 continue to support the use of an RPI-X control. We do not think that it is appropriate to determine the level of the charge on an annual basis since our experience of addressing concerns over the level of the NTS Retail Uplift charge before and after the introduction of the previous control suggests that there are significant advantages to a charge control set for a number of years in reducing the need for frequent regulatory intervention. For example, instead of us requesting and reviewing BT data, and engaging and consulting with relevant stakeholders every year, we would do this only when we reset a charge control.

4.18 Therefore, we still propose to set an RPI-X charge control.

We still propose to use RPI as the relevant inflation index

Summary of July 2009 proposal and associated rationale

4.19 We proposed to retain RPI as the relevant inflation index in our price control formula..

4.20 We provisionally concluded that RPI was both familiar to stakeholders and was a factor outside BT's control, an important consideration for the maintenance of incentives on BT to reduce costs. A disadvantage of a telecoms cost index is that it could be influenced by BT's own purchases, as BT is the largest operator in the UK. We discounted making adjustments to RPI for, for example, mortgage interest and indirect taxes to exclude costs that are not relevant to BT's cost base because this would detract from the transparency of the index. We also stated that we had adopted RPI as our measure of inflation for previous RPI-X style charge controls on BT.

4.21 We asked the following question

Question 1: Do you agree that an RPI is the best inflation index for the proposed charge control?

Consultation responses

4.22 Respondents to our consultation agreed RPI to be the relevant inflation index.

Further analysis and provisional conclusion

4.23 We note that all respondents to the consultation agreed that RPI was the appropriate inflation index for the charge control. Whilst there are alternatives measures of inflation – e.g. the consumer price index (CPI) which excludes costs related to owner-occupation of housing and some other items and is calculated in a different way to

the RPI[27] , and also RPIX which calculates the RPI excluding mortgage interest payments, we therefore consider that RPI is the appropriate measure in this case. RPI remains a widely used measure of general inflation and is the index typically used to set price caps in other sectors subject to economic regulation[28].

4.24 We therefore still propose to use RPI as the measure of inflation within the price cap.

We still propose to set the charge control to run until 30 September 2013

Summary of July 2009 proposal and associated rationale

4.25 We proposed to set the next NTS Retail Uplift charge control for a period of four years until September 2013.

4.26 The criteria we took into consideration in proposing the length of the charge control were:

- generating a stable business environment
- providing incentives to enhance BT's economic efficiency, both dynamic and allocative
- reducing the burden on us and other stakeholders in imposing charge controls

4.27 Dynamic efficiency concerns the ability of firms to innovate and make efficient investments, including activities designed to reduce costs over time. Price caps generally provide strong incentives for dynamic efficiency because they allow regulated firms to earn profits in excess of the cost of capital if they are able to manage costs below the level assumed when setting the value of X. These incentives can drive innovation and investment. Other things being equal, incentives for dynamic efficiency improvement will be stronger under a longer price cap than a shorter one because a longer period gives the firm more opportunity to enhance its profitability through innovation and cost reduction.

4.28 Allocative efficiency is achieved when prices are aligned with underlying costs. Charges can diverge from costs over the life of a price cap if the costs of price-capped services deviate from the level assumed when setting the value of X. The use of RPI-X therefore creates a trade-off between dynamic and allocative efficiency. The longer the duration of the cap, the stronger the incentives for dynamic efficiency and the greater the possible loss of allocative efficiency. However, we are able to ensure that allocative efficiency objectives are also met through the periodic setting of new controls to bring prices back into line with costs, to the extent that there may be a discrepancy.

4.29 In balancing these three criteria we judged a period of four years to be the period most consistent with our regulatory objectives. We judged that a control period of up to 4 years would lead to a stable business environment and increase the dynamic

[27] The CPI is a "geometric mean" whereas the RPI is an "arithmetic mean".
[28] For a more detailed discussion, see our April 2010 consultative document on wholesale mobile voice termination, and references therein at http://stakeholders.ofcom.org.uk/binaries/consultations/wmctr/summary/wmvct_consultation.pdf.

efficiency benefits without resulting in an unacceptable loss of allocative efficiency. It would also significantly reduce the burden on us of imposing the charge control.

4.30 We asked the following question

Question 3: Do you agree that a four year duration for the proposed NTS Retail Uplift charge controls is appropriate?

Consultation responses

4.31 Respondents to our consultation had differing views regarding the appropriate charge control period. Most respondents agreed with our proposals.

4.32 BT suggested that an interim review of the relevant X would be appropriate. BT suggested that this interim review could be triggered by an important event in the NTS market, like the removal of 0845 numbers from the NTS regime.

4.33 AIME suggested that yearly determination of the price cap would be more appropriate because of the competitive nature of the telecommunications industry.

4.34 One service provider [✂] felt that a further assessment of the best duration would be necessary. It felt that a four-year charge control might suit BT and suggested that we carry out a further assessment to ascertain this and set a charge control length that is best for all stakeholders.

4.35 One respondent [✂], while agreeing with a four-year control period, suggested that if volumes diverge significantly from the volume forecasts used for the model there should be an interim review.

4.36 4D Interactive said that it preferred yearly determinations in order to ensure that BT is treating bad debt properly in relation to the PRS Bad Debt Surcharge.

We cannot impose controls beyond September 2013 without conducting a further market review

4.37 In setting charge controls, we may only take into account the conclusions reached in respect of the period covered by the market review. We are not therefore able to extend charge controls beyond the period set out in the review. When reviewing the market for wholesale call origination services as part of the 2009 Wholesale Market Review we took into account the period up to and including 30 September 2013 in forming our conclusions. This therefore sets the outer limit of the time span of remedies we can impose to address BT's SMP in that market at this time. Any further charge controls could only be imposed following a further market review covering a period after September 2013.

Our further analysis and provisional conclusion

4.38 If we were to conclude on the charge controls in June 2011, the maximum length that those controls would apply for is around 2¼ years. We believe a control of 2¼ years, when evaluated against our articulated criteria, is overall better than a control of a single year. We note that our revised proposal goes some way to addressing the concerns of those who wanted a shorter cap or an interim review. The revised proposal is consistent with the balance of the responses, since no respondent argued for a cap of more than four years duration. In the circumstances, we consider that the revised proposal will best meet the needs of all stakeholders.

4.39 We do not believe that the competitiveness of the relevant telecommunications markets would point to annual reviews as AIME contended. This is because we are required to take a forward look as part of the relevant market review. We concluded, as a result of our review, that BT's SMP in the call origination market will persist for the period of the proposed control and that in the absence of a charge control, neither the caller nor the terminating provider would be able to competitively constrain the price that BT sets for the Retail Uplift. There is therefore a risk that BT will be able to set prices above the competitive level. In addition, setting charges annually would weaken BT's incentive to reduce costs which could ultimately harm competition.

4.40 One respondent made a case for an interim review, possibly triggered if actual volumes diverge significantly from those used in our forecast model. As explained in paragraphs 5.120 to 5.126 below, we now propose to project BT's costs using a volume measure designed to reflect forecast change in its overall retail activity, rather than a forecast specific to NTS volumes. As this measure relates to the whole of BT's retailing activities, rather than a relatively small part of the whole, we think that it is less likely to be subject to significant unexpected changes in volume. This further weakens the case for an interim review.

4.41 In any case we do not favour an interim review. We consider that such a review would dampen incentives to reduce costs since it would take us close to a one year control. However, if there are significant changes in the market we will consider the case for revising the NTS Retail Uplift charge control. In particular, the ongoing NTS Strategy Review may bring about changes that could warrant a change to the way we set the BT's NTS Retail Uplift charge control, or even lead to the charge control being abolished.

4.42 Therefore, we still propose to set the duration of the RPI-X charge control until 30 September 2013.

We still propose a single basket with a subcap on freephone services

Summary of July 2009 proposal and associated rationale

4.43 We proposed to combine the Retail Uplift charges on chargeable and freephone calls into a single price charge control basket. Further, we proposed to require that BT does not charge a higher retail uplift for freephone calls than for chargeable calls.

4.44 A basket is defined as group of services that are subject to the same charge control restrictions. In an RPI-X style control this means that these services are subject to a common X. A sub cap is a further constraint applied to a sub-set of services within a basket designed to address a particular competition concern.

4.45 The previous charge control had two baskets:

- Freephone calls with an overall price cap of RPI+4.5%
- Chargeable calls with an overall price cap of RPI-6.5%

4.46 The criteria we took into consideration in proposing the July 2009 basket structure were:

- supporting effective competition in related markets, including for NTS termination/hosting and service provision
- Maximising BT's freedom to change relative prices
- Minimising regulatory intervention

4.47 In short we were seeking to prevent BT from exploiting its dominant position whilst giving it as much freedom as possible to change relative prices and to achieve this in the least interventionist way possible. We judged that a single basket had the potential to meet these objectives.

4.48 We considered whether there were significant differences in competitive conditions between freephone and chargeable services, which BT might have an incentive to exploit if both services were put into a single basket. Our view was that there was no evidence to suggest that such differences existed.

4.49 We also considered whether BT might have an incentive to load price increases onto a particular call category because of its position in the market for NTS call termination. For example, if BT terminated a significantly higher proportion of freephone calls, it might have an incentive to increase the relative price of chargeable call origination. We concluded that this was unlikely to be the case, because data for 2007/08 indicated that the proportions of freephone and chargeable calls terminating on BT's network were similar to those terminating on other networks. Our view was that, based on this evidence, there was no strong reason to maintain two separate charge control baskets.

4.50 However as BT may develop incentives to focus cuts on a particular service over the lifetime of the proposed charge control we believed it would be prudent to place a safeguard (i.e. a subcap) on the level of the uplift for freephone calls to prevent it exceeding that for chargeable calls. In the absence of such a subcap, BT would be able to increase charges in respect of freephone calls above the level of chargeable calls whilst remaining within the overall (i.e. freephone and chargeable) cap set by the charge control. Given the known cost differences between freephone and chargeable NTS calls, we judged that that this constraint would not conflict with an efficient charge structure.

4.51 We asked the following question

Question 4: Do you agree that there should be a single price control basket for all NTS calls including freephone calls?

Consultation responses

4.52 Respondents to our consultation agreed with setting a single charge control basket. However, Cable & Wireless and one other stakeholder [✂] suggested that we should monitor prices to ensure that BT was not gaming the charge controls.

Our further analysis and provisional conclusion

4.53 In order to check whether circumstances had changed since 2007/08, we updated our analysis of the balance of originating and terminating traffic. Data for 2009/10 indicated that BT terminated [✂]% of total chargeable traffic originating on all

networks (BT and non-BT) and [✂]% of freephone traffic[29]. As these proportions did not suggest any change to the conclusions of our earlier analysis, we consider it unlikely that BT would be able to gain a significant advantage for its termination business by focusing price increases on a particular type of call. We therefore propose to maintain our previous position to propose a single basket, covering freephone and chargeable NTS calls. As a safeguard, however, we propose to set a sub-cap on the charges for freephone calls, in the form of a requirement[30] that they should not exceed the equivalent charges for chargeable calls.

4.54 We appreciate the concerns of stakeholders about ensuring that BT does not start gaming the charge control but believe the sub-cap will provide a sufficient constraint. In order to ensure that this remains the case, we will check compliance with the charge controls on an annual basis.

4.55 Therefore, we still propose a single basket with a sub-cap on freephone services.

We propose that the current prices follow a glidepath towards the forecast unit cost at the end of the control

Summary of July 2009 proposal and associated rationale

4.56 In July 2009, we proposed that charges should be brought into line with projected costs gradually over the period of the control, rather than through price adjustments at the outset of the control. In other words, we advocated a glidepath approach, rather than one-off price changes at the start of the control.

4.57 At the outset of any charge control is it unlikely that the level of charges will exactly align with costs even where there was a charge control previously in force, not least because it is not possible for projections (used to set the value of X) to be completely accurate. We needed to consider how best to deal with any under or over recovery in the light of our objective of bringing BT's prices into line with its efficiently incurred costs whilst also giving it incentives to reduce them.

4.58 In terms of how quickly prices align with our measure of BT's efficient costs we considered two options:

- adjusting prices to align with costs, in part or in full, at the outset of the control ("one-off adjustment" option)
- requiring current prices to rise or fall gradually towards the level of costs we project for the end of the control ("glidepath" option)

4.59 The criteria we took into consideration when proposing the glidepath option were:

- Promoting a stable business environment
- Promoting economic efficiency

4.60 We proposed a glidepath because we judged that the benefits deriving from a stable business environment and the enhanced incentive properties of a RPI-X style control

[29] We discuss the revised basis for NTS volumes between paragraphs 5.24 and 5.28
[30] As set out in draft condition AAA4(NTS).10 in Annex 11.

with a glidepath outweighed the benefits of bringing prices more quickly into line with costs. We thought that one-off adjustments would only be justified in a situation where the gap between charges and costs was so large that distortions to investment or entry decisions or to competition could result.

4.61 We estimated that, at the time, the revenues[31] generated by the NTS retail uplift were around £2m a year below the fully attributed costs of providing the service. If we had proposed one-off price adjustments, instead of a glidepath approach, charges to TCPs would therefore have risen by about £2m at the start of the charge control. The proposed reliance on a glidepath approach meant that one-off step increases of this magnitude would be avoided.

4.62 We asked the following question:

Question 5: Do you agree that a glidepath, rather than a one-off adjustment at the outset of the control, is appropriate?

Consultation responses

4.63 Respondents to our consultation were largely in favour of a glidepath as opposed to one-off adjustments. However, BT and another stakeholder [✂] thought that a one-off adjustment would be more appropriate in this case.

4.64 BT argued that the £2m per year under-recovery we had estimated was an understatement. It argued that a one-off adjustment was necessary to recover or at least mitigate the current loss.

4.65 Another respondent [✂] believed that a one-off adjustment at the outset of the control was appropriate. It argued that the disparity between price and cost was of sufficient magnitude to warrant a one-off adjustment.

4.66 This same respondent [✂] also argued that we should adopt the same approach for the Retail Uplift and for the Bad Debt Surcharge: if we applied a one-off adjustment in one case then we should apply it in the other.

4.67 Further, it suggested that we had failed to take account of the impact of allowing prices to remain below costs on the wider market. In particular, it thought that a significant disparity at the outset of the control would send the wrong signal to retail access providers as it would diminish investment incentives. Further, it argued that given the way the NTS regime works, retailers other than BT will also under-recover on NTS calls as a result of our failure to make a one-off adjustment when setting the NTS Retail Uplift charge control.

Further analysis and provisional conclusion

4.68 Our revised estimates of relevant costs are now slightly below the current level of the retail uplift. This means that any one off adjustments to prices at the outset of the control would be downwards. They would also be small.

4.69 Our view remains that one-off adjustments would only be justified in situations where the gap between charges and costs is large, so that distortions to investment or entry

[31] These extra revenues relate to both calls terminated on BT's network as well as other CPs' networks.

decisions or to competition could result. This could be the case, for example, when charges are below long run incremental costs or above stand-alone cost[32]. As the current retail uplift charge is only slightly above FAC, we consider that the likelihood of such distortions arising in this case is minimal.

4.70 We therefore propose to adopt the glidepath approach.

February 2011 question 1: Do you agree with the proposed approach to the form and structure of the NTS Retail Uplift Charge Control, including the use of an RPI-X price cap for the period to September 2013, a single basket, a sub-cap on charges for freephone calls and a glidepath approach to price adjustments?

[32] This was the approach we took to proposing one-off adjustments to certain of BT's PPC charges at the start of the current LLCC and was upheld by the CC on appeal. See the CC's decision in case 1112/3/3/09 "Cable and Wireless UK v Office of Communications", June 2010 (the "LLCC decision"): http://www.catribunal.org.uk/files/1112_Cable_Wireless_Determination_300610.pdf

Section 5

Estimation of the NTS Retail Uplift price cap

Introduction

5.1 We initially consulted on a range for the value of X for the NTS Retail Uplift charge control in July 2009. Since then there have been major revisions to the data that supported these proposals. The purpose of this section is to explain how we have moved from our previous proposals to our latest proposals for the value of X. We also explain how we propose to take account of the views of stakeholders as expressed in their responses to the July 2009 Consultation.

5.2 In Annexes 7 and 8, 'Treatment of base year data in NTS Retail Uplift RPI-X model' and 'Estimation of final year unit costs in NTS Retail Uplift RPI-X model', we provide further detail supporting the explanations we set out in this section.

5.3 Before discussing each aspect of our approach to determining the level of the proposed price cap we recap below the previous set of proposals and the key assumptions underpinning them.

Our July 2009 proposals: approach to determining the level of the price cap

5.4 In July 2009, we proposed a price cap of between RPI+1.5% and RPI+4.5%, with a central case of RPI+2.9%. This proposal was based on BT's cost, revenue and volume information for 2007/08, and developed using the three step process summarised below.

Step 1: we determined relevant retail costs, revenues and volumes for the base year

5.5 Our proposals were based on BT's retail product group cost, revenue and volume data for 2007/08 for BT to CP NTS calls as extracted from its regulatory accounting system. We proposed to make no adjustment to BT's attributed costs apart from excluding 20% of sales and marketing costs which we deemed was not related to the activity of acquiring and retaining retail customers.

Step 2: we projected these 2007/08 costs, revenues and volumes to September 2013

5.6 We proposed to forecast costs (excluding bad debt) out to 2013 on the assumption that:

- changes in cost would be driven by NTS call volumes, which were expected to decline by 7% a year;
- the cost volume elasticity (CVE) would be 0.25 i.e. a 10% change in volumes would lead to a 2.5% change in costs; and
- BT would be able to improve its efficiency at a rate of 3% a year.

5.7 We forecast the bad debt recovered through the NTS Retail Uplift by assuming a one-to-one relationship between the forecast percentage changes in NTS call revenues to 2013 and the forecast changes in bad debt.

Step 3: we compared the then current price with forecast end of period costs to generate our proposed value of X

5.8 We derived a figure for X by comparing the then level of the NTS Retail Uplift to the unit cost we had forecast for 2013. Unit costs were calculated by dividing forecast costs including bad debt for 2013 by forecast NTS call minute volumes.

We propose to determine the value of X using the following approach

5.9 In order to determine the proposed value of X we have performed the same steps as in July 2009 namely:

- determine relevant retail costs and volumes for the base year;
- project these costs and volumes to the end of the charge control period; and
- compare the current retail uplift with forecast end of period costs to generate the proposed value of 'X'.

5.10 We have updated the model built for the July 2009 Consultation using BT's latest 2009/10 data to enable us to perform these steps. In Annex 8 we set out a step by step description of how the current RPI-X model functions.

5.11 In developing these revised proposals we have had to address the following significant developments

- NTS call volumes are now approximately 30% lower than previously thought, a development which significantly raises BT's unit costs for the NTS Retail Uplift (discussed further in paragraphs 5.24 to 5.28).
- As a result, the unit costs attributed by BT to NTS calls are higher relative to other call types, in the light of which we have revised our approach to BT's sales and marketing costs (discussed further in paragraphs 5.54 to 5.68).
- The proposed period of the glide path has been reduced from 4 years to 2¼ years (discussed above in paragraphs 4.37 to 4.42)

5.12 These changes primarily affect the value of X, rather than the form and structure of the charge control (as discussed in section 4).

Step 1: determine relevant retail costs and volumes for the base year

We propose to use data drawn from BT's regulatory accounting system as our primary source of cost information

Summary of July 2009 proposal and associated rationale

5.13 In July 2009, we proposed to rely on volumes and costs prepared on a fully attributed cost (FAC) basis drawn from BT's regulatory accounting system. The base year for these proposals was 2007/08, the latest financial year for which BT had finalised data.

5.14 The system from which this information was drawn is also used to prepare BT's regulatory financial statements. BT assured us that the information it provided was consistent with its regulatory financial statements.

5.15 Under BT's SMP cost orientation condition, charges for regulated services such as these should be based on long-run incremental costs (LRIC) plus an allowance for recovery of common costs. Although BT does produce some information on a LRIC basis this only relates to its wholesale cost base, whereas the charges which we are seeking to price control are intended to recover retail costs. We were content to proceed using the available CCA[33] FAC information as this basis is broadly equivalent to LRIC plus a mark-up for common costs. Both bases of preparation are forward looking and allow for the recovery of all efficiently incurred costs, including common costs. CCA FAC also has the advantage of consistency with BT's RFS which aids transparency. Furthermore this basis of preparation was the same as used to set charges in 2005 and was consistent with other charge controls we had recently set. For reasons of consistency and continuity we proposed to model BT's costs on a CCA FAC basis.

5.16 We explained that the relevant cost base for the purpose of this charge control relates to the costs BT incurs in retailing NTS calls to its retail subscribers irrespective of whether it or another CP terminates the call. However BT had only identified the costs of those NTS calls which terminate on other CPs' networks, and not for those which terminate on its own network. As a result we proposed to use the costs of BT to CP calls to set the proposed level of X.

5.17 We asked the following question:

Question 6: Do you agree that CCA FAC for NTS calls drawn from BT's regulatory accounting system is the appropriate cost basis for setting the proposed controls?

Consultation responses

5.18 BT and C&W both supported the use of CCA FAC regulatory accounting data.

5.19 However, one stakeholder [✂] believed that LRIC + Equi-Proportional Mark-Up (EPMU) better met the objective of being transparent and auditable than CCA FAC. It encouraged us to adopt this basis of preparation when setting the charge control as it

[33] Current Cost Accounting. In the context of this charge control the choice of basis of preparation between current and historical costs is not material to the value of X. The retail nature of the cost base (i.e. few long-lived assets) leads to current cost accounting adjustments which are immaterial to the level of the overall cost base.

would help ascertain whether BT was meeting its cost orientation obligation. Regardless of the approach chosen it considered that the numbers should be audited on a regular basis.

Further analysis and provisional conclusion: basis of preparation of costs

5.20 We do not agree that LRIC + EMPU is more transparent and auditable than CCA FAC. We do not think LRIC+EPMU is likely to have any general advantages over CCA FAC, and indeed it will usually produce similar results to CCA FAC at an aggregate level. Indeed, an advantage of CCA FAC data is that it can be reconciled to the regulatory financial statements, which are published and independently audited. The production of LRIC information by BT unavoidably requires further processing of accounting information beyond that required to produce its FAC information. In addition CCA FAC is a well understood concept and we have used it to set a number of previous charge controls. We therefore believe that CCA FAC is the correct basis for setting this charge control and have not required BT to calculate LRIC data.

5.21 We have not required the audit of these costs for the purposes of setting this charge control. We have reviewed BT's costs as discussed at paragraph 5.64 and again in Annex 7, and asked BDO to review BT's revised volumes and believe them to be sufficiently robust to be used as a starting point for setting these charge controls.

5.22 We regard the future regime for BT's accounting information for these wholesale services, including the audit of the costs and monitoring of BT's cost orientation obligations, to be a separate issue which we discuss in section 8.

5.23 We therefore propose to rely on the cost information drawn from BT's regulatory accounting system, this time for 2009/10.

<u>We propose to use NTS call volume data drawn from BT's retail billing system</u>

5.24 The NTS Retail Uplift allows relevant retail costs to be recovered on a pence per minute basis for each NTS call minute retailed by BT. Hence, if the total amount of costs to be recovered from NTS calls is given, a reduction in volumes would translate directly into an increase in the level of the NTS Retail Uplift.

5.25 As explained between paragraphs 2.26 and 2.38 in the Introduction we discovered that the volumes which BT had been attributing to NTS calls in its regulatory accounting system included a significant proportion of calls which it did not retail to end users and hence would not be subject to the NTS Retail Uplift. BT had sourced these volumes from its wholesale billing systems, rather from its retail billing systems. The table below summarises these reductions for BT's 2008/09 volume data.

Table 5.1: Reconciliation for 2008/09 between unadjusted and adjusted NTS retail call minutes volumes[34]

		NTS call volumes (million minutes)			
		Total	Chargeable		Freephone
		All	BT to CP	BT to BT	All
	Unadjusted	18,178	✂	✂	5,208
	Reductions to originally submitted volumes				
1	BT originated Wholesale Calls	✂	✂	✂	✂
2	Average porting conveyance charge (APCC)	✂	✂		
3	CP originated calls ported away from BT	✂	✂		
4	BT originated calls ported to BT	✂	✂		
5	FF ported calls included within chargeable calls	✂	✂		
6	Personal numbering service (PNS) volumes	✂	✂		
7	Reconciling differences	✂	✂	✂	
8	Overstatement of BT to BT volumes	✂		✂	✂
	Total reductions	5,438	✂	-	1,074
	Adjusted	12,740	✂	✂	4,134
	Reductions in volumes (%)	(30)	(38)	(23)	(21)

5.26 As the table shows, the unadjusted call volumes wrongly included data for Wholesale Calls, a white label service provided by BT Wholesale to other retailers, such as [✂] and [✂]. The unadjusted volumes also incorrectly included volumes related to various types of ported NTS calls, none of which BT had retailed to its end users.

5.27 BT has subsequently provided 2008/09 and 2009/10 volumes extracted from its retail billing systems. This data excludes services such as Wholesale Calls and ported calls. In view of the potentially very significant impact of the revision to volumes on the level of X, we asked BDO to review these volume figures. BDO confirmed that BT had correctly extracted its volumes data for 2009/10[35].

5.28 We therefore propose to rely on NTS call minute volumes from BT's retail billing systems, which provide volumes analysed on a basis consistent with our source cost data.

The significant reduction in volumes has little impact on the cost information BT had previously provided to us

5.29 When we found that the volumes BT had provided were substantially overstated we initially thought that this would have significant implications for the cost information it had previously provided. We asked BT to estimate this impact on total BT to CP retail costs on a basis consistent with its Detailed Attribution Methods (DAM) document dated 13 August 2009. BT replied that the primary factor driving costs to NTS call services was retail revenues. In particular costs were not driven by call minute volumes. As there was little impact on retail revenues arising from the restatement of NTS volumes, BT asserted that there was little impact on retail costs. We were subsequently able to validate this assertion, both through our own analysis of BT's

[34] There are small discrepancies between the volumes quoted here and those in the BDO report, which reflect the fact that BT subsequently refined the estimate it gave to BDO of these volumes for 2008/09.
[35] BDO report, page 11

unit call costs (see paragraphs 5.62 and A7.14 to A7.15) and our review of BT's retail cost attribution methodologies (see paragraphs A7.17 to A7.26).

Our approach to the treatment of sales and marketing costs

5.30 The treatment of sales and marketing costs is especially important in this case, as they account for a significant proportion of the retail costs incurred by BT in supporting NTS calls and other telephony services, and there are some critical choices to be made in relation to how they are recovered.

The approach taken in 2005

5.31 In BT's regulatory costing system, sales and marketing costs which are not incurred specifically on behalf of a particular service (i.e. what might be called generic sales and marketing costs) are attributed to NTS calls and other services on the basis of gross revenues. When setting the 2005 charge control, we made two adjustments to the resulting attributions[36].

5.32 First, we required BT to reattribute generic sales and marketing costs on the basis of net revenues (i.e. gross revenues less outpayments to other CPs[37]) rather than gross revenues. This reattribution reflected advice provided by Analysys Mason who, with support from Brand Finance, had been commissioned by us to review the way BT attributed its retail costs and in particular its sales and marketing costs.

5.33 Analysys Mason concluded that, while the methods used by BT to attribute retail costs to services were generally reasonable, there was a case for attributing generic sales and marketing expenditure on the basis of net revenues rather than gross revenues, because the scale of BT's sales and marketing effort was likely to be driven primarily by the desire to make profits, rather than simply to generate revenues. The more profitable the product, the greater its influence was likely to be, in causing marketing costs to be incurred. As NTS calls were a low margin product, they concluded that there was only a weak causal link between NTS calls and BT's marketing and sales expenditure.

5.34 We agreed with Analysys-Mason's argument and on that basis required BT to reattribute its generic marketing and sales expenditure on the basis of net revenues, which could be regarded as a reasonable proxy for the contribution to profits made by the various services. This substantially (by 82%) reduced the attribution of generic sales and marketing expenditure to NTS calls in 2005.

5.35 We also made a second adjustment, which was to exclude 20% of marketing and sales costs on the grounds that they had been incurred for the purpose of stimulating call volumes, rather than attracting and retaining customers. Our view was that BT's role in the context of the charge control was not to encourage consumers to make calls to NTS numbers, because NTS SPs are able to promote their own services and do so in practice. It was therefore reasonable to conclude that sales and marketing costs incurred in order to stimulate calling rates were not necessarily incurred on

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[36] See *Charges between Communications Providers: Number Translation Services Retail Uplift charge control and Premium Rate Services bad debt surcharge*, 28 September 2005 available at http://stakeholders.ofcom.org.uk/binaries/consultations/NTSfin/statement/statement_nts_uplift.pdf

[37] Outpayments relate to the payments made by BT to other network providers, either for the provision of a network services such as geographic call termination or as revenue shares with terminating providers.

behalf of NTS calls, and should be excluded for the purpose of setting the charge control. This had a more modest impact on the value of X than the net revenue reattribution, but was still significant.

The approach proposed in July 2009

5.36 In July 2009, we proposed to retain the second of the adjustments referred to above, but not the first. That is to say, we proposed to retain the 20% reduction in sales and marketing costs associated with call stimulation, but we did not require BT to reattribute generic sales and marketing costs on the basis of net revenues.

5.37 The reason for retaining the 20% reduction was straightforward. We considered that the rationale for the adjustment remained unchanged, and that 20% was a reasonable estimate of the proportion of sales and marketing expenditure designed to stimulate call volumes.

5.38 However, we did not propose to reattribute generic sales and marketing costs on the basis of net revenues, for the following reasons:

- Firstly, at that time the accounting data suggested that net revenues were negative on NTS calls. A reattribution would therefore have meant that NTS calls would have attracted no costs, which would not in our view have been reasonable; and

- Secondly, the level of cost attributed to NTS calls appeared to be reasonable, when compared with the costs attributed to other call types. In particular, overall unit costs excluding bad debt for NTS calls were significantly lower than the global average for all calls[38]. This provided some assurance that BT's approach had not led to an over-allocation of retail costs to NTS calls.

5.39 We asked the following question

Question 7: Do you agree with how we have proposed to adapt the cost recovery principles we established in our 2005 Statement to current circumstances?

Consultation responses

5.40 Most respondents did not comment on this aspect of our proposals.

5.41 C&W urged us to remove any cost elements associated with both BT's retail and wholesale 'winback' activities. It considered that the costs of BT's customer acquisition and retention activities, a concept akin to BT's generic marketing activity, should be removed as these focused on 'winback'. C&W relied on two arguments. Firstly, those paying for the NTS Retail Uplift should not in effect subsidise BT's attempts to neutralise the competitiveness of rivals in the provision of retail telephony. Secondly, as there were a variety of retailers of NTS calls, and as C&W was indifferent as to the identity of the retailer from which it received these calls, it was not necessary for BT to improve its competitive position relative to these other retailers by incurring these costs.

[38] Further detail is given at A7.12

5.42 BT agreed with our proposal not to re-attribute BT's marketing and sales costs on the basis of net revenue. It argued that the vast majority of retail customers opt for a single supplier for their calls, both NTS and non-NTS. BT's view was that using gross revenue, rather than net revenue, to attribute retail costs to calls would recognise that the prices of all call types should be expected to contribute equally to the consumer's choice of supplier. In addition, for BT customers the revenues from these activities were effectively linked as many NTS calls were in bundle. In contrast, attributing marketing and sales costs on the basis of net revenue would, in BT's view, imply that suppliers' margins on individual services were more important in the choice of supplier than the size of the total call bill.

5.43 BT however disagreed with our proposal to exclude 20% of generic sales and marketing expenditure, arguing that all of this expenditure was designed to acquire and retain its retail customers. It further argued that it would be perverse for us to interpret promotional material which referred to how it now included [voice] 0845 & 0870 NTS calls in its packages as stimulatory, as in fact BT made an incremental loss on these calls. BT also pointed out that over the last 3 years there had been a substantial reduction in retail call minutes, of the order of one third, which in its view made it hard to argue that an element of generic sales and marketing was designed to stimulate further usage.

Comments on consultation responses

5.44 C&W's first argument is that we should apply a further principle when determining the recoverable cost base for BT, namely that those costs which it incurs with the express intent of improving its market position relative to competitors in the market for retail telephony should be disallowed on the basis that these costs act as a cross subsidy. C&W's second argument focuses on the issue of which costs should be considered necessary.

5.45 C&W may have used the term "cross-subsidy" rather broadly, as for there to be a cross-subsidy it is usually necessary for charges to be below incremental cost. This is consistent with the approach to cross-subsidy set out in the Competition Act guidelines[39]. However, C&W also argued that they should not be contributing to costs which are directed towards winning customers from them even when BT does not price its retail services below incremental cost.

5.46 We considered the recoverability of costs incurred to improve BT's market position at length when setting the 2005 charge control, for example:

> If BT were still a monopolist without any competitive pressures from other operators and service providers, (and assuming there is full penetration of telephony) it could be expected that it would take little or no effort for BT to acquire and retain customers. However, in the present situation where there are a number of pressures from competition in the retail calls market, it seems reasonable that BT does have to undertake activity to acquire and retain customers. This argues for sales and marketing activity related to customer

[39] *The Competition Act 1998 – the Application in the Telecommunications Sector*, OFT 417, March 2000. See paragraphs 7.20 – 7.25.

> acquisition and retention to be part of the retailing service provided by BT to NTS Terminating Communication Providers.[40]

5.47 Now, as then, we believe that a share of the cost of these activities should be part of BT's recoverable costs as such customer-orientated marketing expenditure is causally related to the acquisition and retention of customers and it is necessary for BT to incur these costs in order to compete effectively. In our view it is reasonable for BT to recover customer acquisition and retention costs through the NTS retail uplift because, in order for a retailer to retail NTS calls on behalf of terminating operators, it is necessary that the end user is a customer of that retailer for retail calls. Given the competitive pressures in retail calls markets, it is necessary for the retailer to undertake marketing activity to acquire and retain customers.

5.48 Regarding C&W's argument that it is indifferent to which retailer actually originates its calls, it is our view that, as it is appropriate for NTS calls to bear some of the costs of sales and marketing in order to acquire and retain customers, then these costs should be recoverable. Although only BT's charges are regulated, all operators are likely to incur such costs and recover them through charges. If anything, competitive pressures have increased since 2005 with each of the major retailers engaging in extensive marketing efforts to improve its market position.

5.49 C&W also referred to BT's retail and wholesale "winback" activities. Our view is that the costs relating to retail-level "winback" activity should be treated like those of any other sales and marketing activity.

5.50 BT Wholesale's winback activities relate to BT's white label Wholesale Calls product. For 2009/10 BT identified Wholesale Calls as a separate product group within its regulatory accounting system for the first time. Therefore the costs BT incurs in relation to these services would not be included in the recoverable cost base that supports these proposals.

5.51 As noted above, BT's view is that sales and marketing costs should be attributed on the basis of gross retail revenues. This is based on a view that most retail services are now bought as a bundle and that consumers give equal weight to all prices when choosing a supplier. However, bundling does not necessarily mean that all prices are considered of equal weight by all consumers, not least because usage patterns differ markedly from one customer to another. In addition, there is a wide variety of different tariff packages on offer, designed to appeal to a range of customer tastes.

5.52 But in any case the use of bundling would not establish that sales and marketing expenditure is causally related to gross revenue or change the motive for incurring marketing expenditure which we see as being the pursuit of profit. We would therefore expect BT's marketing effort to be driven by the profitability of its bundles and this will in turn reflect the prices, bundled quantities and costs of the individual services within them. In any case, bundling of calls is not universal. In principle, therefore, attribution on the basis of net revenue would still in our view be a reasonable approach.

5.53 We discuss BT's arguments about whether the 20% exclusion is appropriate in paragraphs immediately below.

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[40] At paragraph A5.28 in Number Translation Services Retail Uplift charge control and Premium Rate Services bad debt surcharge, Consultation 19 August 2004

Further analysis and proposed approach to the treatment of sales and marketing costs

We do not consider that we should adopt the approach proposed in 2009

5.54 As noted above, in the July 2009 Consultation, we proposed that we should make the 20% marketing and sales adjustment, but should not otherwise adjust the marketing and sales costs attributed to NTS calls in BT's regulatory costing system. We believe that, in the light of the evidence now available, both elements of this approach should be revisited.

5.55 Firstly, we believe that, based on BT's response to the July 2009 Consultation and information it has subsequently provided to us, there is no longer a case for making the 20% adjustment associated with removal of call stimulation expenditures.

5.56 We still adhere to the view that, as a matter of principle, the cost of sales and marketing activities intended to stimulate calling rates should not be included in the cost base for the charge control. However, the information provided to us by BT indicates that it no longer incurs this type of expenditure.

5.57 BT stated in its consultation response that all its generic sales and marketing expenditure related to acquiring and retaining customers. We therefore asked it to produce evidence that the nature of its generic marketing and sales expenditure had changed since 2005 in a way that would justify a change in approach. BT provided us with analysis which showed that its advertising campaign expenditure was no longer directed at stimulating either calls in general or NTS calls in particular.

5.58 We therefore propose no longer to exclude 20% of BT's generic sales and marketing costs.

February 2011 question 2: Do you agree that there is no longer any basis for excluding 20% of BT's sales and marketing costs?

The case for re-attributing costs on the basis of net revenues is stronger now than it was in July 2009

5.59 As discussed above, in July 2009, we did not propose to reattribute sales and marketing costs because (i) net revenues on NTS calls were reportedly negative, and (ii) the overall attribution of costs to NTS calls appeared to be reasonable. Both legs of this justification have now fallen away.

5.60 On the first point, whilst BT still reports negative net revenues for NTS calls, we have ascertained that this arises because BT does not accurately match outpayments to NTS calls in its regulatory costing system. We have overcome this shortcoming by producing our own estimates of outpayments, which yields a positive estimate of net revenues for NTS calls.

5.61 On the second point, we discovered that, once we allowed for BT's revised estimates of NTS call volumes, the overall attribution of retail costs no longer looked reasonable between NTS calls and other call types. This was essentially because the same amount of cost was now being attributed to a much lower volume of NTS calls, giving rise to a substantial increase in the unit costs of each NTS call minute.

5.62 We had initially anticipated that the downward adjustment in call volumes might lead to a similar downward adjustment in the costs attributed to NTS calls, and that as a

result unit costs might not change significantly. However, further scrutiny of BT's costing methods revealed that this was not the case. BT's retail costs are generally attributed between services on the basis of revenues rather than volumes. The reduction in the volumes therefore made no material difference to the total costs attributed to NTS calls. As part of its review, BDO verified that this was the case[41].

5.63 Prior to the volume adjustment, the retail costs per minute attributed to NTS calls were well below those attributed to other types of call. Following the adjustment, this is no longer the case. In 2009/10, the costs attributed to each chargeable NTS call were on average 0.47 pence per minute, as compared with an average of 0. 50 pence per minute across all call types. Moreover, the unit costs of NTS 'local' and 'national' calls were significantly above those of their geographic call counterparts. Further detail is provided in paragraphs A7.12 to A7.16.

5.64 Given these developments, we have given further thought to the cost attribution issue and have developed the approach set out below.

We propose an approach based on a three-fold categorisation of costs

5.65 Based on our review[42] of the costs of the activities BT has attributed to NTS calls, we consider that a distinction can usefully be drawn between the following categories of retail cost:

- **Service delivery**. In this category we include activities (other than sales and marketing) which are required for the provision of NTS call services, the costs of which can be attributed on a causal basis. Such activities include for example the billing, credit and debt management, and customer service activities (e.g. call centres) that BT needs to establish and maintain in order to retail NTS calls on behalf of TCPs. The relevant costs also include the indirect costs of support services, where these can be attributed to service delivery activities on a causal basis. Such indirect costs include, for example, accommodation costs, salary costs for management of the individual retail activities and activities such as computing and HR (human resources) directly supporting these activities. We also include bad debt in this category as bad debt is a consequence of BT providing NTS call services to its customers on credit terms;

- **Sales and marketing**. This category includes the cost of external, third party sales and marketing activities (e.g. TV, radio and newspaper advertising, printing of leaflets) and the costs BT incurs in-house for the purpose of promoting its services and increasing sales. As with service delivery, also included are the costs of indirect activities and support services, such as accommodation and motor transport, which can be causally attributable to services; and

- **Indirect costs which are incurred on behalf of a range of services and which cannot be attributed to services on a causal basis ("support costs")**. In any business organisation there will be a range of activities, typically incurred at the centre, which, whilst vital to the sustainability of the business, cannot be attributed to any individual activity on the basis of causation. Costs in this

[41] BDO report, page 16
[42] As set out in paragraphs A7.6 to A7.26.

category include for example, the direct and indirect costs of senior management and the cost of corporate activities such as adhering to certain externally imposed compliance measures. In economic terms, such costs are unlikely to be avoidable, or incremental, even in the longer term, if a particular service (such as NTS calls) is withdrawn. In the rest of the document we refer to these costs as "support costs".

5.66 In the present context, it would in our view be appropriate to treat these categories of retail cost in the following way:

- **Service delivery**: we do not propose to make any adjustment to the attributions made by BT in its regulatory costing system. As noted above, the attribution methods used for this purpose were reviewed in some detail by Analysys Mason for the 2005 charge control and found to be reasonable. We understand from BT that the attribution methods have not changed significantly since 2005 and we have no reason to believe that they do not remain reasonable.

- **Sales and marketing**: based on the rationale cited in 2005, and taking account of developments since July 2009 (discussed in paragraphs 5.60 to 5.64 above), we believe it would be appropriate to reattribute generic sales marketing costs on the basis of net revenue. We consider that this would result in an attribution to NTS calls that is more consistent with the principle that the charge for a service should generally reflect the costs caused by its provision than would an attribution based on gross revenues.

- **Support costs**: our analysis of BT's costing methods indicates that these costs are generally attributed on the basis of gross revenues as with most other retail costs. But as we propose to attribute sales and marketing costs on the basis of net revenue, the effect of continuing to attribute support costs on the basis of gross revenue would be that such costs would account for a much increased share of the NTS retail uplift. We do not believe this to be appropriate. These costs cannot be attributed to services on a causal basis and so use of gross revenues to attribute these costs is inevitably somewhat arbitrary. In the present context, in particular, we do not think it is reasonable for the cost base used in setting the NTS charge control to be inflated as a result of such an arbitrary choice. In our view, it would be more appropriate to recover these costs in proportion to those costs which have been attributed on a causal basis i.e. as an uplift on service delivery and sales and marketing costs. From an accounting perspective, this approach can be seen as equivalent to using a composite or weighted average attribution base to distribute support costs between services. It avoids the selection of any one attribution base and is in that sense less arbitrary than alternative approaches. We also understand that BT itself uses this approach to prepare elements of its regulatory financial statements.

5.67 As shown in the table below, we estimate that applying the approach described above would reduce the retail costs attributed to NTS calls by BT in 2009/10 by £8.8m (from £22.8m to £14.0m). Further details of our estimate are set out in paragraphs A7.27 to A7.47.

Table 5.2: Retail costs (excluding bad debt) attributed to BT to CP NTS calls before and after adjustment

	Costs attributed to NTS calls (£m)			
	Before	After	Δ	% Δ
Service delivery	9.6	9.6	-	-
Sales & marketing	8.4	1.5	6.9	83
Common costs not causally attributable	4.8	3.0	1.8	38
Total costs / weighted average reduction	22.8	14.0	8.8	38

5.68 For the reasons set out above, we propose to reattribute generic sales and marketing costs on the basis of net revenues and to treat support costs as an uplift on service delivery and sales and marketing costs i.e. on those costs which are causally attributable.

February 2011 question 3: Do you agree with the proposal to reattribute generic sales and marketing costs using net revenues and to treat support costs as an uplift on causally attributed costs?

The level of bad debt for lower priced calls is higher than previously thought

5.69 In our July 2009 Consultation we did not specifically discuss BT's bad debt costs in the context of the NTS Retail Uplift except to explain how we proposed to forecast the 'normal' bad debt element recovered by the NTS Retail Uplift. There is a recovery for bad debt which is included in the NTS Retail Uplift but this is intended to recover bad debt on lower priced NTS calls and not recover the extra bad debt associated with PRS calls.

5.70 In their consultation responses 4D Interactive and AIME pointed out that there was no definition of what comprised bad debt. Based on BDO's review we are able to confirm that BT defines and accounts for bad debt in accordance with standard accounting practice[43]. We further discuss the definition of bad debt in paragraphs 6.26 to 6.28 and A9.3 to A9.7.

5.71 As explained in the Introduction we now know that BT had incorrectly classified bad debt relating to 0871 and 0844 calls as PRS bad debt in cost information on which we based our July 2009 proposals. As a result, the bad debt attributed to PRS calls was overstated, but the bad debt attributed to other NTS calls was understated by a corresponding amount.

5.72 The tables below show the extent to which BT's correction has affected base year unit costs. The figures quoted for PRS calls relate to all bad debt BT has attributed to PRS calls and therefore refer to both 'standard' and 'excess' bad debt. The 2007/08 numbers underpinned our July 2009 proposals whereas the 2009/10 numbers are reflected in our revised proposals.

[43] BDO report, page 7

Table 5.3: unit base year cost of bad debt reflected within previous and current proposals

	hundredths ppm		bad debt incidence %	
	2007/08 (unadjusted)	2009/10	2007/08 (unadjusted)	2009/10
Basic rate calls	2	5	1.2%	2.2%
Higher rate calls	0	17	0.1%	3.0%
PRS calls	487	349	9.1%	5.4%

5.73 The impact of BT's revision to the amounts of bad debt associated with basic rate and higher rate PRS calls was to increase the recovery within the NTS Retail Uplift from on average 0.015 ppm based on unadjusted 2007/08 figures to 0.077ppm based on the 2009/10 numbers prepared on the corrected basis.

We have reviewed BT's cost base to ascertain whether it otherwise contains irrelevant costs

5.74 Given the flaws in the 2007/08 BT data used to develop the proposals set out in the July 2009 Consultation, we carried out a more detailed review of the 2009/10 cost base. This involved obtaining detailed cost breakdowns from BT for all BT to CP NTS calls and reviewing the cost descriptions for all costs over £100,000. We noted that none of these descriptions indicated that the costs were not relevant to setting base year costs for the NTS Retail Uplift.

5.75 However we have become aware that BT captures within its cost base for BT to CP PRS calls (retail regulatory product group P315) personal numbering services (PNS). These calls are not PRS calls but BT has used the revenues relating to PNS calls to attribute costs to the P315 retail regulatory product group. We therefore propose to exclude that element of the PRS cost base which is attributable to PNS calls, £0.4m. We set out the basis on which we do this in paragraphs A7.48 to A7.52.

We propose to reflect the benefit to BT arising from retailing NTS calls with negative capital employed

Summary of July 2009 proposal and associated rationale

5.76 We generally set charge controls to allow the regulated firm to earn a rate of return at least equal to its cost of capital. This is so that it will have the incentives it needs to invest in its business. In a competitive market one would expect competitive pressure on prices and profits to reduce returns on investment to approximately the cost of capital.

5.77 In July 2009, we proposed to incorporate the minimum return required on BT's capital employed in the recoverable cost base by multiplying its mean capital employed by the relevant cost of capital, an approach we have adopted in a number of other RPI-X charge controls.

5.78 BT's mean capital employed (MCE) that supported our July 2009 proposals was, across the three relevant retail product groups, a small positive number, £1m. The

relevant cost of capital[44] used was 11%, the weighted average cost of capital (WACC) for the non-access business of BT as set out in the May 2009 ORFF statement[45].

5.79 We considered that the NTS Retail Uplift should not be classified with BT's access network for the purposes of assessing risk levels since demand for NTS calls is likely to be more cyclical than that for access services. We regard BT's access services as having some utility-like characteristics by which we mean that most fixed access users will continue to purchase them regardless of the economic climate. In contrast demand for the other services which BT provides is more likely to vary with fluctuations in the economy.

5.80 We asked the following question

Question 8: Do you agree with the way in which we convert BT's mean capital employed figure into an annualised cost?

Consultation responses

5.81 BT did not believe that a cost of capital style return on its MCE (which, in BT's revised data, was negative) was appropriate because, in its view, it would mean that BT was not even recovering its retail costs (because allowing a percentage return on the negative MCE would result in a reduction in total costs). It believed we should include in the recoverable cost base a return on sales instead.

5.82 C&W argued, in the context of the MCE (which it believed to be positive), that one could argue that the level of risk should be lower than for other investments as the service had been mandated as a result of BT's SMP and therefore the demand was not as cyclical as we might think. Under the approach which we use to estimate the cost of capital, it is largely the cyclicality of demand which determines which of the two rates is appropriate to any particular service. The less that demand for a service varies with the general level of economic activity, the lower its cost of capital. Hence C&W were arguing that we should apply a lower cost of capital in calculating the NTS retail uplift[46].

After we published our consultation, BT revised its previously supplied MCE figures for 2007/08

5.83 On 7 September 2009, before it submitted its response to the July 2009 Consultation, BT informed us that it had made transpositional errors in the MCE figures it had supplied to us. Instead of overall a small positive figure of £1m for MCE it had become a larger negative figure of £12m i.e. its liabilities exceeded its assets. This picture was consistent with the 2003/04 cost base which had informed our 2005 charge control.

5.84 Had we applied the 11% cost of capital to the negative £12m we would have reduced the then recoverable cost base associated with chargeable BT to CP calls by nearly £1.3m.

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[44] Two rates were defined, a lower rate applicable to Openreach's copper access services, and a higher rate applicable to the rest of BT. The latter was used in the July 2009 consultative document.
[45] *A new pricing framework for Openreach* (22 May 2009) available at http://stakeholders.ofcom.org.uk/binaries/consultations/openreachframework/statement/statement.pdf
[46] For more details of our approach to the cost of capital and a fuller explanation of the relevance of cyclicality see our consultative document "Proposals for WBA charge control", 20 January 2011.

5.85 BT's latest costs still show that its investment in retailing NTS calls is largely confined to the provision of working capital. In fact this figure is overall a negative number because in BT's regulatory costing system its retail business is extended notional credit by its network business, which is more than enough to offset the credit it gives to end-users.

Further analysis and provisional conclusion

5.86 According to BT's cost data BT is able to retail NTS calls with a negative capital employed. If that is the case, then BT is deriving a benefit from being able to do so. BT's retail business has few fixed assets and the size of the MCE largely reflects the net balance of debtors and creditors.

5.87 We note that whereas BT has consistently reported small overall positive MCEs for geographic calls[47], it has reported small overall negative MCEs for NTS calls. This may simply reflect the fact that outpayments (which are an accounting liability until they are paid) represent a higher proportion of revenues for NTS calls than for geographic calls.

5.88 Our proposed approach set out in the July 2009 Consultation, which factors payment terms into the recoverable cost base, is consistent with the way we set the NTS retail uplift charge control in 2005, the rationale for which we believe remains relevant.

5.89 C&W's argument that mandated SMP services have a low level of cyclicality would, if it were valid, apply generally to all regulated services. In our view, the evidence does not support the proposition that demand for all regulated services is as stable as that for copper lines. Our view on this point was supported by the Competition Commission in its recent decision on the appeal of the Leased Lines Charge Control[48]. The demand for NTS calls is currently characterised by structural decline so it is difficult to discern cyclicality. However, the available evidence suggests strongly that call demand is more sensitive to changes in price or economic conditions than the demand for fixed access. One reason may be that it is easy for a customer to make relatively small changes to the volume of calls made in response to a change in price or income. This is in contrast to the binary "disconnect or stay connected" choice faced by the customer when deciding how to respond to an increase in the line rental.

5.90 We are currently consulting as part of our Wholesale Broadband Access charge control proposals[49] on a revised cost of capital for BT where we continue to distinguish between access and non-access services. In relation to our NTS Retail Uplift RPI-X proposals, we therefore propose to use the revised non-access cost of

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[47] See, for example, page 80 of BT 2008/09 regulatory financial statements http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2009/CurrentCostFinancialStatements.pdf

[48] *Leased lines price control: reference to the CC made by the CAT on 17 December 2009 in connection with the Cable & Wireless UK v Office of Communications appeal (Case No. 1112/3/3/09), Final Determination* (30 June 2010), http://www.competition-commission.org.uk/appeals/communications_act/final_determination_excised_version_for_publication.pdf
As noted above, a detailed discussion is also included in our consultative document "Proposals for WBA charge control", op. cit.

[49] *Proposals for WBA charge control, Consultation document and draft notification of decisions on charge control in WBA Market 1* (20 January 2011) available at http://stakeholders.ofcom.org.uk/binaries/consultations/823069/summary/condoc.pdf

capital which results from this consultation process as opposed to the 11% used in the July 2009 Consultation. The range proposed for non-access services is between 8.5% and 10.0%, with a mid-point of 9.3%.

5.91 We therefore propose to apply the proposed relevant value of non-access cost of capital of 9.3% to BT's (negative) MCE.

The NTS Retail Uplift applies to all NTS calls that BT retails

5.92 As explained in paragraph 5.16, BT is only able to separately identify the costs of retailing NTS calls to its end users for those calls which terminate on other CP's networks i.e. for BT to CP calls. As our proposed charge control will apply to all calls that BT retails, not just BT to CP calls, we propose to adjust the cost base to include an estimate of BT to BT calls.

5.93 We do this by calculating unit costs for chargeable BT to CP calls and then assuming that the same unit cost applies to BT to BT chargeable calls.

We still propose to calculate the uplift for freephone and chargeable calls from the costs attributed to BT's chargeable NTS calls

Summary of July 2009 proposal and associated rationale

5.94 We proposed that the (adjusted) total cost excluding bad debt that we ascribed to NTS chargeable calls should also be deemed to have included the cost of NTS freephone calls.

5.95 Freephone calls are paid for by the organisation receiving the call, rather than by the retail customer who made it, as is the case with chargeable calls. Hence there is no bad debt arising from non-payment by the dialler of freephone calls made from BT lines.

5.96 BT's regulatory accounting system does not recognise freephone calls as a category of retail calls: the associated costs are in effect attributed across all other calls. We considered the alternative of applying the (adjusted) unit cost excluding bad debt for chargeable calls to freephone calls but rejected this because it would lead to an over-recovery of costs. We considered the proposed approach to be reasonable, and consistent with the approach adopted in 2005.

5.97 We asked the following question

Question 9: Do you agree with the way we propose to handle retail costs to freephone calls?

Consultation responses

5.98 Four stakeholders responded to this question (BT, Cable & Wireless, another stakeholder [✂], and AIME). The only respondent that did not agree with our proposed methodology was BT. BT argued that the proposed methodology would result in under recovery of costs as BT would not be able to recover any additional retail costs in relation to freephone calls. BT conceded that it was possible that the alternative methodology of dividing total chargeable NTS retail costs by chargeable volumes to derive the freephone costs may result in an over-recovery of NTS retail costs. Therefore, BT suggested that a more appropriate solution would be to take an average of the two methodologies as a compromise.

Further analysis and provisional conclusion

5.99 In order to give context to this discussion we show below the relevant costs and volumes.

Table 5.4: Adjusted 2009/10 costs and volumes for total chargeable and freephone NTS calls retailed by BT

	Retail volumes (billion mins)	Costs excl. bad debt (£m)
Chargeable calls	6.6	18.2
Freephone calls	3.4	-
Total	9.9	18.2

5.100 BT couches its argument in terms of not being able to recover the incremental costs it incurs in retailing freephone calls. We agree that there are in general good reasons for not requiring prices to be less than LRIC, as LRIC represents the resource costs of providing the service in the long run. Our proposed charge for freephone calls, being based on FAC, is unlikely to be below its incremental cost. We note from the analysis set out in annex 7 that the vast majority of retail costs attributed to NTS calls appear to be incurred on behalf of a range of BT's retail services and are therefore not part of the incremental costs of any one call type. We therefore believe that there is little risk that BT will not be able to recover its incremental costs of retailing either its freephone or its chargeable NTS calls as there are likely to be low relative to costs measured on an FAC basis. .

5.101 We also note that, in view of BT's prevalent retail cost attribution methodology i.e. attributing on the basis of revenues, very little cost would in fact be attributed to freephone calls even if BT were to explicitly recognise these calls within its regulatory accounting system.

5.102 In addition, based on our analysis of BT cost attribution methodologies used to attribute costs to NTS calls (see Annex 7), it is evident that any retail costs associated with freephone calls will not just be reflected in the cost base for other calls but also with other retail services including, for example, telephony line rentals and broadband.

5.103 Furthermore, we do not believe it would be a readily practicable proposition to establish an FAC style cost for freephone calls as it would in effect involve establishing and then applying a whole new set of attribution methodologies, a project beyond the scope of setting this charge control. Alternative approaches such as the one BT suggested in its consultation response carry the risk of double counting retail costs.

5.104 We also checked whether the proportion of freephone calls within total NTS volumes had increased significantly between our July 2009 proposals based on 2007/08 data and our revised proposals based on 2009/10 data. We found that the percentage had increased slightly from 29% to 32%. In our view this change would not have any implications for our proposals.

5.105 Therefore, we propose to calculate the uplift for freephone and chargeable calls from the costs attributed to BT's chargeable NTS calls and the combined total of freephone and chargeable NTS call minutes.

Recap of proposed treatment of base year costs, revenue and volume information

5.106 Based on the analysis set out above we propose that:

- We rely on BT's regulatory costing system as our source for cost information
- The cost information is prepared on a fully attributed cost (FAC) basis
- We reattribute BT's sales and marketing expenditure on the basis of net revenue
- We reattribute support costs on the basis of costs already attributed on a causal basis
- We include all of BT's sales and marketing expenditure once reattributed
- We include a return on BT's (negative) MCE in the cost base, calculated using the non-access cost of capital
- We include BT's freephone volumes in base year volumes

February 2011 question 4: Do you agree with our approach to determining base year costs and volumes?

Step 2: project these base year costs and volumes to the end of the charge control

5.107 Having established the recoverable cost base for the base year (2009/2010), the next stage in calculating X is to forecast the change in retail costs from our view of BT's base year (2009/10) cost to the end of the charge control (20013/14).

5.108 We forecast bad debt in a different way to the way we forecast non bad debt costs. We discuss other retail costs first, and then consider the treatment of bad debt in paragraphs 5.190 and 5.197 below.

5.109 In our forecast model the two main drivers of the change in all other retail costs over this period are:

- the rate of volume change (growth or decline)
- the rate of underlying improvement in efficiency

5.110 The rate of volume growth acts via the cost-volume elasticity (see paragraphs 5.182 to 5.189).

5.111 The rate of underlying improvement in efficiency represents the change over time in the average unit cost of retailing NTS calls that does not result from changes in the volume of supply. Such changes may be due to technical progress or the elimination of inefficiency existing at the start of the control period. We aim to set this rate of

efficiency improvement at a level that would bring BT's costs into line with those of a reasonably efficient operator.

5.112 We therefore need to set these parameters within the model to generate final year costs.

We now propose to project all costs except bad debt to 2013 using our forecast of changes in BT's total retail service activity

Summary of July 2009 proposal and associated rationale

5.113 We proposed in July 2009 that we use NTS call minute volumes rather than all retail call minute volumes to forecast costs excluding bad debt to 2013.

5.114 We forecast that BT's NTS call minute volumes would fall at an average of 7% year on year during the proposed control period.

5.115 We argued that the choice of volume indicator, or 'metric' to forecast costs depended on whether NTS unit costs were driven mostly by total call volumes or NTS specific call volumes. If the total costs of NTS calls were mostly incremental to NTS calls, then the use of NTS call volumes was more appropriate. However if these costs reflected mainly the attribution of a share of costs which were common across all call types (but not other activities such as the provision of access lines) then the use of total call volumes would be more appropriate.

5.116 At the time we had not performed a detailed analysis to identify the factors which predominantly drove costs. So, as we had used NTS specific volumes to set the 2005 control, and adopting this approach would have been consistent with our previous practice when setting retail price charge controls, we proposed to use NTS specific volumes.

5.117 Our overall forecast percentage fall in year-on-year NTS call minutes of 7% was slightly greater than the average fall of 5% predicted by BT for traffic of all call types for the Fixed Narrowband Retail Services Markets consultation ("2009 Retail Market Review")[50] reflecting a relative decline in NTS traffic. However, in our view, this difference was not material. More specifically we predicted BT's volumes of freephone and PRS call minutes to fall by 7% per year and chargeable NTS minutes to fall by 6% per year.

5.118 We asked the following question

Question 10: Do you agree that we should use NTS call volumes to forecast costs and do you agree with our forecast for these traffic volumes?

Consultation responses

5.119 BT thought we should forecast volumes using NTS call minute volumes but that the forecasts were too optimistic i.e. they underestimated the extent of likely reductions in NTS call minutes. C&W thought that changes in NTS call minute volumes may well stabilise and could even grow over the life of the charge control. Another operator [✂] also thought it appropriate to use NTS call minute volumes to forecast costs. This operator added that, in view of the difficulties of forecasting these volumes

[50] http://www.ofcom.org.uk/consult/condocs/retail_markets/ and published on 19 March 2009

accurately, we should be willing to reset the control if actual volumes were to vary significantly from those we forecast to prevent charges from becoming materially mis-aligned with costs by the end of the control.

Further analysis and provisional conclusion: choice of volume metric for forecasting costs

5.120 For the purposes of this further consultation we have analysed the majority of retail costs BT has attributed to its chargeable NTS calls. As illustrated in table A7.3 at paragraph A7.20, we have found that only a small element of total retail costs (e.g. relating to handling complaints and certain credit management activities) attributed to NTS calls varies with the volume of NTS calls. In effect BT treats the vast majority of costs as common between NTS calls, other calls and access services such as line rental. As noted above it generally attributes these costs on the basis of gross revenue.

5.121 Given our better understanding of the nature of BT's retail cost base and cost attribution methodology, we have re-considered whether there is a better candidate volume metric than NTS call minute volumes which we should use to project costs to 2013.

5.122 The assumed volume driver is especially important in this case. NTS call volumes are now declining quite rapidly (at 15% a year on our latest forecast) so, if we believe that these volumes drive the relevant retail costs, the unit costs of retailing NTS calls will increase quite sharply (reflecting the cost volume elasticity (CVE) of 0.25 which in turn reflects the presence of fixed costs).

5.123 However, our analysis has shown that the costs attributed to NTS calls are common across a number of services and vary in scale with BT's overall retail activity. We therefore believe that projecting costs forward using a measure of BT's *total* retail service activity would more closely reflect the driver of these costs, rather than NTS call volumes. The projections will then reflect the likely re-attribution of retail costs, within BT's cost attribution methodology, to other retail services and away from NTS calls as NTS volumes decline.

5.124 We appreciate that using a measure of BT's total retail activity would not be consistent with previous approaches to this charge control. However, we also believe that some of the arguments for adopting our previous approach to setting the NTS Retail Uplift charge control are now weaker than before. For example we do not need to be consistent with the amount of costs which we allow BT to recover in other retail price controls since there are no such controls. We have however confirmed that the amount of costs implicitly reattributed to other services is small in relation to overall retail revenues and profits and hence does not present a risk to overall cost recovery.

5.125 It should be noted here that projecting costs using a volume measure other than NTS call volumes is consistent with the expectation that NTS call volumes will fall by 15% per year. The assumptions used to drive the cost projections are designed to produce a robust estimate of the costs, in pence per minute, which it is appropriate to recover through the NTS retail uplift at the end of the charge control period. In this case, an aggregate measure of retail volumes appears to be the most appropriate measure to use in the forecasting model, because that is what drives the costs. To put the point another way, the unit cost of retailing NTS calls on behalf of TCPs should not increase or decrease merely due to NTS calls having a growing or declining share of BT's overall revenues which, applying BT's prevalent retail cost attribution methodology, would lead to BT effectively re-attributing retail costs across services from one year to the next.

5.126 We therefore provisionally conclude that we should project costs to 2013 using a forecast of changes in BT's total retail service activity.

February 2011 question 5: Do you agree that we should use a forecast of change in BT's overall retail service activity to project BT's costs?

Forecast movement in BT's overall retail activity

5.127 We have used two different approaches to making projections of changes in BT's total retail service activity. One approach is to construct the forecast of BT's retail activity at an aggregate level, using forecasts prepared by brokers. The other is to employ a "sum of the parts" approach. This latter approach involves constructing individual forecasts for each of BT's main retail services as a prelude to working out an overall figure by calculating a weighted average of the service-level projections. We prepared projections using both approaches, but we place most weight on the results of the "sum of the parts" analysis since we do not have complete information on the assumptions underlying the brokers' forecasts. However, on the face of it, the brokers' forecasts appear broadly to corroborate our projections based on the "sum of the parts" approach.

We produced estimates using aggregate data

5.128 Adopting the first approach we looked at BT's total retail revenues and forecast growth in these retail revenues in real terms. We use revenues rather than volumes as it is not possible to combine the volume of all the different retail services – for example, call minutes, number of lines, broadband capacity - in a single measure with a common unit. For this purpose we used BT Retail as a proxy for BT's retail activities as it is within this BT business unit that the vast majority of the costs attributed to NTS calls are incurred.

5.129 We therefore reviewed recent brokers' reports for forecast revenue information for BT Retail. One recent report[51] included a "consensus" forecast nominal decline in BT Retail revenue of 3.0% per year averaged over the period 2011 to 2014. We have used this consensus forecast to inform our projections of BT's retail activity. However it is important to adjust this nominal revenue decline figure to remove the effect of price changes as it is the volume of BT's retail activity that is relevant for forecasting future costs levels in our model. It would be necessary to remove both the effects of general inflation and of any real price changes specific to BT's retail services.

5.130 This report did not include an explicit inflation forecast or identify any assumptions made about specific price movements. To allow for general inflation, we adjusted this forecast using our average forecast inflation for RPI of 3.4%, generating a real revenue decline of 6.2% per year.

5.131 This report, along with others commenting more generally on BT's prospects, stated that it believed that BT would need to sacrifice margin to defend its retail customer base. If BT were to make real reductions in its retail prices, and this is reflected in the revenue forecasts, it would be necessary to adjust the figure of 6.2% to avoid overstating the implied decline in the volume of BT's retail activity.

We produced estimates using a 'sum of the parts' approach

[51] Goldman Sachs BT Company Update published 11 November 2010

5.132 We also constructed a sum of the parts forecast, where each individual element was based on our forecast of the change in activity expected over the lifetime of the control[52], to overcome this difficulty with the use of forecast revenue to predict changes in overall activity levels.

5.133 We constructed forecasts for the following elements of BT's retail activity using a combination of information gathered to set this charge control, published information and volume forecasting underpinning other recent and planned BT charge control consultation proposals.

- NTS calls
- Other calls (primarily geographic but also including calls to mobile (CTM)
- Telephony lines
- Broadband lines
- Other

NTS calls

5.134 We set out in more detail our volume projections for this call type in paragraphs A8.34 to A8.44. We conclude that on average NTS call minutes will decline at around 15% per year. The forecast change in NTS volumes makes only a small contribution to the overall change in BT's retail volumes, because NTS calls account for less than 5% of total BT Retail revenues (based on 2009/10 figures).

Other calls

5.135 Here we extrapolated the recent trends in geographic volumes declines published in BT's Annual Report[53] for geographic calls. These show that the volume of these calls fell between 10% and 11% between both 2007/08 and 2008/09 and 2008/09 and 2009/10. Based on this information we forecast that volumes of other calls will fall by 11% per year. This forecast has a weight of around 25% based on BT Retail 2009/10 revenues.

Telephony lines

5.136 Here we use the volume projections which we have made for the purposes of our review of the Local Loop Unbundling and Wholesale Line Rental charge controls, on which we will shortly be consulting. Volumes of telephony lines are forecast to fall by 7% a year, a figure slightly lower than that seen in the past two years. BT recorded a decline in exchange lines of between 9% and 10% between both 2007/08 and 2008/09 and 2008/09 and 2009/10. This forecast has a weight of 32% based on BT Retail 2009/10 revenues.

[52] Strictly speaking we forecast costs over the period 2009/2010 to 2013/14 as our base year costs relate to 2009/10

[53] Operational statistics (page 154) published in BTGroup plc Annual Report 2010 http://www.btplc.com/Sharesandperformance/Annualreportandreview/pdf/BTGroupAnnualReport2010.pdf

5.137 Based on this information we forecast that volumes of telephony lines will fall by 7% per year.

Broadband lines

5.138 Our projections of retail broadband subscriber numbers (lines) are based on the projections of broadband growth which informed our proposals for the WBA Charge control, on which we are currently consulting.

5.139 The "base case" used in the WBACC reflects a "conservative" assumption that the number of broadband subscribers will grow at 2% per year over the period 2011 to 2014. The proposed WBACC only applies to the parts of the UK in "Market 1". However, as (by definition) there is currently no wholesale competition to BT in Market 1, we can derive a consistent projection for BT's retail subscriber numbers by making a small adjustment to allow for projected changes in BT's retail market share[54].

5.140 We note that BT has recently been gaining market share in retail broadband, recording 8% growth in lines both in 2008/09 and 2009/10., A report by Enders Analysis[55] commenting on trends in the broadband market suggests that BT's retail broadband line numbers have recently been growing at 2½% above the market trend. We apply this as a "premium" to the market trend in generating our preferred estimate of BT's retail volume growth using the "sum of the parts approach".

5.141 This forecast has a weight of 16% based on BT Retail 2009/10 revenues.

Other

5.142 These other revenues relate primarily to BT's provision of connectivity to its business customers excluding broadband, that is, leased lines. These other revenues also include some newer BT services such as BT Vision and BT Mobility. As we have no readily available data that encompasses the breadth of this activity, we exclude it from the calculation of our preferred estimate of retail volume growth. However, we have also made a projection with "other" services included and assuming zero growth in "other" revenue. This forecast then has a weight of 26% based on BT Retail 2009/10 revenues.

We weighted our individual forecasts to generate an overall forecast

5.143 As a final step under this 'sum of the parts' approach we also need to be able to weight the individual forecasts to derive an overall forecast. The options here include weighting the individual forecast by current retail revenues, retail revenues forecast at the end of the charge control or an approach which averaged these weights over time. However as the relative importance of individual contributions to BT's overall retail activity (e.g. for broadband) has varied significantly over the recent past, and can be expected to in the future, the resulting overall forecast could hinge as much on the approach taken to weighting as on the individual forecasts.

[54] The sources used to derive the 2% assumption were not specific to Market 1 so the figure of 2% can be thought of as reflecting trends at a national level. Further details are provided in our WBACC consultative document.

[55] *UK fixed line market analysis, UK broadband and telephony trends to September 2010* (December 2010)

5.144 We have therefore projected revenues for each service separately, assuming the volume changes set out above (but assuming constant prices), summed these revenues in each year and then calculated the average annual change in the resulting total. This method implicitly allows weights to change over time.

5.145 Using this approach outlined above, and including "other" services, we generated a forecast of an overall decline of 4.4% per year. This estimate, when compared with the forecasts generated from brokers' estimates as explained at paragraphs 5.128 to 5.131 above, is consistent with the inclusion, in brokers' forecasts of BT's future revenue growth, of a significant pricing effect (i.e. decline) in retail revenues.

5.146 We consider that it would be more prudent to exclude 'other' from this calculation as we do not, amongst other things, have detailed volume information to forecast volume movements here. By excluding 'other' we would be in effect assuming that 'other' would decline at the same overall rate as the other elements (calls, telephony lines and broadband lines) in the mix. We consider this approach to weighting to be prudent because 'other' services, which include some newer services, may well decline at a slower overall rate than the other elements.

5.147 This estimate suggests a 5.6% annual decline. We believe that a combination of the exclusion of 'other' revenues and a forecast of broadband growth factoring in an above market growth rate for BT retail should be our central case assumption. We have rounded 5.6% to 5.5% for this purpose. This figure is somewhat lower than our estimate of the decline in real revenues based on brokers' reports (6.2%). However, the two estimates appear to be broadly consistent if BT's retail prices are expected to increase by less than the rate of general inflation and these expected changes in real prices have had a depressing effect on brokers' revenue forecasts.

5.148 Inevitably, any forecast of the changes in the scale of BT's overall activity will be subject to a margin of error when compared to actual outcomes. However we believe that the scale of BT's overall activity is likely to be more stable than individual elements of BT'S retail portfolio, in part because over time new services tend to replace traditional services. We are therefore consulting on a relatively narrow range of forecast overall retail activity decline of between 3.5% and 7.5% per year over the period to 2013, with a central estimate of 5.5%.

February 2011 question 6: Do you agree with our approach to forecasting the change in BT's overall retail activity and the proposed range of forecast decline of 3.5% to 7.5% per year? If possible, please provide evidence to support your view.

We assume that BT will be able to improve its efficiency by 2.5% a year

Summary of July 2009 proposal and associated rationale:

5.149 In July 2009, we proposed that BT would be able to improve its efficiency in retailing NTS calls year on year by a central estimate of 3%.

5.150 We assumed BT would be able to make efficiency gains independent of volume changes over the lifetime of the control. That is to say, for a given level of calls, BT would be able to retail these calls for less cost year-on-year.

5.151 We calculated the average annual reduction in attributed costs to geographic calls BT had achieved over the period from 2004/05 to 2007/08 on three different bases depending on the extent to which we had included BT's third party marketing and sales costs in the calculations.

5.152 We relied on geographic calls for this exercise because the large cost base was less likely to have been distorted by one-off factors and improvements in retailing efficiency are likely to be applicable to all call types.

5.153 The results ranged from a 1.8% annual reduction (with BT's third party sales and marketing excluded) to 4.0% (where we fully included these sales and marketing costs). We provisionally concluded that future reductions in sales and marketing costs may not be sustainable and therefore proposed a central estimate of 3%

5.154 We asked the following question

Question 11: Do you agree with our proposed approach to efficiency?

Consultation responses

5.155 BT in its response argued that in the future it would be much harder to find further efficiency savings because significant efficiency improvements have already been put in place and were already reflected in the current unit costs. It suggested that a retrospective view should not therefore be projected forward without a review of the relevant efficiency drivers. In respect of the reduction in its marketing costs, BT suggested that both supply side factors such as the advent of new advertising media that had borne down on advertising tariffs, and weak demand caused by businesses cutting back on discretionary marketing, would make it less likely that they could achieve similar annual reductions going forward. BT therefore believed that a figure without including third party marketing and sales of 1.8% was close to the mark.

5.156 Another respondent [✂] argued that geographic and NTS calls are treated very differently at the retail level (e.g. as regards inclusion in bundles etc), and that there was therefore a strong possibility of them demonstrating distinct retail cost characteristics. As a result, it did not believe that the scope for efficiency gains against these two call types would necessarily be comparable and argued that we should carry out a reassessment using specific NTS call data. The respondent further argued that it was critical for retailers to be able to recover their legitimately incurred costs. Setting an efficiency target that is too aggressive or overly ambitious could hinder such cost recovery and would serve to disincentivise not only BT but also other retailers.

5.157 Cable & Wireless, on the other hand, suggested that BT would be able to achieve efficiency savings well in excess of our proposals. It was disappointed by the level of research we had carried out here. It argued that there was compelling anecdotal evidence which pointed to a high level of inherent inefficiency within BT's organisation. For example it believed BT's retail operation to be affected by over inflated labour costs resulting from BT's staff benefitting from discretionary policies such as no compulsory redundancies.

Further analysis and provisional conclusion

We need to set an efficiency target consistent with our forecast volumes measure

5.158 As we now propose to project costs on the basis of movements in BT's overall retail activity, we need to consider the implications for our efficiency target. For the July 2009 Consultation, we had estimated an efficiency trend by analysing data for geographic calls. But if we were to use a more broadly defined volume driver as we now propose, it would be more consistent for us also to use a more broadly defined measure of efficiency. That is, our assumption about BT's ability to reduce real unit costs in future should not be based on the rate at which BT has in the past reduced

its unit retail costs of geographic calls. For consistency the efficiency target should instead be based on the rate at which BT has reduced its unit retail costs across a wider range of services. In this case, this is likely to make a significant difference to the assumed rate of real unit cost reduction.

We do not believe that there is any significant NTS-specific element to BT's retail efficiency

5.159 One respondent [✂] thought there was a strong possibility of there being distinct retail cost characteristics between geographic and NTS calls (e.g. as regards inclusion in bundles). This view is not supported by our analysis of BT's retail costs and retail cost attribution methodologies as set out in Annex 7.

We do not have any evidence to suggest that BT is currently inefficient

5.160 When analysing efficiency for the purposes of setting charge controls we attribute savings to:

- technical progress in retail activities (an example of such progress would be the introduction of e-billing, reducing the cost to BT of billing its customers); and
- catch up with best performing retailers carrying out similar activities to BT (where we did not consider BT to be a benchmark efficient retailer).

5.161 C&W pointed to anecdotal evidence in its consultation responses that BT was currently an inefficient retailer. We would characterise this sort of efficiency, or lack of it, as 'catch-up'[56] efficiency. We do not have evidence that BT is currently any less efficient in minimising its retail costs than other major retailers of telephony services. Indeed in our most recent statement, Fixed Narrowband Retail Services Markets - Identification of markets and determination of market power[57] ("retail narrowband market review'), we concluded that the retail market for telephony services was competitive. In such a competitive market there are very powerful incentives for all operators to be efficient.

5.162 We have considered commissioning a specific study to benchmark BT's current level of efficiency in retail service provision. However, we do not think it would be proportionate for us to investigate whether BT's retailing activities are currently efficient, particularly in the light of the competitiveness of retail markets. Such a study is likely to be a major undertaking, not least because each of the major retailers of telephony services has a different business model which would make comparisons difficult. Therefore we have not undertaken a comparative study of BT's overall efficiency in retailing services.

5.163 Similarly, we have not commissioned new research into BT's overall efficiency, at an aggregate level, for the purposes of this review. We can however use the results of some relevant research carried out for other reviews, which we already have. One

[56] The "catch-up" factor measures BT's efficiency relative to a benchmark efficient company i.e. the amount by which BT would need to reduce costs to be as efficient as the benchmark. We draw a distinction between this and "frontier shift", the rate at which an efficient company reduces costs over time due to technical progress etc.

[57] http://stakeholders.ofcom.org.uk/binaries/consultations/retail_markets/statement/statement.pdf and published on 15 September 2009

such study, carried out by NERA,[58] (the "NERA efficiency study"), considered BT's efficiency relative to US Local Exchange Carriers (LECs). This study was used to inform Ofcom's decision in the 2009 Leased Lines Charge Control (LLCC).

5.164 NERA estimated BT's efficiency at a relatively aggregated level. This at least partly reflected the nature of the available data and the fact that the statistical robustness of the results of these studies tends to decline as the degree of disaggregation increases. It does however give the study wide applicability to a range of BT services and its results can be applied in a consistent way across charge controls.

5.165 NERA's report provided estimates of BT's efficiency based on different model specifications. As with its previous study (carried out for then Oftel), it assumed that the relevant benchmark is the top 10% of US LECs, which we refer to as the top decile. NERA's analysis showed that BT was around, possibly slightly above, the top decile. BT also commissioned Deloitte ("Deloitte 2009 study") to respond to NERA's study. As part of the 2009 LLCC consultation process, Ofcom assessed both Deloitte[59] and NERA studies and concluded that both studies consistently show that BT is above the decile.[60] This suggests that, at the time of the study, it was appropriate to assume a catch-up factor of 0% for the purposes of forecasting BT's costs.

5.166 We recognise that both reports were based on data which may no longer be the most recent available. The US comparator data has been collected on a consistent basis annually by the Federal Communications Commission (FCC)[61] for around 70 LECs. This data is available with some time delay, so the 2008 study used data up to and including 2006. In 2008 the FCC implemented reporting changes, reducing the filing requirements for some LECs. Given that both studies covered data from 1996 to 2006, we did not believe that an additional year's data would give us significantly different results than one obtained previously.

5.167 For the purposes of the proposed WBA charge control on which we are currently consulting, BT commissioned Deloitte to produce an updated version of the efficiency report ("Deloitte 2010 study"), which made use of the additional data for 2007. The results showed that BT was still above the decile. Whilst we disagree with some aspects of Deloittes' approach, as we discuss further below, the consistency in the results of the two Deloitte's studies provides some indication that BT's position relative to the benchmark level of efficiency has not changed markedly since the first study. We think it unlikely that BT's relative efficiency has declined to a point below that of the benchmark operators.

5.168 Finally we repeat the point that the retail markets in which BT operates are competitive. The fact that BT is subject to competitive pressure to reduce costs and operate efficiently at the retail level also suggests that an assumption of zero catch-up is reasonable.

5.169 We therefore propose to make no 'catch-up' adjustment for efficiency in our RPI-X model.

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[58] NERA, *The comparative efficiency of BT Openreach* (17 March 2008) http://stakeholders.ofcom.org.uk/binaries/consultations/llcc/annexes/efficiency.pdf

[59] NERA, *Comments on the Deloitte paper on "the efficiency of BT's network operations* (6 May 2008) http://stakeholders.ofcom.org.uk/binaries/consultations/llcc/annexes/operations.pdf

[60] See Annex 7 of the 2009 Leased Lines Charge Control Statement. http://stakeholders.ofcom.org.uk/consultations/llcc/statement/

[61] http://www.fcc.gov/wcb/armis/

We believe that BT should be able to reduce its retail unit costs by between 2.0% and 5.0% per year

5.170 Whilst we do not propose to make an adjustment to forecast costs for 'catch-up' efficiency, we do propose to incorporate into our forecast of final year unit costs a target for efficiency arising from technical progress or "frontier shift".

We assume frontier shift of 2.0% to 5.0%

5.171 We build into our cost forecasts efficiency improvements that BT might reasonably be expected to achieve over the duration of the charge control. These efficiency improvements relate to expected reductions in real unit costs, which do not depend on changes in volumes but reflect the general improvements in efficiency, which all firms seek to make.

5.172 When setting charge controls, we have often based our estimates of likely future efficiency improvements on the trend of reductions in real unit costs in the recent past, for the relevant service. In its decision on the appeal of the ORFF (the "LLU decision"), the CC indicated that significant weight should be placed on historic trends in efficiency derived in this way.

5.173 We explained above that we now propose to base our volume assumptions on the rate of growth in BT's retail business as a whole rather than the volume of NTS calls. and that any assumption which we make about future efficiency gains therefore needs to be consistent with this broad volume "metric" (as we term it). We have therefore considered whether it would be possible to broaden the scope of our 2009 approach to calculating BT's historic efficiency gains, from one based solely on the retail costs of geographic calls to one based on all BT's retail services. Here we would be seeking to compare changes in BT's retail costs over time in conjunction with a measure of the scale of BT's overall retail activities over the same time period. However, when we attempted to apply this approach we found that the mix of BT's services in 2004/05 was very different to that in 2009/10, for example in relation to the prevalence of retail broadband services, making the results of such an approach extremely sensitive to the precise weights chosen, and therefore potentially not robust.

5.174 We have also updated the calculations we prepared previously to assess BT's achieved reduction in unit costs based on geographical call data. These calculations indicate that BT has reduced its unit costs by around 9% a year on average over the period 2003/04 to 2009/10, a figure which does not change whether third party sales and marketing expenditure is included or not in the calculations. However we do not place so much weight on this information as there is a real possibility that a significant proportion of the reduction in retail call costs measured in this way in recent years is due to other growing services bearing an increasing share of such costs, that is, due partly to reallocation to other services rather than reduction in overall costs.

5.175 The 9% figure is, we believe, significantly greater than any previous assumption we have made in any Ofcom charge control. The highest rate previously assumed was 4.6% in the 2005 Statement relating to setting the previous set of charge controls for the NTS Retail Uplift. BT has also indicated that some of these gains may not be repeatable. This may indicate that a conservative approach, relative to the most recent trends, should be adopted.

5.176 NERA's comparative efficiency analysis referred to above also estimated a time trend, which measures the average rate of change in costs of US LECs. It concluded that costs were falling at 2.5% to 3% per annum in real terms for the period 1999 to 2006, lower if data from 1996 were included. In contrast, the Deloitte 2009 study suggested an annual rate of decline of total costs of around 2.2%. This is consistent with Deloitte's 2010 study that estimated the time trend from the comparative analysis of 2%, or 3% for the period between 2004 and 2007. We believe the comparative analysis results obtained by the Deloitte 2010 study are similar to those obtained by NERA's previous study. This supports our view that the contribution from the additional year's data to an estimate of the time trend is small.

5.177 We also recognise that Deloitte's 2009 and 2010 studies also considered efficiency estimates based on total factor productivity (TFP) models. The 2009 study suggested TFP growth rates of around 0% to 1.9% whilst its 2010 results indicate a range of 1% and 2.4% per annum between 1996 and 2007.

5.178 Deloitte's TFP models used data from US LECs as well as European telecommunication incumbent operators. As in the 2009 study, Deloitte's analysis uses the Tornqvist index for inputs and outputs and estimating what the time trend has been for the two indices. The Tornqvist index is a standard measure used in productivity analysis and takes into account the impact of changing cost weights over time. Deloitte defined the aggregate Tornqvist index at time t as the average of each output's growth rate using geometric average of the base year and current year cost weights. For the reasons set out in the 2009 LLCC Statement[62], we do not think that it is appropriate to anchor the weights to a base year.

5.179 We believe that Deloitte's results obtained using their specification of the Tornqvist index are likely to be biased as a result of this aspect of their method. On the balance of evidence, we believe that the likely lower bound of efficiency improvement is around 2% per annum, with a base case of 2.5%.

5.180 In the LLCC we were able to use past data on leased line costs to estimate trends in efficiency. This analysis suggested that, with a central frontier shift estimate of 2.5%, an upper bound of 5% was reasonable. In the present context, a rate at the upper end of this range would be consistent with giving some weight to the historic rate of efficiency gain on BT retail calls, which we calculated at 9%. It would be consistent with a view that some, at least, of these reductions reflected genuine gains in efficiency rather than simply the reallocation of costs to faster growing services. However, we think it is unlikely that an assumption of real unit cost reductions in excess of 5% per annum could be justified, in the absence of any strong supporting evidence and in the light of the analysis for the LLCC. We therefore propose an upper bound of 5% to allow for potentially higher efficiency savings by BT. We welcome respondents' views on the appropriateness of 2.5% as an efficiency assumption and on whether there is evidence to support a higher or lower figure within the 2% to 5% range.

5.181 We therefore propose to incorporate an efficiency target of between 2.5% and 5.0% a year with a preferred estimate of 2.5%. Also for reference purposes we note that once the differing efficiency targets (2.5% per year improvement at the overall retail level versus 9% measured improvement for NTS calls) are matched to our forecast

[62] See Annex 7 of the LLCC statement for a more technical treatment and fuller discussion of this issue: available at http://stakeholders.ofcom.org.uk/consultations/llcc/statement/

of the decline in corresponding volumes (5.5% per year versus 15% per year), the two effects broadly balance out in terms of the resulting value of X.

February 2011 question 7: Do you agree with our preferred efficiency improvement assumption of 2.5%?

We propose to project all costs except bad debt using a cost volume elasticity of 0.25

Summary of July 2009 proposal and associated rationale

5.182 We proposed to assume a cost volume elasticity (CVE) 0.25 to project costs to the end of the charge control. This meant that if volumes were to rise or fall by 10%, then total retail costs will respectively rise or fall by only 2.5%.

5.183 We recognised that retail costs in this sector exhibit substantial economies of scale (reflecting in turn the presence of fixed costs). As the assumption of retail CVE of 0.25 was not based on recent evidence we performed sensitivity checks for slightly lower and higher values. We also used a CVE of 0.25 in our calculation of BT's year on year improvement in efficiency. In this respect we made internally consistent assumptions to arrive at our charge control proposals. We had also adopted 0.25 when projecting costs for the previous NTS Retail Uplift charge control.

5.184 We asked the following question

Question 12: Do you agree that we should assume a Cost Volume Elasticity of 0.25?

Consultation responses

5.185 Most respondent to our consultation did not comment on the proposed CVE. BT agreed with our proposal and Cable & Wireless asked for further “sanity checks”, to support the use of this estimate.

Further analysis and provisional conclusion

5.186 As we now propose to project costs using a measure of BT’s overall retail activity, we have considered whether it would still be appropriate to apply a CVE of 0.25 to this different indicator of volumes. To our knowledge, there are no recent studies estimating cost volume elasticities for retailing telecommunications services. Nevertheless, a figure of 0.25 has previously been used for setting price caps to apply to a wide basket of BT’s retail services[63] as well as the NTS Retail Uplift on the basis that 0.25 is reasonable reflection of how retail costs are likely to increase or decrease in response to changes in the volume of BT’s retail activity. We therefore remain of the view that a CVE of 0.25 us appropriate in this case.

5.187 We recognise that there is a degree of uncertainty about the proposed assumption and intend to use sensitivity analysis to ensure that we understand the implications of adopting it.

5.188 We present the results of our sensitivity analysis at paragraph 5.205. We also note that, given our proposal to assume that retail volumes decline at a relatively modest

[63] See for example *Pricing of Telecommunications Services from 1997* (June 1996), paragraph 6.30 http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/pri1997b/chap6.htm

rate between 3.5% and 7.5% p.a., the value of the CVE is not as material to the value of X as it was in relation to our July 2009 proposals.

5.189 We therefore provisionally conclude to assume a central case CVE estimate of 0.25, and to consider sensitivities based on a range of 0.20 to 0.30.

We propose to project bad debt to 2013 by assuming that it is a function of revenue

Summary of July 2009 proposal and associated rationale

5.190 We proposed that only the level of bad debt associated with non-PRS NTS calls should be recovered via the pence per minute NTS Retail Uplift charge. We proposed to project this bad debt by assuming a one-to-one relationship between forecast changes in relevant NTS call revenues to 2013 with changes in bad debt. We also assumed that changes in NTS call revenues would reflect our then forecast NTS volumes multiplied by unit prices expressed in real terms. We assumed that BT would broadly maintain retail prices at their current level in real terms.

5.191 We also proposed that we should not subject BT's bad debt to an efficiency adjustment.

5.192 The bad debt recovered through the NTS Retail Uplift is based on the level of bad debt experienced by lower priced NTS calls (i.e. for 084 and 087 calls) and is known as 'standard' bad debt.

5.193 We explained that it was more appropriate to handle bad debt costs separately from other retail costs because they are more causally related to revenues than volumes. We therefore proposed to use a cost revenue relationship (CRR) of 1 to forecast bad debt. We believed it a reasonable assumption that there were not likely to be any significant economies of scale for every extra every £1 of revenues

5.194 Regarding BT's efficiency at collecting its revenues we stated that, whilst BT may be able to take steps to reduce credit risk through adoption of stricter credit control measures, bad debt was also significantly influenced by factors outside BT's control. Furthermore, we noted that BT has a commercial incentive to minimise customers' bad debt, commensurate with maximising its profits.

5.195 We asked the following question

Question 13: Do you agree with the way in which we have forecast 'normal' bad debt, in particular that it is reasonable to apply a CRR of 1 and no efficiency adjustment?

Consultation responses

5.196 BT and another respondent [✂] agreed with our approach. C&W in contrast argued in response to this question that BT had scope to significantly improve its collection rates for PRS revenues.

Further analysis and provisional conclusion

5.197 As set out in paragraphs 6.119 to 6.152 we do not propose to apply an efficiency adjustment to BT's bad debt costs for the purposes of setting the level of the PRS Bad Debt Surcharge. In reaching this proposal we relied on evidence that that did not relate specifically to BT's PRS calls, but rather to all those services billed alongside PRS calls. Therefore our rationale for proposing to make no adjustment for efficiency equally applies to other NTS calls, as these are billed alongside PRS calls. We

therefore propose to project BT's bad debt assuming a 1:1 relationship with revenue and to make no efficiency adjustment.

Step 3: compare current price with forecast end of period costs to generate our proposed value of 'X'

5.198 The key output from Step 2 is a forecast of BT's efficiently incurred costs of retailing NTS calls in 2013, the final year of the control.

5.199 We propose to calculate the value of X as though the charge control were a three year control in force from the 1 October 2010 to 30 September 2013. As the new control will not come into effect until we publish our statement, which is likely to be part way through the first year (2010/11), we make a number of modifications to the charge control conditions (see Annex 11) so that they are appropriate to the shorter period for which the control will apply. These modifications allow for the possibility that BT might change the retail uplift between 1 October 2010 and the actual start of the new control. They are necessary in order to make sure that the value of X we set remains appropriate to the level of the uplift actually applying at the start of the control period. The aim will be to ensure that the effect of the control by the end of the control period is the same as it would have been, had the control come into effect on 1 October 2010. If we did not do this, the value of X might be either too low or too high, resulting either in prices which were below projected cost, or which were above projected cost and so did not give the best deal for consumers. The formula set out in the draft Condition (Annex 11) has been designed to achieve this objective.

5.200 The final step in arriving at the value of X is to compute the glidepath from the charges prevailing at 30 September 2010 to the target year (2013/14) costs over 3 years. For the purposes of calculating charges at 30 September 2010 we deflate the nominal prices in force at that date to the level of prices at September 2009. This allows the glide path to be determined using costs and prices both expressed in terms of prices as at the end of September 2009.

5.201 We have calculated a fresh weighted average NTS charge at the start of the control using the latest data for 2009/10. To calculate this weighted average we used all NTS volumes BT had retailed in 2009/10 in contrast to the previous approach which only related to BT to CP volumes and included Wholesale Calls and ported numbers.

5.202 We set out further detail of the mechanics of this calculation in paragraphs A8.25 and A8.33

We have summarised all the changes underpinning our revised proposals for the value of X

5.203 Each of the changes to our July 2009 proposals impacts upon the value of X in the RPI-X charge control. In order for stakeholders to easily understand where those changes are addressed in this document, the table below summarises these changes and indicates where these are considered.

Table 5.5: Summary of changes to estimation of the value of X for the NTS Retail Uplift

#	Change since July 2009	Outline justification for change	Paragraphs
Step 1: determine relevant costs and volumes for the base year			
1.	Use of retail than wholesale billing volumes	Correction of error to remove volumes not in fact retailed by BT	2.26 to 2.39 5.24 to 5.28
2.	Include all sales & marketing costs within base year costs (80% inclusion in July 2009)	Recent evidence suggests BT no longer undertakes sales and marketing activities aimed at call stimulation	5.35 5.54 to 5.58
3	Reattribution of certain retail costs (no reattribution in July 2009)	Refinement of approach to determination of relevant base year costs following correction of error in NTS call volumes	5.30 to 5.68
3a	Three way classification of BT's retail costs into: service delivery (SD); sales & marketing (S&M); and support costs not causally attributable (SC).	Prelude to re-attribution of certain retail costs	5.65
3b	Reattribute sales and marketing costs on the basis of net revenue	Cost attribution methodology should reflect the strength of the causal link between spend on S&M and profit on NTS calls	5.31 to 5.35 5.59 to 5.64 5.66 to 5.68
3c	Reattribute support costs not causally attributable	Attributing these support costs in proportion to SD and S&M costs is more reasonable than attributing on the basis of gross revenues, given change 3b	5.66 to 5.68
4	Base estimate of normal bad debt on reliable identification of lower priced NTS and PRS calls (correction of error)	BT had incorrectly coded debt on some lower priced NTS calls as PRS calls	2.23 to 2.24 5.69 to 5.73
Step 2: project these base year costs and volumes to the end of the charge control			
5	Project costs using forecast changes in the volume of BT's overall retail activity rather than NTS call minutes	Most of the cost attributed to NTS calls are not specific to NTS calls, rather incurred for the benefit of all of BT's retail activities	5.113 to 5.148
6	Efficiency target based on consideration of BT's overall efficiency rather than efficiency in retailing calls	Approach revised to be consistent with the revised approach towards projecting costs.	5.149 to 5.181
Step 3: compare current prices with forecast end of period costs to generate the proposed value of X			
7	Use retail rather than 'wholesale' billing system time of day volumes to calculate weighted average price (correction of error)	Consequential impact on estimation of weighted average charge following revision to basis of measurement of NTS retail call volume minutes (see #1 above)	5.201

Adopting the proposed approach set out above we obtain a preferred estimate for X of +2.0%

5.204 The results of this analysis show that our preferred value of X is 2.0%. The proposed glidepath, in line with our July 2009 proposals, is upward sloping. According to our cost analysis, BT's retail uplift charges are currently marginally above the fully

attributed costs of providing the service (0.221 pence per minute weighted average charge[64] compared with 0.219 pence per minute weighted average cost[65]). Looking ahead, however, our projections suggest that the (downward) impact on unit costs of improved efficiency will be more than offset by the (upward) impact of declining volumes. As a result, the retail uplift will need to increase marginally in real terms in order to bring prices into line with projected level of cost at the end of the control.

5.205 As with our July 2009 proposals we have also conducted a sensitivity analysis on the key inputs into our RPI-X model in order to help us determine a proposed range for the value of X.

[64] September 2010 weighted (by 2009/10 volumes) average charge expressed in September 2009 £s
[65] Forecast 2010/11 weighted average costs expressed in September 2009 £s

Table 5.6: Sensitivity of the value of X arising from changes in key assumptions and cost estimates

Scenario	Further Detail	Value of X
Base case as discussed in this section	*Principal inputs* BT's 2009/10 costs adjusted following identification of £8.4m of sales & marketing expenditure Volume decline = 5.5% per year Efficency gain = 2.5% per year WACC = 9.3% Cost volume elasticity = 0.25 3 year control	2.0
Volume sensitivities		
Volume decline = 3.5%		0.3
Volume decline = 7.5%		3.7
Efficiency sensitivities		
Efficiency gain = 2.0%		2.5
Efficiency gain = 5.0%		(0.7)
WACC sensitivities		
WACC = 8.5%		2.2
WACC = 9.3%		2.0
WACC = 10.0%		1.7
CVE sensitivities		
CVE= 0.2		2.3
CVE= 0.3		1.7
Sales & marketing costs adjustment		
Sales & marketing costs = £7.4m (total cost adjustment £7.8m)		4.2
Sales & marketing costs = £8.4m (total cost adjustment £8.8m)		2.0
Sales & marketing costs = £9.4m (total cost adjustment £9.7m)		(0.3)

5.206 Our assessment of the plausible range for X has been informed by the sensitivity of the value of X to changes in three key inputs into our modelling: namely

- our estimate of costs relating to sales and marketing activities attributed by BT to NTS calls (range £7.4m to £9.4m). We re-attribute these costs on the basis of net revenue
- forecast volume changes (range 3.5% to 7.5% decline per year)
- efficiency target (range 2.0% to 5.0% annual improvement)

5.207 The results of this analysis show that an appropriate value of X lies between +0.0% and +4.0% with a preferred estimate of +2.0%. Varying one assumption at a time, the toughest X (0.0%) reflects a tougher efficiency target than the 2.5% preferred case, and the most generous X (+4.0%) reflects a smaller adjustment to the costs of sales and marketing attributed by BT to NTS calls. We therefore propose that the price cap should lie within a range of RPI +0.0% to RPI+4.0%.

We finally consider the impact of our provisional X calculations on our proposals as a whole

5.208 Adopting all aspects of the proposed RPI-X charge control for the NTS Retail uplift set out so far in this section would imply a price cap of RPI +.2.0%, across freephone and chargeable calls. We plan to consult on a range: RPI+0.0% to RPI+4.0%. For comparison the 2005 caps were RPI+4.5% for freephone and RPI-6.5% for chargeable NTS calls.

5.209 Based on this provisional value of X we have considered whether an X of this magnitude should have an impact on any of the analysis set out so far, and in particular whether we should revise any aspect of our provisional proposals. Our provisional view is that, whilst this value of X is somewhat less advantageous to BT than the level we proposed in July 2009, it does not require us to revise the previous analysis. We do not consider that the fact that the X would lead to increasing charges for the NTS Retail Uplift at 0.75% a year on average in real terms (current preferred estimate), rather than at 2.9% a year on average in real terms (July 2009 central estimate) would lead to any significant implementation issues either on the part of BT, TCPs or service providers.

5.210 We have considered in particular whether the extent of the disparity between the current charge and our estimate of BT's level of costs consistent with the provisional value of X is such that we should mandate a one off decrease to prices at the outset of the charge control. Based on our information we do not believe that the retail uplift is sufficiently in excess of cost for there to be a substantial risk of distortion as discussed in paragraphs 4.68 to 4.69 and so we do not propose to mandate such a decrease.

February 2011 question 8: Do you agree that our proposal for the value X with no one off adjustment to prices at the outset of the control has no impact on any previous aspect of our proposals?

We propose that the charge control comes into effect immediately

5.211 We propose that BT's compliance with the charge control for the part-year to September 2011 will be assessed from the date of implementation of the charge control to 30 September 2011 as reflected in the RPI-X Condition in Annex 11. The date of implementation will be the date of our final statement. Depending on the exact date of implementation BT may seek a consent to waive the 90 day notification period required under the market review obligations, so that it can comply with the charge control for this part period to September 2011. In this case, we would consider whether it would be appropriate to consent to waive this requirement.

Section 6

Revised proposals for the PRS Bad Debt Surcharge

Introduction

6.1 Costing up to £1.50 per minute or per call from a BT line, PRS calls are more expensive than other NTS calls and tend to be associated with a higher incidence of bad debt. If BT were not able to target the recovery of this higher incidence of bad debt experienced on PRS calls it would need to recover these extra costs via some other mechanism. One means of achieving this would be to average the recovery for bad debt across both PRS and other NTS calls, effectively setting a common recovery for bad debt within the NTS Retail Uplift regardless of the retail price of the call. The level of this recovery would be such that the cost for originating more lowly priced NTS calls would in part reflect the cost of the higher bad debt experienced on PRS calls. However, given the higher incidence of bad debt in respect of PRS calls, we consider that it is economically more efficient that BT recovers PRS bad debt via a charge targeted at PRS calls, namely the PRS Bad Debt Surcharge, rather than via an averaged bad debt recovery in the NTS Retail Uplift.

6.2 We initially consulted on the structure and level for the PRS Bad Debt Surcharge in July 2009. The purpose of this section is to set out our revised proposals for the Surcharge and to explain why they differ from our previous proposals. We also explain how we propose to take account of the views of stakeholders as expressed in their responses to the July 2009 Consultation.

6.3 We consulted in July 2009 on a proposal to increase the Surcharge to 9.7% of revenue, based on BT's revenue, bad debt charge and volume information for 2008/09. We proposed that the Surcharge should continue to take the form of a fixed percentage of BT retail revenues and that it should run until September 2013. We also proposed that the level of the Surcharge should not be subject to an efficiency adjustment.

6.4 Aware that this would amount to a large price increase, from the old level of 3.03%, we commissioned BDO to carry out an independent review of the BT data used to produce the 9.7% estimate. The proposed increase was subject to a satisfactory outcome from the independent review.

6.5 We received responses from stakeholders in September 2009, many of which expressed concern over the prospective increase. BT subsequently informed us that some of the data underpinning the 9.7% estimate was inaccurate, and in February 2010 provided a revised set of information for its revenues, bad debt charge and volumes for 2008/09 which, in BT's view, supported a Surcharge of 5.2%.

6.6 We have now developed another set of proposals based on BT's revenue, bad debt charge and volumes information for 2009/10. Our overall approach to developing this revised set of proposals has not changed significantly since July 2009 but there have been some major changes, most notably to the underlying accounting information provided by BT. The key changes between the evidence base supporting the two different sets of proposals are as follows

- Some bad debt which was previously classified as PRS has now been re-classified as relating to other types of NTS calls, most notably 0871 and 0844

- Some revenues previously classified as retail PRS either did not relate to retail calls or were not, from a regulatory point of view, premium rate services

- PRS call minute volumes were overstated for the reasons explained in section 3 i.e. they included BT Wholesale Calls volumes and various types of ported calls not retailed by BT

6.7 We concluded that a charge control should be applied to the PRS Bad Debt Surcharge in our 2009 Wholesale Market Review Statement but we did not set the level of the Surcharge. We therefore propose a modification to the NTS Condition, as set out in Annex 11, implementing the proposed level of the Surcharge.

6.8 Following a brief discussion of policy objectives, the remainder of this section sets out our revised proposals. For each of the issues considered, we recap on our previous proposals and consider stakeholder responses, before setting out our latest thinking. More detail on the proposed approach is provided in Annex 9.

Our objectives for the PRS Bad Debt Surcharge

6.9 As set out in paragraph 3.14 of section 3, the Act articulates a number of policy objectives to balance when setting charge controls, including the promotion of efficiency, sustainable competition and conferring the greatest benefit on end users. Our specific objectives in setting the PRS Bad Debt Surcharge are as follows:

- preventing excessive pricing by BT;

- supporting effective competition in related markets, including for NTS termination/hosting and service provision;

- allowing BT to recover costs efficiently incurred in providing the service;

- providing incentives to enhance BT's economic efficiency, both static and dynamic;

- generating a stable business environment; and

- minimising the costs associated with imposing, and subsequently monitoring, the charge controls.

6.10 We consider that proposals which satisfy these objectives are likely to benefit consumers by promoting service availability and innovation, and ensuring that prices reflect efficiently incurred costs.

6.11 We are also aware that PRS calls can give rise to consumer protection concerns, associated with the relatively high price of calls and the associated potential for scams. However, we consider that issues of this sort can generally best be dealt with through targeted action to protect consumers, rather than through the design of a charge control. We do not therefore focus on consumer protection issues in this consultation.

We propose that the PRS Bad Debt Surcharge should take the form of a single fixed percentage of retail revenue

6.12 We decided in the 2009 Wholesale Market Review Statement that there should be a charge control in some form on the PRS Bad Debt Surcharge.

6.13 The form of the current recovery for bad debt specific to PRS has always been a single average percentage of revenues across all PRS services.

Summary of July 2009 proposal and associated rationale

6.14 In July 2009, we proposed that the price cap on the PRS Bad Debt Surcharge should take the form of a fixed percentage of BT retail revenues. More specifically, we proposed that this fixed percentage should represent the *additional* cost of bad debt for PRS calls, expressed as a percentage of revenue, that is in excess of the standard level of bad debt associated with other types of NTS calls.

6.15 We explain the concept of the standard level of bad debt relating to non PRS NTS calls at paragraph 5.192. The mechanics of this calculation are set out in paragraphs A9.11 to A9.14.

6.16 The rationale for our proposed approach was that bad debt is closely linked to revenues, and therefore to the level of retail charges. As BT's retail prices of PRS calls vary between 10 ppm and 150 ppm including VAT at the then rate of 17.5%, it would be inconsistent with the principle of cost causality[66] to set the same ppm Surcharge for all PRS call minutes.

6.17 We also noted that PRS calls have a higher incidence of bad debt than other call types, linked to their higher cost. We also referred to the higher incidence of scams on PRS number ranges compared with other NTS number ranges, despite action taken both by PhonepayPlus and by BT through its Artificial Inflation of Traffic ('AIT')[67] process.

6.18 We asked the following question

Question 14: Do you agree that we should retain the PRS Bad Debt Surcharge in its current form to recover bad debt specific to PRS calls?

Consultation responses

6.19 BT and one other retailer [✂] agreed with our proposal.

6.20 C&W acknowledged the need for a PRS Bad Debt Surcharge in principle and recognised that PRS services were likely to attract a higher incidence of bad debt than other call types. However it thought that the July 2009 Consultation neither provided a clear definition of bad debt nor explained how BT had arrived at the numbers supporting the proposed 9.7% Surcharge. Furthermore it pointed out that if

[66] In common with all sales transactions provided on credit terms it is not possible to precisely target the recovery of bad debt from those particular customers who ultimately prove responsible for bad debt. If PRS calls are taken to be the relevant increment of output, then the associated bad debt can be seen as part of the incremental costs of those calls, and caused by their provision.
[67] Under this process BT can withhold termination payments when it suspects that revenues generated at the retail level may be associated with fraudulent activity.

BT was genuinely experiencing difficulties collecting PRS revenue then it was important to understand which specific types of service were particularly problematic so that these services could be driven from the market. C&W also wanted to understand the inter-linkages between BT invoking its AIT processes and the revenues it wrote off as bad debt. We consider these wider points later in the section (see paragraphs 6.110 to 6.114).

6.21 AIME and 4D Interactive echoed C&W's concern that there needed to be a clear definition of bad debt before any meaningful analysis could be undertaken

6.22 One service provider [✂] requested greater analysis of bad debt to understand why it was occurring. Did TV voting, for example, exhibit a similar incidence of bad debt to chat and dating services? In its view, a single percentage retention across all services did not seem appropriate.

6.23 Another service provider [✂] thought that the Surcharge should be abolished. It thought that as a result of requirements imposed by PhonepayPlus, all PRS service providers were now required to operate a simple and effective refund policy to address any customer dissatisfaction with the service provided. Where the number ranges were not regulated by PhonepayPlus, BT should be withholding payment to the relevant TCP rather than applying a set retention across the whole PRS sector, using real time data and implemented either monthly or quarterly in arrears. In this context we interpret 'real time' to mean that BT should wait until it knows who has defaulted on their bills and interrogate its 'real time' calling records to find out which services have caused the consumer to default and then withhold payment for the relevant calls from the relevant TCP, rather than seek to recover the bad debt in effect from every service provider. We therefore interpret the approach advocated by this service provider to require TCP-specific Surcharges.

6.24 . In the same vein one network provider member quoted by the PRA in its response believed that 80% of the bad debt would have been associated with services hosted by 20% of the TCPs.

6.25 DM plc thought that a mechanism which generated a single Surcharge applicable to all PRS services created no incentive for service providers to become and remain compliant with PhonepayPlus's code.

Further analysis and provisional conclusion

BT recognises bad debt in the standard way

6.26 Certain stakeholders raised concerns regarding the lack of clarity about exactly what constituted bad debt. Put simply, *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. In the present context we base the PRS Bad Debt Surcharge on the bad debt *charge* in BT's income statement, which reflects the value of BT's revenues for the period which will, in BT's view, prove to be uncollectible. The bad debt *charge* therefore only relates to that element of total bad debt which is estimated to arise from revenues earned in that period.

6.27 The bad debt charge in BT's financial statements reflects the change in the value of BT's provision for bad and doubtful[68] debts between the beginning and end of the relevant accounting period, as well as the amounts actually written off as irrecoverable in the period. We explain bad debt accounting in paragraphs A9.3 to A9.7.

6.28 BT accounts for bad debt in accordance with standard accounting practice[69]. PwC, BT's corporate auditor, reviews BT's estimate of the value of its bad and doubtful debts[70] on a quarterly basis. BDO sets out BT's approach to provisioning in Appendix 8 of the BDO report.

The Surcharge is designed to compensate BT for the fact that some customers do not pay their PRS charges

6.29 One service provider [✂] thought there was no continuing need for the Surcharge at all. We do not believe this to be the case. Whereas the PhonepayPlus regime applies where customers who are dissatisfied with the service provided can obtain a refund from the SP, the Surcharge covers the situation where customers do not pay their bills to BT. The Surcharge therefore addresses a different sort of problem, which is that bad debts may arise in the absence of dissatisfaction with the service provided.

There appears to be no practicable basis on which to disaggregate the Surcharge between service types

6.30 Both C&W and another service provider [✂] wanted to understand whether any particular services were problematic. Historically the form of the current recovery for bad debt specific to PRS has always been a single weighted average percentage of revenues. However there may be a case in principle to disaggregate the Surcharge between, for example, different service types and/or by price point.

6.31 We therefore sought evidence to indicate whether there is a correlation between the incidence of bad debt and:

- the type of PRS service; or
- the price point (i.e. higher price points would be correlated with higher incidence)

6.32 PhonepayPlus, the regulator for PRS content, identifies a number of different types of PRS service including, for example, adult and tarot services. Historically, however, BT has only been able to analyse PRS services by price point or by number range. Services of a particular type can be offered on a number of different price points with no one price point being offered on a particular range.

6.33 The only services offered on dedicated number ranges are adult content. We asked BT to isolate revenues and bad debt on these number ranges but it said it was not able to do this as the information used to analyse bad debt across call types does not separately identify these number ranges. We therefore found no practical way of obtaining evidence on the incidence of bad debt by service. Besides, as there is no reason to believe that adult content services alone may have a significantly different incidence to other services, such an approach may well not result in objective

[68] We define doubtful debts at A9.4
[69] BDO report, page 7
[70] BDO report, page 7 and again on page 94

treatment between different types of services. We also believe that, if we were to adopt such an approach, there would need to be a mechanism to ensure service types were not misclassified.

6.34 We therefore provisionally reject this approach.

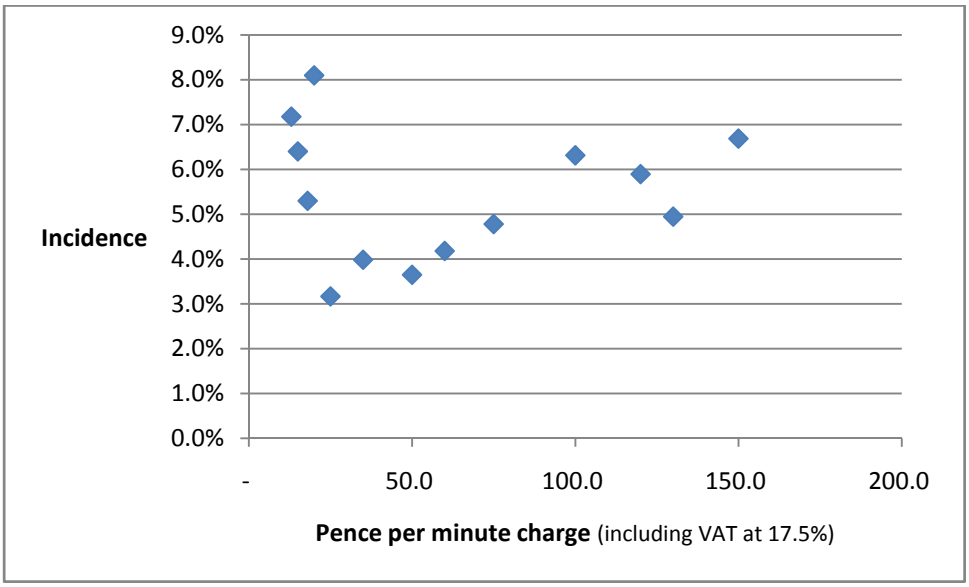
We found no evidence of a strong correlation between price point and incidence of bad debt

6.35 We also tested the hypothesis that there may be a correlation between the level of charges (drop charges and pence per minute separately) and the incidence of bad debt. We used an analysis of expenditure across price points incurred by the sample of defaulting customers used by BT to attribute[71] its total retail bad debt across all its services including PRS calls. We used this information to disaggregate total 2009/10 retail bad debt attributed to PRS calls across the different price points.

6.36 This analysis of the distribution by price point only related to defaulting customers billed on its old retail billing system, CSS, as data by PRS price point is not captured by BT within its new retail billing system, Avalon. However, we believe we can rely on the bad debt data from the CSS system alone for the purpose of assessing whether there appears to be any correlation between price points and incidence of bad debt.

6.37 In order to calculate the incidence of bad debt for each price point we also obtained from BT total 2009/10 revenue for PRS calls by price point. We then plotted the calculated incidence against price point. The results are shown below.

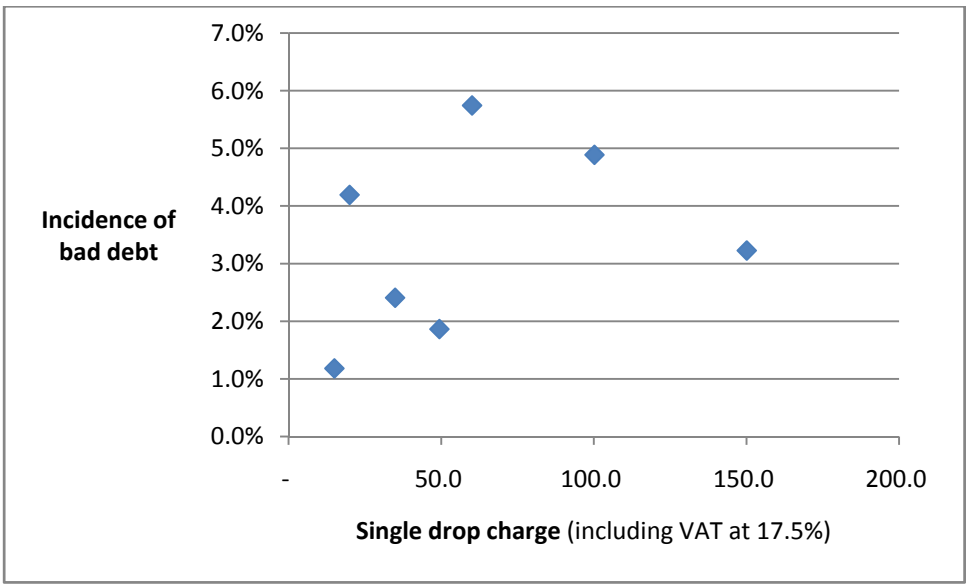
Figure 6.1: Scattergram of incidence of PRS bad debt versus price point: ppm charges



This graph shows all price points for which BT's 2009/10 revenues exceeded £½m

[71] We give more background to the data analysed by BT when we discuss its bad debt attribution methodology between paragraphs 6.96 and 6.99

Figure 6.2: Scattergram of incidence of bad debt versus price point: single drop charges



This graph shows all price points for which BT's 2009/10 revenues exceeded £½m

6.38 From these graphs it appears that there is no strong correlation between individual price point, either for pence per minute charges or for single drop charges. We therefore do not propose to disaggregate the Surcharge by price point.

There appears to be no practicable basis to disaggregate the Surcharge between terminating networks.

6.39 Two service providers [✂][✂] thought that we should mandate separate network specific bad debt Surcharges to reflect the level of bad debt incurred on that network's portfolio of NTS services.

6.40 This approach to the recovery of bad debt would in their view make the NTS micropayment mechanism akin to the credit card payment mechanism. This latter mechanism involves two banks, one signing up retailers (i.e. the merchant bank) and the other consumers. If the consumer bank notices that many of its defaulting customers have spent heavily at particular retailers, then it passes on less money to the relevant merchant bank, which in turn hands over less money to the retailers in question. As a result there is some mechanism which financially penalises retailers who provide services on credit to consumers who ultimately do not pay their credit card bills.

6.41 In principle, this sort of approach has some merit in that both the terminating network operator and its service provider customers would as a result be directly incentivised to reduce bad debt. In practice this would mean allowing BT to vary its Surcharge by terminating network, subject to the requirements of cost orientation and no undue discrimination. However this would be a complex undertaking and would require BT to withhold all termination payments until it completes its credit management processes and can identify consumers who have defaulted on their bills where there is no prospect of BT recovering any money. It would also require BT to be able to identify which calls have prompted the consumer to withhold payment which may not be possible where the entire bill is unpaid

6.42 We therefore sought BT's view on this approach. BT also thought that it had some merit but argued that there were implementation issues which would make the proposal unworkable. BT told us that it was only able to analyse the incidence of bad debt by chargeband, and not by network operator, and therefore it would not have the necessary information to implement the approach. Moreover, the TCP would need to know which of its (possibly many) SPs were responsible for the bad debt for this mechanism to work effectively.

6.43 BT also noted that Ofcom is separately undertaking a review of Non-Geographic Services, the outcome of which may be that the current system of regulation, including Ofcom capping its recovery in relation to PRS bad debt, will come to an end. BT therefore did not want to invest in developing an approach which might only be used for a short time.

6.44 In the light of these considerations, our provisional conclusion is that an approach involving separate Surcharge percentages for each network operator would neither be practicable nor proportionate at the present time given the complexities (and associated cost) which such an approach would give rise to.

Provisional conclusion

6.45 Having considered both responses to the previous consultation and our own further analysis we propose that this recovery should continue to take the form of a single fixed percentage of retail revenue.

February 2011 question 9: Do you agree with our assessment of the potential options regarding the structure of the recovery for bad debt on PRS calls?

We still propose to set the charge control to run until 30 September 2013

Summary of proposal and associated rationale

July 2009 proposal

6.46 In July 2009, we proposed to set the level of surcharge for a period of four years, from October 2009 to September 2013.

6.47 The rationale for this proposal was that a period of 4 years would effectively balance dynamic efficiency incentives and allocative efficiency benefits, and would provide an appropriate degree of regulatory certainty.

6.48 The alternative we considered was to reset the level of the charge more frequently. We provisionally rejected this option on the grounds that a four year control would:

- tend to strengthen BT's incentive to control costs;
- minimise the time spent intrusively scrutinising BT's bad debt costs; and
- provide a more stable business planning environment for stakeholders.

6.49 We asked the following question:

Question 15: Do you agree that a four year duration for the PRS Bad Debt Surcharge is appropriate?

Consultation responses

6.50 BT and another stakeholder [✂] agreed with our proposal. Cable & Wireless recognised that a four year period was administratively the most efficient option and allowed consistency of approach between the PRS Bad Debt Surcharge and the NTS Retail Uplift charge control. However, they argued that the Surcharge should be based on the bad debts of an efficient operator - C&W could not support a four year period if BT was found to be inefficient and ineffective in securing payment of PRS revenues.

6.51 AIME responded that we should review the level of the Surcharge annually. It justified this on the grounds that telecoms markets were competitive and that we should be able to set up the appropriate processes to achieve this. The PRA also thought that an annual review was more appropriate.

6.52 4D Interactive argued that we should review BT's information annually and benchmark[72] it against other economic and industry data. Another service provider [✂] argued that, in view of the then proposed increase in the level of the Surcharge, we should evaluate its impact within months of setting it[73].

We cannot impose controls beyond September 2013 without conducting a further market review

6.53 In setting charge controls, we may only take into account the conclusions reached in respect of the period covered by the market review. We are not therefore able to extend charge controls beyond the period set out in the review. When reviewing the market for wholesale call origination services as part of the 2009 Wholesale Market Review we took into account the period up to and including 30 September 2013 in forming our conclusions. This therefore sets the outer limit of the time span of remedies we can impose to address BT's SMP in that market at this time. Any further charge controls could only be imposed following a further market review covering a period after September 2013.

6.54 In the light of this, our revised proposal for the duration of the charge control is that it should apply for the period up to 30 September 2013. If we publish a statement in mid 2011, this would equate to a duration of about 2 years and 3 months.

Further analysis and provisional conclusion

6.55 As previously explained in the context of the NTS Retail Uplift at paragraph 4.39 we do not believe that the competitiveness of the retail telecoms market means that we should determine the level of the Surcharge annually. It is, however, true that competition will put pressure on BT to control bad debt along with other costs and this can reduce the need for a long duration cap in order to create efficiency incentives. There would also be some advantage to updating the level of the Surcharge more frequently in that the level would more closely track BT's latest cost levels.

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[72] We consider benchmarking of BT's bad debt incidence against other economic and industry data in our discussion of whether BT efficiently manages bad debt between paragraphs 6.131 and 6.137

[73] We evaluate the impact of the proposed increase, both direct and indirect, in annex 6.

6.56 On the other hand, we regard incentives to minimise bad debt costs as important, and reducing bad debt is consistent with our wider consumer protection objectives. BT's incentive to minimise the level of the Surcharge is also likely to be weaker than its incentive to control the underlying cost of bad debt as the greater part of the surcharge falls on other TCPs rather than BT. A longer cap also gives greater certainty to stakeholders over the level of charging and, not least, reduces the administrative burden of implementing these arrangements. For example, as well as reviewing BT's numbers we would also need to consult each year on the level of Surcharge that we proposed to apply if it were set annually.

6.57 In addition, a price cap of around 2¼ years duration would be significantly shorter than the four years originally proposed and should go some way to addressing the concerns of some respondents that we should not allow bad debt charges to get too far out of line with costs.

6.58 We do however plan that BT in future report its unit costs and revenues in its regulatory financial statement for the PRS Bad Debt Surcharge. We discuss this in section 8.

6.59 We therefore provisionally conclude that BT should be constrained in the level it can charge for the PRS Bad Debt Surcharge until September 2013 by the imposition of a cap on the PRS Bad Debt Surcharge which will apply across the period.

We propose to determine the level of the Surcharge using the following approach

6.60 Thus far in this section we have considered the form of the appropriate recovery for bad debt specific to PRS calls - a single PRS Bad Debt Surcharge - and how long we believe controls on this recovery should last i.e. until September 2013. We now consider how we propose to determine the maximum permitted level of recovery.

Summary of proposal and associated rationale

July 2009 proposal

6.61 In July 2009, we proposed that the level of the Surcharge should be 9.7% of BT's PRS revenues, based on BT's then revenue and bad debt information for 2008/09 and subject to the outcome of an independent review to assess whether BT's PRS bad debt was properly matched to its revenues.

6.62 We used BT's latest accounting data as this, if properly extracted from source data, would provide a robust estimate of the most recent incidence of bad debt on PRS calls. This in turn would provide a good basis to predict the level of Surcharge that should apply going forward, subject to a separate consideration of whether BT's debt management practices were efficient.

6.63 Given the sharp rise in BT's estimate of bad debt on PRS calls, we said that we would commission an independent review of the methodology and calculations used by BT to produce the 9.7% estimate. We made it clear that implementation of the 9.7% Surcharge would depend on the findings of this review.

6.64 Regarding our approach we asked the following question

Question 16: Do you agree with our proposed approach for the PRS Bad Debt Surcharge and in particular that we should use BT's own bad debt and retail revenue information to inform our proposal?

Reliance on BT information: consultation responses

6.65 BT and another stakeholder [✂] agreed with our approach.

6.66 AIME and 4D Interactive responded that BT's experience should form the basis of any assessment for a PRS Bad Debt Surcharge but it was also essential that BT's own bad debt and retail revenue performance should be independently assessed to ensure that the Surcharge did not effectively subsidise any BT shortcomings.

6.67 TalkTalk, a firm which operates an NTS call termination business as well as being a major retailer of telephony, wanted to understand whether there was any connection between the operation of the AIT procedures and how BT accounted for bad debt.

6.68 One service provider [✂] disagreed with the proposed approach, believing that BT was seeking to recover bad debt relating to its customers in general, not just PRS calls.

Reliance on BT information: further analysis and provisional conclusion

6.69 Almost all stakeholders agreed that the starting point for our analysis should be BT's accounting information subject to appropriate scrutiny. This scrutiny should include ensuring that the debt attributed to PRS calls only related to PRS calls and not to any other service provided by BT and that no money withheld under BT's AIT procedures was being counted as bad debt.

6.70 Having taken account of the responses received, we consider that BT's latest accounting information, this time in relation to 2009/10, suitably reviewed, provides an appropriate starting point for the development of our revised proposals.

Level of BT's apparent incidence of bad debt: consultation responses

6.71 In addition to asking about our proposed data sources we also asked the following question:

Question 17: Can you supply any evidence or other insight about the incidence of bad debt on PRS calls and in particular whether the incidence of PRS bad debt has risen substantially in recent years?

BT believed that a higher level of Surcharge was justified by its experience

6.72 BT pointed out that it had already provided information to us on its PRS bad debt experience. In its view other CPs' evidence may reflect differing operating circumstances to BT as, for example, they do not have the same regulatory obligations and customer profiles.

Others pointed to improved levels of compliance in the PRS sector as well as the low level of complaints

6.73 C&W urged us to ensure that the Surcharge was reflective of the current market, characterised by improving compliance with the PhonepayPlus regulatory regime (e.g. in relation to participation and quiz TV) rather than one reflecting a non-repeatable spike caused by the rogue dialler problems. It believed that the current

incidence of PRS bad debt would be in line with the (then) current level of Surcharge i.e. about 3%.

6.74 Many respondents including C&W, AIME, 4D Interactive, the PRA and DM plc pointed to the level of complaints logged by PhonepayPlus relating to PRS calls. According to this data, complaints about PRS calls from landlines had fallen from over 10,000 in 2005/06 to less than 2,000 in 2008/09. They also pointed out that most PRS complaints now related to calls from mobile networks.

6.75 AIME also referred to anecdotal evidence from its service provider members primarily operating in the entertainment sector. It suggested that reduced complaints were translating into a reduced level of refunds and therefore reduced bad debt. A service provider [✂] made effectively the same point saying that it had seen a huge decrease in complaints and refunds.

6.76 DM plc argued that as consumer research had shown that those who use premium rate services do so infrequently and that the amounts supplied are generally low there was no evidence base for a dramatic upward revision in the level of the Surcharge. It also pointed out that there had been no major new issues over the conduct of actors in the PRS value chain to justify such an increase.

6.77 It further pointed out that BT had been an active member of the PhonepayPlus Industry Liaison Panel but had not once put the issue of bad debt on the agenda, nor mentioned this as an issue in consultation responses to proposed revisions to PhonepayPlus's Code[74]. It cited in particular that BT, in responding to the 2008 review of Live Voice Services, had been in favour of abolishing the compensation scheme (bond payments), a measure which could protect retailers from incurring losses on account of unauthorised use of these services, the category of services most at risk from unauthorised or excessive use.

Many respondents believed that the incidence of bad debt on comparable activities was much lower than that experienced by BT

6.78 C&W believed that the fact that it had not been able to source hard information on the incidence of bad debt from its reseller partners who dealt directly with retail customers was telling: if there was a significant problem here, then it would expect this information to be available. Anecdotal evidence relating to retail customers of C&W's reseller partners had suggested that bad debt levels in total were not as high as BT was claiming solely for PRS.

6.79 The PRA said that certain of its members believed that the level of debt incurred by other network operators is far lower than the figures recorded by BT. The PRA refers to additional sources placing bad debt in the 1.5% to 2% margin for other networks.

6.80 4D Interactive also stated that its experience of bad debt for the same set of services using different payment mechanisms was less than 2%. It pointed out that as it, along with other service providers, refunded dissatisfied customers, some customers may be both defaulting on their telephony bill *and* claiming a refund. It also believed BT may be writing off as bad debt those revenues for PRS services with which its customers were dissatisfied whilst at the same time referring these customers to

[74] This code, a detailed set of regulations, often tailored to different types of PRS services, sets out how actors in the PRS value chain should conduct themselves. It is drawn up by PhonepayPlus and approved by Ofcom under the Communications Act. The latest version of this code (11th) can be found at http://www.phonepayplus.org.uk/upload/PhonepayPlus_Code_of_Practice.pdf

PhonepayPlus. As a result it believed that BT was not incentivised to chase or recover PRS debts rigorously enough.

Level of BT's apparent incidence of bad debt: further analysis

We were unable to obtain direct equivalents, for other operators, of measures of the incidence of bad debt on BT's PRS calls

6.81 We sent information requests to other major retailers of PRS calls in the UK (Virgin Media, TalkTalk and Sky) plus KCOM plc to better understand their experience of PRS bad debt. As further discussed later in this section when discussing BT's efficiency (paragraphs 6.131 and 6.132), none of these retailers were able to provide us with robust estimates of the incidence of bad debt on their PRS revenues.

6.82 Virgin Media added it had not been able to establish measures of bad debt related to PRS calls within its own customer base to the extent that BT had. It was, however, able to share some insight based on samples, snapshots and anecdotal evidence. In general, this evidence led it to conclude that its levels of PRS bad debt were at least as significant as those of BT.

We make a distinction between customers being dissatisfied with a service and being unable to pay their phone bills

6.83 Many respondents referred to the fact that there was now a refund scheme presided over by PhonepayPlus whereby customers dissatisfied with individual PRS services could obtain a refund. Furthermore the number of complaints from fixed lines about individual PRS services had declined dramatically in recent years. Whilst we acknowledge the validity of both points, we consider there to be a clear distinction between customer dissatisfaction with an individual service and an inability or unwillingness to pay for that service. For example a customer may be very happy with a service but nevertheless be unable to pay for it when the bill eventually arrives. In the same vein the number of complaints made by consumers about PRS services may not be a good indicator of whether customers are able to pay.

6.84 Whilst an individual customer of BT could in theory both claim a refund from a PRS service provider and separately ask BT to write off the same PRS charges, and hence recover the money twice, BT would not treat this write off as bad debt. Our understanding from BDO[75] is that in these circumstances BT would write off the amount concerned against revenues and not bad debt. We further understand BT only does this in exceptional circumstances where it wants to maintain the goodwill of the customer.

We do not believe the credit card payment mechanism provides a valid benchmark

6.85 A couple of respondents referred to bad debt incidence of the order of 2% experienced with other payment mechanisms. We understand that these respondents are referring to payment by credit card. As previously discussed at paragraphs 6.40 to 6.41 we do not believe that this payment mechanism can serve as a direct comparator for the NTS micropayment mechanism. The management information systems and agreements between the retail bank (the equivalent of the retailer/ originating network) and the merchant bank (the equivalent of the terminating operator) allow for a recharge mechanism to the merchant bank and then to the

[75] BDO report, page 21

merchant for bad debt experienced by the retail bank. For the NTS micropayment method there is no such mechanism to pass the cost of bad debt down the value chain in such a targeted way.

6.86 It is also much harder to obtain a credit card than to obtain telephony from BT, which has a Universal Service Obligation (USO) to offer basic telephony services to all UK consumers. Furthermore credit card companies routinely manage their customers' exposure to credit (e.g. by segmenting their customers and setting credit limits as standard) to a degree that the major UK telephony retailers do not. Credit card companies are also covered by "bill shock"[76] regulations which telephony retailers currently are not.

The consumption patterns of consumers who do not pay their bills may not be representative of the population as a whole

6.87 Regarding consumer research indicating that most consumers only use PRS infrequenly, this may well be the case. However this is not inconsistent with either some customers running up large PRS bills before being disconnected or the customers who do not pay their bills consuming a higher than average level of PRS service than those customers who do pay their bills.

We do not believe the lack of previous industry action by BT necessarily implies there is not an issue with bad debt on PRS calls

6.88 We asked BT to comment on DM's plc's observation about its conduct at the PhonepayPlus Industry Liaison Panel. BT responded that it believed it had taken appropriate action as it flagged its concerns regarding the level of the PRS Bad Debt Surcharge to the appropriate regulator, Ofcom, in 2007. As it is Ofcom that regulates the level of the PRS Bad Debt Surcharge, and not PhonepayPlus, it did not raise PRS bad debt in its responses to PhonepayPlus's consultations. In our view, the fact that BT did not raise this issue in the PhonepayPlus context does not suggest that it is an issue of minor importance for BT and the industry as a whole. We recognise that the PhonepayPlus forum seeks to address issues other than those raised in this consultation and it may not therefore have been appropriate or desirable for BT to raise such issues in that forum.

BDO's first review led to the discovery that both PRS bad debt and revenues had been overstated

6.89 We engaged BDO to review BT's 2008/09 bad debt and revenue information. As BDO were completing their review, BT explained that it had found coding errors in the information it had supplied to us which had supported the calculation of the Surcharge at 9.7%:

- bad debt relating to 0844 and 0871 calls had been incorrectly labelled as PRS calls rather than 'normal' NTS calls; and
- certain revenues relating to non-PRS services had been incorrectly labelled as PRS.

[76] Bill shock occurs when, for whatever reason, a consumer receives an unexpectedly high bill.

6.90 0844 and 0871 numbers host services currently charged at up to 5 pence per minute or per call and up to 10 pence per minute or per call inclusive of VAT, respectively, from BT lines. Despite the fact that services using 0871 numbers are classed as Controlled Premium Rate Services for the purposes of PhonepayPlus regulation, calls to 0871 remain outside of the traditional definition of PRS calls where prices generally range from a minimum of 10 pence per minute or per call up to a maximum of £1.50 per minute or per call including VAT, from BT lines.

6.91 The revenue data which supported the July 2009 Consultation proposal of 9.7% wrongly included BT Wholesale Calls, PRS revenues, speaking clock revenues and personal numbering services (PNS). BT Wholesale Calls is not a service it provides to BT's retail customers and should not therefore be subject to the Surcharge. Neither BT's speaking clock service (now marketed as Timeline) nor PNS are PRS services.

6.92 At the same time BT supplied updated calculations correcting for both these coding errors which suggested that a PRS Bad Debt Surcharge of 5.2% would be justified based on actual 2008/09 data. BT also indicated that the 'normal' NTS bad debt which had been wrongly coded to PRS calls should now be recovered through the NTS Retail Uplift charge.

BDO has reviewed BT's 2009/10 numbers

6.93 As already explained at paragraph 2.41 in the Introduction, by the time BT had provided its estimate of the level of the Surcharge based on its revised and reworked 2008/09 data we were well into 2010. Because this BT estimate of the incidence of PRS bad debt for 2008/09 had almost halved from the previously estimated level we realised we would have to reconsult on the Surcharge's future level.

6.94 Given the need to reconsult, and the time involved in doing so, it also became apparent that the new Surcharge could not be finalised before accounting data for 2009/10 were expected to become available, in July 2010. We therefore decided to delay the publication of the revised proposals so that account could be taken of the results for 2009/10. We also extended BDO's remit to include a review of the methodology and the calculations used by BT to estimate PRS bad debt in 2009/10.

6.95 Although the information was originally expected to be available in July 2010, BT supplied the 2009/10 data and supporting document to BDO in early October 2010. BDO completed its review in November 2010.

We provisionally conclude that BT's approach to attributing 2009/10 bad debt to PRS calls in 2009/10 is fit-for-purpose

6.96 In contrast to its revenue data, BT is not readily able to analyse its bad debt charge by service. This means that whilst BT can readily provide revenues, for example, for each different call type including PRS calls, any precise analysis of bad debt needs first to examine the service composition of the balances written off on individual customer accounts. BT's billing systems do not readily generate this information, a feature we learnt that its billing systems share with other major UK telephony retailers.

6.97 BT therefore has to estimate the share of bad debt charge which relates to PRS calls. In essence BT examines the revenues relating to a sample of its customers whose account balances have been written off: the proportion (%) which relates to

PRS calls is then applied to BT's total bad debt charge to derive an estimate of PRS bad debt. We refer to this approach to estimating the share of the total bad debt charge which relates to PRS calls as BT's bad debt attribution methodology. The key assumption underpinning this methodology is that the revenues examined are representative of the composition of the balances written-off.

6.98 What is relevant to the Surcharge is not the absolute value of this estimate of PRS bad debt but its proportion of the corresponding revenue for the same period. We call this the incidence of bad debt and it reflects the proportion of revenue that it is estimated will eventually not be paid by the customers who generated the revenue in the first place.

6.99 In 2009/10 BT used two different systems to bill its customers, CSS and Avalon, the roll-out of the latter being BT's response to an Undertakings[77]requirement to fully separate its retail from its wholesaling billing systems. For the CSS billing system, BT estimated the incidence of PRS bad debt by examining the composition of the 12 months revenues prior to termination of service for the sample of written off accounts. For the Avalon system BT was able to analyse the uncleared bills on the sample of written-off accounts, a concept close to but not quite the same as the balance written off[78]. BT then calculated the proportion of the total bad debt charge to attribute to PRS calls by weighting the two percentages calculated for each billing systems by total write-offs sampled on each billing system. Using this approach BT estimated that the incidence of bad debt on PRS calls for 2009/10 was 5.4%.

6.100 This incidence of 5.4% is therefore the weighted average of the incidence of bad debt on PRS calls across the CSS and Avalon billing systems. In one respect, the disaggregated incidence relating to the Avalon billing system (4.9%) should provide a better estimate than CSS (5.8%) as the Avalon approach more closely approximates the composition of the amount written off. However, the accounts on the Avalon system are not representative of the whole population. For example, they only relate to residential customers, and then only those customers who, because of their unproblematic track record, BT has migrated from the CSS to the Avalon billing system first. It would not therefore be appropriate to rely on the Avalon data alone. We therefore conclude that the weighted average incidence of 5.4%, i.e. that based on the experience of both CSS and Avalon customers, provides the best estimate of the overall incidence for 2009/10

6.101 BDO has reviewed in detail both the appropriateness of BT's attribution methodology and its application in practice. It has also reviewed the associated revenue figures necessary to estimate the incidence of bad debt. BDO has concluded[79] that both BT's methodology in principle and its application to its 2009/10 data provide a robust foundation for estimating the incidence of bad debt on PRS calls.

6.102 We therefore provisionally conclude that we should rely on these estimates of the incidence of bad debt generated by BT's application of its bad debt methodology to its 2009/10 data as the starting point for our revised proposals for the level of the Surcharge.

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[77] http://stakeholders.ofcom.org.uk/binaries/telecoms/policy/bt/consolidated.pdf
[78] These two concepts are further explained on page 38 of the BDO report.
[79] BDO report, page 15 (albeit couched in terms of the level of the PRS Bad Debt Surcharge and not the incidence of bad debt).

February 2011 question 10: Do you agree that BT's attribution methodology for bad debt is an appropriate starting point to use in assessing the incidence of bad debt on PRS calls?

The level of the Surcharge has been calculated in exactly the same way as previously

6.103 The Surcharge is the additional cost of bad debt for PRS calls, expressed as a percentage of revenue, that is in excess of the standard level of bad debt associated with non PRS NTS calls. We explain the concept of the standard level of bad debt relating to non PRS NTS calls at paragraph 5.192. The mechanics of this calculation are set out in paragraphs A9.11 and A9.14.

6.104 This is the approach we adopted in our July 2009 Consultation, in the 2005 Statement and also in previous determinations on the level of the Surcharge.

6.105 Applying this approach to calculate the level of the Surcharge to BT's estimates for service-level bad debt and the associated revenue figures gives us an estimate for the PRS Bad Debt Surcharge for 2009/10 of 5.2%[80].

The latest evidence confirms that the incidence of bad debt for PRS calls is significantly higher than for other call types

Table 6.1: Incidence of bad debt across different call types for 2009/10

Bad debt as a percentage of revenue

NTS calls		Other calls	
PRS	5.4%	*Residential customers*	
Higher rate NTS	3.0%	Calls to mobile	✂
Basic rate NTS	2.2%	National	✂
		Local	✂
		Business customers	
		Calls to mobile	✂
		National	✂
		Local	✂

6.106 The estimates of the incidence of bad debt for other call types have been calculated using the same methodology and the same source data as for PRS calls as described in paragraphs 6.95 to 6.97.

6.107 There are a number of factors which may contribute to the higher incidence of bad debt on PRS calls:

- The average pence per minute charge for PRS calls is much higher than for other call services;

[80] The Surcharge % of 5.4% is not simply equal to difference between the incidence of bad debt on PRS calls and incidence on basic (2.2%) and higher rate (3.0%) NTS calls because bad debt on NTS calls is recovered via a pence per minute recovery as explained in paragraphs 5.190 and 5.192. The incidence figures quoted in table 6.1 are all expressed as bad debt as a percentage of the related revenues.

- Calls may be more likely to have been made without the bill payer's consent; and
- The service is more likely to be subject to undetected fraud.

6.108 PRS calls are typically much more expensive (average 63ppm in 2009/10 excluding VAT) than other call types. As a result if a consumer makes a lot of these calls he or she can run up a large bill which they may not be able to pay. However we do not believe that the absolute level of the price of the call is the only factor driving the relatively high incidence of bad debt on PRS calls. As explained in paragraphs 6.35 and 6.38 we found no evidence of there being a good correlation of the incidence of bad debt and the price point *within* PRS calls.

Calls may be more likely to have been made without the bill payer's consent

6.109 We also reviewed the complaints made to our contact centre and correspondence from MPs concerning PRS calls. We found some evidence to support the view that, at least in some cases, members of the household who were not the bill payers had run up significant PRS call bills. Whilst this may or may not in an individual case lead to non payment of the bill, it is likely to be a factor in explaining the higher than average incidence of bad debt on PRS calls.

PRS calls are more likely to be subject to undetected fraud

6.110 PRS calls generate the highest revenue shares of all NTS calls and therefore may attract fraudsters who seek to dishonestly obtain monies via scams using PRS numbers. BT in conjunction with the rest of the industry has taken steps to stop the flow of revenues down the value chain where it reasonably suspects fraud, through the development of AIT (Artificial Inflation of Traffic) processes.

6.111 AIT can take a number of forms such as unexpected volumes of traffic to specific PRS numbers where BT suspects that calls may be being made to generate a fraudulent or unreasonable revenue share. Other types of AIT include generating large volumes of very short duration calls, usually to mobiles, in order to tempt the recipient to call the number presented by the CLI of the incoming call. Because the calls are so short the recipient cannot answer them in time and, thinking they have missed something, may call the CLI presented to find out who rang them. The CLI itself usually presents as a high value PRS number where the generator of the 'missed call' receives a fraudulent revenue share from their 'victim'.

6.112 BT's AIT processes are designed to identify these and other types of fraud and BT will withhold payment of a revenue share unless the TCP or its retail customer can provide evidence that the calls are genuine. Even though the caller may not pay for the fraudulent calls, since no termination payment is made BT does not treat this as bad debt.

6.113 However, where fraud occurs but is, for whatever reason, not suspected and therefore the AIT processes are not invoked, BT will make termination payments to the TCP in the normal way. If these calls are not ultimately paid for (which, if they are fraudulent, they will not be) BT will write off the customer debts as bad debt.

6.114 We understand from BDO[81] that no revenue withheld by BT under its AIT processes is recorded as bad debt. However it is inevitable that BT will not identify all cases of

[81] BDO report, page 23

fraudulent activity on PRS calls. To the extent that such fraudulent activity causes BT to write off customers' bills for non payment, then such write offs will find their way into BT's bad debt charge for the year and push up the incidence of bad debt.

Other major UK retailers of telephony services also have payment issues with PRS calls

6.115 In order to gain some further insight into what it is about PRS calls that may give rise to a higher incidence of bad debt, we asked a number of major retailers of telephony services in the UK to provide some additional information on written off accounts. Each retailer was asked to analyse the outstanding balances of the top 30 retail residential customer accounts by value (regardless of whether they contained any PRS calls or not) that they had disconnected for reasons of non-payment/bad debt during the months of December 2008, March, June and September 2009. Where the PRS element was over £50 we asked them, for each PRS service accessed, not only to identify total charges to that number but also to obtain from PhonepayPlus's number checker the description and the supplier of the service.

6.116 The information we obtained from this analysis indicated that customers of all the major retailers were able to run up large bills, some over very short timescales, arising directly from PRS calls leading ultimately to their disconnection. Services featuring heavily in this analysis included, but were not limited to, adult content and psychic services, often at £1.50 a minute. BT's disconnected customers were typically billed quarterly and paid by manual methods whereas the other major suppliers billed monthly and insisted on payment by direct debit or otherwise imposed a significant payment charge.

6.117 We were unable to draw any robust conclusions pinpointing the precise causes of PRS bad debt from this analysis, not least because it related to an unrepresentative sample (the highest balances on disconnection) from populations that varied significantly in size (BT's 16m residential versus Sky's 2m telephony customers). However we do believe we can conclude that the relatively high incidence of bad debt on PRS calls arises in part from the nature of the calls, and that BT's experience is not unique here.

6.118 In addition, and as already mentioned at paragraph 6.82, one of the other major retailers of telephony services, Virgin Media, had explained to us that it believed that, like BT, it experienced a high rate of bad debt on PRS calls.

We have found no clear evidence that BT has been inefficient in managing bad debt on PRS calls

6.119 When setting the level of regulated charges we normally first obtain the most up to date information on the costs the firm has incurred in providing the relevant service. We then consider whether these costs have been efficiently incurred, in order to judge whether an efficiency adjustment is merited. We adopt this approach here.

6.120 Efficiency here means BT minimising the level of bad debt consistent with responding to commercial and competitive pressures, related to the reasonable demands of its customers, and with meeting its regulatory obligations. It follows from this definition that the efficient level of bad debt may not necessarily be the minimum level of bad debt achievable. For example BT might be able to minimise its bad debt by charging for all services in advance. But this might not be efficient because it might induce customers to move to competing providers who are prepared to offer more flexible

payment terms. It might also be regarded as potentially incompatible with BT's universal service obligations. We discuss some of these broader aspects of efficiency in paragraphs 6.141 to 6.151.

6.121 In the previous consultation we argued that, notwithstanding BT's ability to pass on inefficiently incurred bad debt through the Surcharge, it was under commercial pressure to keep bad debt under control. In other words BT was under a competitive incentive to control the level of its customers bad debt, most of which is unrelated to PRS calls and not recoverable through the Surcharge, as it is with other retail costs. In addition the overall level of bad debt is known to be correlated with general economic conditions, a factor outside BT's control. Scams are also to a large extent outside its control.

6.122 On the other hand, most (circa ✂) of the PRS Bad Debt Surcharge is borne by CPs other than BT. The concern here is that BT's incentive to minimise bad debt on PRS calls might be weakened by its ability to pass on any inefficiency to its rivals in downstream markets.

6.123 Over the course of the past year or so a number of stakeholders have made representations to us, including in consultation responses, that the proposed level of the Surcharge was inconsistent with BT operating efficiently. In their view, the reported level of bad debt signalled that BT's bad debt management processes were deficient.

6.124 Some respondents to the consultation, including DM plc and AIME, believed BT's quarterly billing to be an explanatory factor for the high incidence of bad debt, and stated that monthly billing is standard best practice in the telecoms sector.

6.125 In the light of these considerations, we asked BDO to review BT's bad debt management practices and give an opinion on whether they followed best practice. We have also considered separately in paragraphs 6.141 to 6.152 whether BT's practice of quarterly billing should give rise to an efficiency adjustment.

BDO have concluded that BT follows good practice, while setting out a number of possible factors contributing to the levels of PRS bad debt

6.126 BDO concluded that BT had been able to demonstrate that it has reasonable credit management processes and controls in place to efficiently manage debt. BT's processes, policies and procedures are well documented and demonstrate good practice. Given this, BDO concluded that BT's general debt management processes and controls do not significantly contribute to the higher level of bad debt on PRS calls[82].

6.127 BDO commented on a number of aspects of BT's debt management processes which it thought may possibly contribute to the relatively high incidence of bad debt on PRS calls. Their comments are[83]:

- 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;

[82] BDO report, page 15
[83] BDO report, page 10

- 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; and

  BT has policies for setting either a usage or credit limit on accounts but this is not applied to all customers as standard.

6.128 BDO has pointed out that whilst BT could implement other debt management processes and procedures specifically relating to PRS, these would have a cost. BDO report that BT has assessed that the costs of implementing possible additional debt management processes and procedures are likely to outweigh the benefits[84].

6.129 The suggestion here is that, whilst the introduction of some PRS-specific debt management procedures might lead to some reduction in the level of PRS bad debt, it is not clear that it would be cost effective to introduce such changes. In other words, the costs of bringing in some PRS specific procedures, which were not assessed by BDO, might outweigh the consequential benefits of bad debt reduction. It should also be noted that, if BT were to introduce some PRS-specific bad debt management practices, the cost of running them should arguably be recovered through the PRS bad debt surcharge.

6.130 The full findings of BDO on this matter are set out in its report.

BT's overall performance does not appear to be out of line with that of other major retailers of PRS calls

We were unable to benchmark the incidence of bad debt specific to PRS calls

6.131 As described at paragraph 6.81 we were unable to obtain information from other major UK retailers that would enable us to benchmark the incidence of bad debt on PRS calls. None of these retailers was able readily to isolate bad debt on PRS calls from other services billed alongside these calls.

6.132 It was apparent that the only way other retailers had of establishing the incidence of bad debt on PRS calls would have been to manually analyse a representative sample of the balances written off on account of non-payment. In view of the difficulty involved and the time it took for these retailers to analyse the 30 highest balances on disconnection for a sample of 3 months, we do not believe that it would have been proportionate for us to require these retailers to generate this information.

BT's incidence of bad debt across all services including PRS calls does not appear out of line with other major UK telecoms service retailers

[84] BDO report, page 15

6.133 As we were unable to establish directly comparable information for bad debt on PRS calls specifically, we asked Virgin Media and TalkTalk, the other major retailers of telephony in the UK whose business models are most similar to BT's, for their overall bad debt charge and revenues so that we could calculate their overall incidence of bad debt.

6.134 This analysis focussed on residential customers as, according to BT's own analysis, this is the customer segment which generates the vast bulk (80%+) of PRS revenue.

Table 6.2: overall incidence of bad debt across retailers for 2009/10 (%)

BT	✂
Virgin Media	✂
Talk Talk	✂

VM data relates to calendar year 2009

6.135 This information indicated that BT's *overall* incidence of bad debt is similar to that of these other major retailers of UK telephony.

We do not believe that consumer protection issues related to PRS calls are best addressed through the design of the charge control

6.136 As mentioned at paragraph 6.11 we have not focused on consumer protection issues related to PRS calls in this consultation. Nevertheless two responses we received to our July 2009 consultation touched on this angle. For completeness we therefore set out these points, and our response to them, below.

PRA and DM plc comments on consumer protection measures

6.137 The PRA in its consultation response advocated mitigation rather than compensation as the appropriate and sustainable response. It suggested we consider mandating call barring or prepayment from high risk customers as possible solutions.

6.138 DM plc argued that many issues over consumer debt attributed to these services must be addressed as part of an overall package. It believed that the issue of bad debt provision and the methodology for setting and reviewing the provision should be dealt with as part of the broader strategic review of regulation and consumer protection, which was then being conducted under the auspices of the PRS Scope Review[85].

6.139 As described at paragraph 6.11 the introduction of such measures is not a matter for this consultation and would require the imposition of measures under consumer protection powers. We have not imposed obligations on CPs to mandate call barring or prepayment for high risk customers as a consumer protection mechanism and there are, at present, no consultations which address this issue. We do not therefore consider that it is appropriate to consider those issues in the context of this exercise since it is unlikely that such measures will be in place over the period in which the charge control will apply.

[85] http://stakeholders.ofcom.org.uk/binaries/consultations/prs_scope/summary/prsscope.pdf published 15 May 2009

6.140 We have now published a statement[86] as part of the PRS Scope Review. The Scope Review examined many of the points touched upon by DM plc, including the link between regulation and consumer protection. However, it was not the appropriate vehicle for the consideration of BT's efficiency in recovering bad debt arising from PRS calls.

We do not have evidence that BT would more efficiently collect bad debt if it billed all its customers monthly

For BT, the benefits of billing its customers quarterly appear to outweigh the possible costs, including potentially a higher incidence of bad debt on calls

6.141 We note that it is standard practice for telecoms retailers in the UK, both fixed and mobile, to bill monthly. The main exceptions to this are the two USO operators, BT and KCOM plc, who both bill a significant proportion of their customers quarterly. In BT's case, around 50% of residential customers pay quarterly. The advantages of billing monthly include the bill payer being better able to monitor usage and the retailer being able to identify payment problems sooner.

6.142 The billing cycle will also have an impact on the cash flows of the telecoms provider. BT bills for its line rental service in advance and for calls in arrears. Quarterly billing will therefore have a positive impact on cash flows from line rentals but a negative effect on cash flows from calls. We have examined the relative size of these effects and estimate that, on balance, BT is likely to derive a small cash flow benefit from billing residential customers quarterly. Specifically, we estimated that BT derives a benefit of 0.3% per year on its total retail residential revenues which it currently bills quarterly instead of monthly. This translates into a £0.7m a year benefit to BT.

Monthly billing could allow both BT and customers to identify payment issues earlier

6.143 Whilst BT's use of quarterly billing suggests that, overall, it derives a net benefit from the practice, our concern is that this may be at the cost of a higher level of bad debt on call services in general, and PRS call services in particular. If that were the case, it is not clear that BT should be able to recover the incremental bad debt from other CPs through the PRS bad debt surcharge.

6.144 According to BDO a monthly billed customer can incur call charges for up to [✂][87] days without making any payment before BT would stop the customer from making further calls. In contrast a quarterly billed customer can incur a further 60 days worth of charges without making any payment (in addition to the [✂] days) before being prevented from making further calls. Likewise customers would potentially be alerted much earlier to the extent of their call charges if they were billed monthly. Other things being equal, this suggests that monthly billing would reduce the incidence of bad debt on all call types, and in particular PRS calls.

[86] http://stakeholders.ofcom.org.uk/binaries/consultations/prs_scope/statement/prs.pdf published 28 October 2009
[87] BDO report, page 77

However other factors may be much more significant in determining the incidence of bad debt

6.145 We asked BT to provide us with its bad debt and revenues for 2009/10 analysed by billing frequency so that we could calculate the overall incidence of bad debt by billing frequency. BT however informed us that it is not able to identify the incidence of bad debt relating to its monthly billed customers separately from its quarterly billed customers.

BT argues that other underlying factors would largely explain any higher incidence of bad debt associated with quarterly billing, even if such a difference could be identified

6.146 Even if we had been able to establish the differential in incidence of bad debt across all services billed together, BT contends that it would not be not possible to infer that moving its quarterly billed customers onto monthly billing would lead to a reduction in the incidence of bad debt. The differential incidence between the two billing frequencies is in its view due more to the different profile of customers and the methods of payment they choose than to the frequency of billing. It points out that:

- historically, its policy has been that customers must not be forced to adopt an automated payment method. This is linked to BT's role as USO provider, and the fact that, for example, consumers may not have bank accounts; and

- for many years monthly billing was only offered in conjunction with automated payment.

6.147 BT adds that its monthly billing customer base is almost entirely composed of either current or former direct debit (DD) customers. This is evidenced by the continuing significant differential in the DD penetration between the monthly and quarterly billing customer groups.

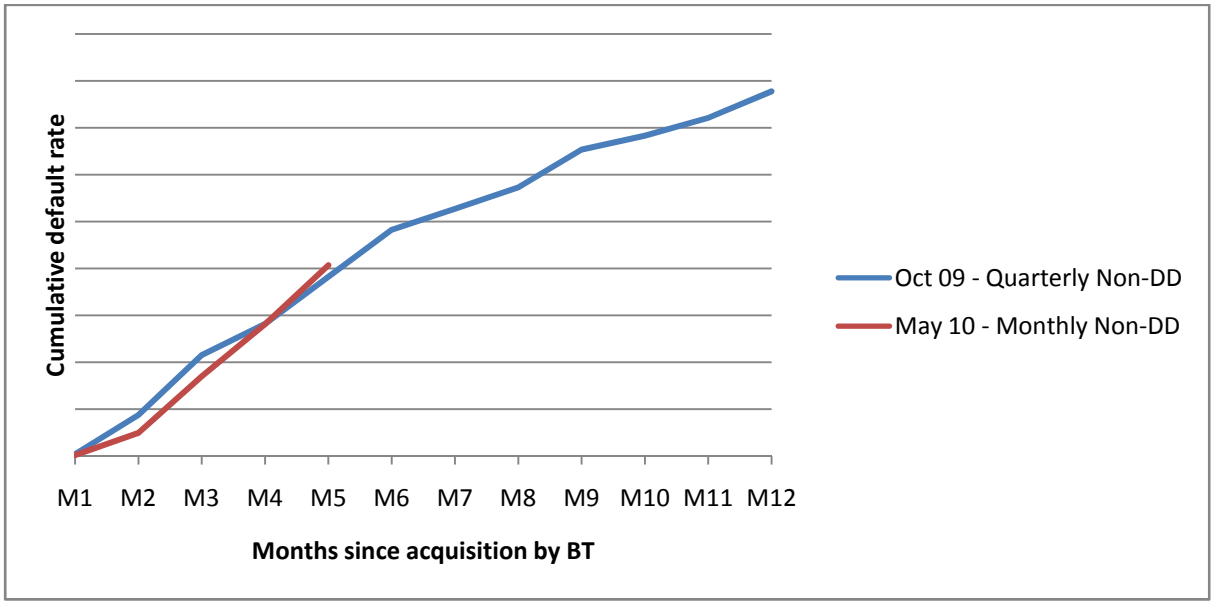
6.148 BT believes that, whilst there is not necessarily a causal link between DD payment and bad debt incidence, there are a number of characteristics associated with customers likely to default that have an impact on DD sign up. Specifically, customers with no intent to pay, customers with no funds, customers with uncertain funds and customers demonstrating all the socio demographic indicators of high default propensity are all significantly less likely than others to supply bank account details for a service where none is required.

6.149 BT's policies in relation to monthly billing have led to a fundamental difference between the customers who have selected a combination of monthly billing and DD and those who have not. This difference is further evidenced by the fact that the monthly billing customers typically spend more and have higher concentration of broadband use than quarterly customers. For these reasons, BT believes that it would be wrong to conclude that any lower default rate amongst the monthly billed population was a direct consequence of their being billed monthly.

6.150 To support its contention that bad debt is much more strongly associated with those customers who are not prepared to sign up to direct debit payment and supply banking details, BT has recently tracked by billing frequency new customers which fell within the same (low) credit score rating range from acquisition to default and concluded, based on the graph shown below, that there was no appreciable difference in default rate between the two sets of customers. When we put to BT that we had observed that individual customers could run up very substantial debt from

making PRS calls[88] BT explained that these cases would not be reduced by monthly billing as these sorts of balances were typically run up in a matter of days.

Figure 6.3: Cumulative default rate[89] for newly acquired high credit risk residential customers – monthly versus quarterly billing



Source: BT

6.151 BT acknowledges that monthly billing does have the potential to reduce the average value of bad debt in certain circumstances. For example, at the margins, the presentation of lower value bills could prevent a situation where certain customers find themselves with a bill that they cannot afford to pay (although through the BT Payment Card BT has long offered the opportunity to spread payments to minimise the potential shock of future bills irrespective of bill frequency). However, returning to the causes of default, and to key variables in terms of default propensity, BT contends strongly that bill frequency has little relevance either as cause or mitigation of absolute default rate.

We do not believe that there is a sufficient case to make any efficiency adjustment

6.152 Our provisional conclusion is that there are insufficient grounds for making an adjustment to the PRS Surcharge on the basis of inefficiency. In reaching this view, we have taken account in particular of the following points:

- BDO's finding that BT's bad debt management processes reflect good practice[90];
- BT's overall incidence of bad debt is broadly comparable with that of its main competitors in the retail market for fixed telephony services[91]; and

[88] As described in paragraph 6.116
[89] The scale of the Y axis has been redacted (i.e ✂)
[90] Paragraph 6.126
[91] Paragraph 6.135

- it is not clear that BT's use of quarterly billing is inefficient.There appears to be no evidence to indicate that of itself monthly billing would reduce default rates[92] and therefore the incidence of bad debt. In addition transferring customers from quarterly billing would clearly involve some additional costs for BT and be potentially disruptive to its existing customers.

- Account should also be taken of BT's USO status, and the fact that a significant proportion of its customers may not be in a position to pay by direct debit. The costs of moving these customers onto monthly billing and collection may be especially high; and

6.153 We therefore propose not to make an efficiency adjustment to our estimate of the actual level based on the most recent available data.

February 2011 question 11: Do you agree with our view that no adjustment should be made to the PRS Bad Debt Surcharge for inefficiency? If not, please provide analysis and evidence to support your arguments.

We propose to set the level of the Surcharge at the revised level at the outset of the charge control

6.154 Having established the proposed level of the Surcharge we now consider one final structural issue i.e. whether the proposed level should be introduced immediately or phased in.

Summary of July 2009 proposal and associated rationale

6.155 In July 2009, we proposed that the level of the Surcharge should be adjusted to 9.7% of BT's PRS revenues at the outset of the charge control.

6.156 We acknowledged the significant negative impact which this would have had on the level of PRS outpayments to TCPs and then to SPs providing services on PRS number ranges and considered whether this increase should be phased in. We thought that on balance it was more appropriate for BT to be able to fully recover its reasonably incurred costs and to reflect the bad debt cost caused by PRS calls in this wholesale charge as soon as practicable. We noted in this respect that, under proposals contained in the 2009 Wholesale Market Review Consultation, BT would be required to give 90 days notice of any change in charges.

6.157 We asked the following question

Question 18: Do you agree that in these circumstances that a one-off adjustment to the PRS Bad Debt Surcharge at the outset of the control, rather than phasing it in over time, is appropriate?

Consultation responses

6.158 BT agreed with our proposal, stating that it saw that there was no reason to adopt an alternative approach to that adopted previously. Another stakeholder [✂] agreed that given the disparity between the existing level and the proposed level, a one off

[92] Paragraph 6.150

adjustment at the outset was appropriate. This retailer further argued that it was critical for retailers to be able to recover their legitimately incurred costs.

6.159 C&W advocated the use of a glide path to avoid market price shocks which would have a dramatic detrimental impact on service providers and ultimately consumers.

6.160 AIME wanted a system that ensured the lowest possible Surcharge at any given time. 4D Interactive wanted to see the Surcharge set at the correct level at the outset of the control.

6.161 One service provider [✂] said it could not agree with an increase to 9.7% being justified regardless of how it was introduced.

Further analysis and provisional conclusion

6.162 We have considered the views of stakeholders. We note that the new proposed PRS Bad Debt Surcharge is much lower than the 2009 proposal, at 5.2%. This in itself will help to address the concerns of stakeholders, expressed in response to the 2009 consultation, about adjusting to the new rate without phasing.

6.163 A further reason for not phasing in the increase is that to do so would mean that the costs of PRS bad debt would have to be borne by customers for other BT services, for example, service providers using other NTS numbers, or their customers. We think this would be undesirable since we regard PRS bad debt as being caused by the provision of PRS calls, and part of the incremental costs of such calls (as we noted earlier at paragraph 6.16). Hence our proposal for the PRS Bad Debt Surcharge is consistent with the way we have implemented one-off adjustments to charges at the start of other charge controls. For example at the start of the current leased line charge controls, BT was allowed to make one-off increases to charges which were below DLRIC (BT's "distributed" long run incremental cost) to bring them up towards that level.

6.164 Finally we note that some of BT's other regulated charges (in other markets) are only borne by BT's competitors (and not BT itself) and, where these need to increase, we may need to consider phasing. But the new surcharge applies equally to all TCPs and service providers and so again we believe that the consistent approach is not to phase in the change to the PRS Bad Debt Surcharge.

6.165 We therefore consider that the charge control in respect of the PRS Bad Debt Surcharge should come into effect on the first of the month following our final statement which we anticipate will be June 2011. This is to coincide with BT's monthly billing cycle and ensures that CPs are not required to invoice BT twice for their termination payments at the end of the month which would be necessary if the new PRS Bad Debt Surcharge were introduced in mid-month.

February 2011 question 12: Do you agree that in the current circumstances it is appropriate for the PRS Bad Debt Surcharge charge control to have effect on the first of the month following our final statement? If not, please supply reasons why this would be the case.

The revised level of the Surcharge only has prospective effect

6.166 As with all other charge control regulation our decisions on the level of charges only have prospective effect. However, at the end of March 2010, BT notified TCPs of an increase in the level of the PRS Bad Debt Surcharge to 5.24% with effect from 1 July

2010. A number of TCPs failed to agree to this increase and BT referred a dispute under section 185 of the Act for Ofcom to resolve on 5 January 2010. BT has subsequently withdrawn its referral of the dispute pending further negotiations as a result of this consultation.

6.167 Should BT be unable to agree terms with TCPs for the period up to the date on which the charge control takes effect, it may resubmit that dispute and we will consider what the appropriate level of the PRS Bad Debt Surcharge over that period should be.

Provisional conclusion

6.168 We therefore propose that the charge control for bad debt specific to PRS calls should continued to take the form of a single fixed percentage of BT retail revenues and that the level we determine should run until 2013. We propose that the level of the Surcharge should be 5.2% of BT's PRS revenues.

6.169 In addition we propose that there should be a one-off change to the level of BT's retention at the outset of the control, allowing BT to adjust to the new level as soon as practicable and that the PRS Bad Debt Surcharge control should therefore take effect on the first of the month following our final statement.

Section 7

Implementation of the proposed new SMP conditions

Introduction

7.1 The purpose of this section is to summarise briefly the aims and effects of the proposed charge controls and explain how we consider that our further proposals meet the relevant legal tests.

The aim of the charge control is to prevent excessive charging by BT and thereby help to ensure fair competition in downstream markets

7.2 The aim of the proposed charge controls, both the RPI-X charge control on the NTS Retail Uplift and the PRS Bad Debt Surcharge, is to prevent BT from setting excessively high charges for the retailing components of NTS call origination services thereby increasing its overall charge for originating NTS calls (i.e. the origination charge plus the Retail Uplift). They also prevent BT from leveraging its market power from call origination into downstream markets by imposing a margin squeeze on TCPs, which would prevent TCPs from competing with BT in the provision of downstream services such as voice NTS services.

We have considered whether our proposals comply with the relevant tests in the Act

7.3 Below we set out the reasons why we consider that our proposals for the NTS Retail Uplift charge control and PRS Bad Debt Surcharge comply with the relevant tests in the Act. In Annex 10 we set out further details about the legal framework.

7.4 In conducting the tests we have considered the RPI-X control on the NTS Retail Uplift and the PRS Bad Debt Surcharge at the same time. This is because their aims are exactly the same, i.e. to limit BT's retention in relation to retailing NTS calls on behalf of TCPs to a cost-based charge.

7.5 To give regulatory effect to our policy proposals summarised above, we have proposed a new SMP condition (AAA4(NTS)) in respect of the NTS Retail Uplift and a modification to SMP condition AAA11.5 to give effect to the PRD Bad Debt Surcharge control. We have also proposed an incidental modification to SMP condition (AAA3). The text of those conditions is attached in Schedules 1, 2 and 3, respectively, to the statutory notification published under section 48(2) of the Act at Annex 11 to this document.

The proposals must comply with our duties and policy objectives

7.6 We consider that the performance of our general and specific duties under sections 3 and 4 of the Act is secured or furthered by the way we have designed the proposed charge controls. These duties are set out in further detail in paragraphs A10.6 to A10.11.

7.7 We have had particular regard to the requirements to promote competition and to secure efficient and sustainable competition for the benefit of consumers, which are relevant to both sections 3 and 4 of the Act.

7.8 We have also borne in mind the need to seek the least intrusive regulatory measures to achieve our policy objectives.

The proposals must satisfy the tests which apply to the setting of charge controls

7.9 In the 2009 Wholesale Market Review Statement we concluded that BT has SMP in the market for wholesale call origination on a fixed narrowband network in the UK, except the Hull Area.

7.10 Section 87(1) of the Act provides that, where Ofcom has made a determination that a person has SMP in an identified services market, they shall set such SMP conditions authorised by that section as they consider it appropriate to apply to that dominant provider. Section 87(9) authorises the setting of SMP services conditions, including price controls and the setting of rules in relation to recovery of costs and cost orientation.

7.11 Before setting SMP conditions falling within section 87(9) we are required to ensure that the conditions in section 88 are met. Those conditions are discussed in more detail at paragraphs A10.29 to A10.39 and we consider below their application in the present case.

There is a risk of adverse effects arising from price distortion

7.12 As set out at paragraph 16.24 of the 2009 Wholesale Market Review Statement, there is no competitive market for the provision of NTS call origination. As a result, in the absence of a charge control, BT would be able to set or maintain its charges at an excessively high level. Were this to be the case, the ability of TCPs to offer NTS services to their own service provider customers would be severely impeded. TCPs would therefore be unable to compete and end-users would be prejudiced by both the lack of competition and the likelihood of pass through of excessive charges. In those circumstances, we are of the view that BT's SMP in call origination gives rise to a risk of adverse effects arising from price distortion for the purposes of section 88(1)(a) of the Act.

Promote efficiency

7.13 The imposition of a charge control of the nature proposed will promote efficiency since the level of the NTS Retail Uplift Control and the PRS Bad Debt Surcharge requires BT to price at the level of an efficient firm in the absence of competitive constraints in the relevant market for NTS call origination. In the absence of a charge control of this nature on these elements of charges for NTS call origination, there is a risk that BT could price at a level which was not related to efficiently incurred costs as a result of its ability to set charges at an excessively high level. We are therefore of the view that the proposed charge controls will promote efficiency by ensuring that BT does not set charges at a level above the costs of an efficient operator. Indeed, our proposals will further promote efficiency in that BT has an incentive to outperform our charge controls as it will be able to keep such benefits during the lifetime of the control.

Promote sustainable competition

7.14 The proposed charge controls prevent BT from charging excessive prices for the retailing element of its call origination retention on NTS calls. This in turn ensures that other CPs incur only those costs which are necessary in connection with the retailing of NTS calls, thereby enabling them to compete sustainably and effectively with each other and BT in the market for NTS termination and hosting. In the absence of such controls, BT could set charges at an excessive level thereby increasing the charges which CPs competing at the retail level will be forced to offer their customers in order to avoid incurring a loss. As a result, competition in the retail markets would be significantly weakened. The charge controls therefore serve to promote competition in line with section 3 of the Act by ensuring both that competition is promoted and that end-users are able to derive the benefits which flow from that competition in terms of price and innovation.

Confer the greatest possible benefits on the end-users of the public electronic communication services

7.15 The proposed charge controls are designed to sustain the provision of NTS calls at lower cost and to foster effective competition between terminating networks and SPs, the benefits of which are likely to be passed on ultimately to end-users of NTS calls. Hence our proposals would confer the greatest benefits on end-users of the public electronic communication services possible within the current regulatory framework for NTS calls[93].

The proposals must satisfy the tests which apply to all conditions

7.16 Once it has been determined that the imposition of price controls is appropriate and that the market analysis demonstrates that the conditions in section 88 are met, we must ensure that the conditions which are imposed meet the tests set out in section 47 of the Act. These tests are described in further detail at paragraphs A10.29 to A10.39.

Objectively justifiable in relation to the services to which they relates

7.17 The charge control is objectively justifiable in order to restrict BT's ability to charge excessive prices to CPs that would ultimately be passed on to consumers in a market where BT currently faces no competitive or pricing constraints and where its pricing is unlikely to be constrained throughout the period of the 2009 Wholesale Market Review Statement.

7.18 In the absence of this regulation, BT would have the incentive and ability to set an excessively high charge for the retailing components of the NTS Call Origination service and this could lead to excessively high prices paid by consumers. TCPs would then be unable to compete with BT in the provision of downstream services such as voice NTS services. Before a charge control was in place there were a number of disputes between BT and CPs when BT proposed to set or adjust its own NTS related charges.

7.19 In light of these considerations, we consider that a condition which imposes a cap on charges for the NTS Retail Uplift and PRS Bad Debt Surcharge on the basis of costs

[93] We are currently consulting on options to change the framework for NTS calls.

incurred by an efficient operator is objectively justifiable to ensure that competition is preserved and end-users are not prejudiced.

Not unduly discriminatory against particular persons or against a particular description of persons

7.20 The charge controls do not unduly discriminate against BT as they are imposed only in a market where BT has been found to have SMP.

7.21 We do not consider that the absence of specific NTS regulation on KCOM plc ("KCOM"), the operator which we have found holds SMP in wholesale call origination on a fixed narrowband network in the Hull Area, is discriminatory against BT since, as set out at paragraph 15.11 of the 2009 Wholesale Market Review Consultation, KCOM is in a different position to BT in that it would not be proportionate to impose specific regulation on KCOM in respect of NTS call origination given the costs involved in complying with such regulation. Those considerations do not apply in the case of BT and therefore we do not consider that the proposed conditions are unduly discriminatory against BT.

Proportionate to what it is intended to achieve

7.22 The object of the proposed regulation is to ensure fair competition in downstream markets by ensuring BT cannot price excessively. Before we set the previous set of charge control in 2005 it fell to BT to propose revised charges for the NTS Retail Uplift and PRS Bad Debt Surcharge from time to time. This resulted in a series of disputes, largely from TCPs who held that BT's ability to retain elements of its retail costs for billing consumers and marketing NTS calls resulted in an excessive retention. This experience provides direct evidence that the remedies of cost orientation and non-discrimination, which have already been imposed, will not be sufficient to constrain BT's pricing and therefore imposing charge controls is the minimum level of regulation consistent with achieving the desired outcome.

Transparent in relation to what it is intended to achieve

7.23 Finally, for reasons discussed above, we consider that the charge controls are transparent in that it is clear for both BT and TCPs what the level of the charge controls is and, consequently, what level of charges BT may apply as a retention for NTS calls. Their aims and effect are clear and they have been drafted so as to secure maximum transparency. Their intended operation is also aided by our explanations in this consultation. We have set out their likely impact on charges for the duration of the controls.

Our proposed amendment to Condition AAA3 must also satisfy tests

7.24 The 2009 Wholesale Market Review Statement decided, in relation to addressing BT's SMP in the relevant markets, to impose (among others) cost orientation and charge control obligations. The cost orientation obligation (AAA3) includes clarification for the avoidance of any doubt that charges for services subject to charge control obligations must also satisfy any cost orientation obligation (AAA3.2) which may be included in Condition AAA4.

7.25 In accordance with the rationale leading to the imposition of Condition AAA3.2 and to ensure that it is clear that the requirement for cost orientation must also be met in addition to the charge control for the NTS Retail Uplift, we are therefore proposing a

minor and incidental modification to AAA3 as notified in the 2009 Wholesale Market Review Statement, with a view that the proposed amendment can, subject to consultation, take effect at the time of the NTS Retail Uplift final statement.

7.26 The proposed amendment is to insert a new paragraph into AAA3 that has a similar effect to the current paragraphs AAA3.2 and AAA3.2(a)[94], confirming for the avoidance of doubt that the proposed NTS Retail Uplift charge controlled services remain subject to the basis of charges requirement.

7.27 The proposed modified condition needs to satisfy the section 47 test. We consider that the amendment by way of inserting an additional paragraph to Condition AAA3, provides clarity in the light of our charge control proposals in this consultation. Such an amendment would also be consistent with the decisions in the 2009 Wholesale Market Review Statement and is therefore objectively justifiable, proportionate and does not discriminate for the same reasons. As mentioned above, the condition adds clarity to exactly which services are subject to the basis of charges condition and therefore the amended condition is transparent in what it seeks to achieve.

Our draft Notification is set out in Annex 11

7.28 We set out in Annex 11 of the consultation the draft Notification under section 48(2) of the Act giving effect to our proposals.

7.29 As required by section 50(3) of the Act, we will send draft decisions contained in the Notification to the European Commission and to the regulatory authorities ("NRAs") of every other Member State. We will take into account any comments received from the European Commission and other NRAs when we reach our conclusions in our Final Statement.

7.30 In addition, we will send a copy of the draft decisions contained in the Notification to the Secretary of State for Culture, Media and Sport in accordance with section 50(1)(a) of the Act.

[94] http://stakeholders.ofcom.org.uk/binaries/consultations/wlr/summary/wlrcondoc.pdf

Section 8

Monitoring of charge control compliance

Introduction

8.1 The purpose of this section is to set out how we propose to monitor whether BT is complying with the charge controls. We also discuss the interaction of these charge controls with other regulatory obligations with the aim of providing a broader view of the constraints on BT's pricing for the NTS Retail Uplift and the PRS Bad Debt Surcharge.

Monitoring of charge control compliance

PRS Bad Debt Surcharge

8.2 As set out in section 6 we propose to set a single percentage of PRS retail revenue as the PRS Bad Debt Surcharge. This single percentage will appear as an input into BT's NTS Calculator[95], which sets out for each price point all of the deductions BT is allowed to make from the headline retail price for retail calls. As such all stakeholders are able to check at all times that BT is applying no more than the allowed level of the bad debt surcharge.

NTS Retail Uplift charge control

8.3 Unlike for the PRS Bad Debt Surcharge it is not readily evident whether the prices charged by BT comply with the RPI-X price cap. This is because the cap relates to the weighted average charge but the prices shown in the NTS Calculator determining the level of outpayments are set by time of day and may also vary across the course of the year.

We will monitor compliance by calculating a weighted average change in the NTS Retail Uplift charges

8.4 BT's freedom to set charges for the services controlled by the proposed single charge control basket will be constrained so that the average charge in the basket at the start of the control year cannot be increased by more than RPI adjusted by the relevant value of 'X' set out in the Condition. RPI (i.e. the controlling value of RPI) is the term used to represent the percentage change in the Retail Prices Index in the 12 months up to May preceding the start of the relevant charge control year (the relevant year). The RPI index for the month of May has been chosen as this will be published in June and will allow BT sufficient time to adjust its charges in advance of the new compliance year beginning on 1 October.

8.5 In order to assess BT's compliance with the controls we need to determine the appropriate basket weights. Regulators who have applied this form of control have generally used one of two main methods of calculating these weights – "prior year revenue weights" or "current year revenue weights".

[95] http://www.btwholesale.com/pages/static/service_and_support/service_support_hub/online_pricing_hub/cpl_hub/cpl_pricing_hub/number_translation_services.html

We propose to use prior year revenue weights

8.6 Under the prior-year weighting approach, basket weights are set equal to the proportions of basket revenues accruing to the relevant services in the year prior to the one in which the price change occurs. Under the current year weighting approach, the weights are set equal to the proportion of current year basket revenues accounted for by each service as a proportion of total current year revenues. A current year weighted control may take the form of a control on average revenue (total revenues divided by total service volumes).

8.7 Ofcom has generally preferred prior year weighting. This is primarily because current year weights cannot be calculated with certainty until after the end of the price control year in which compliance is being assessed, because current year revenues will only be known with a significant time lag. This means that, to decide how far to reduce prices, the firm has to make forecasts of weights, with the consequent need for retrospective adjustment for forecast errors. Some energy network services in the UK are subject to average revenue controls, which incorporate such adjustment factors. For example, where actual revenues recovered in a particular formula year exceed allowable revenues (implied by the charge control), then the charge control includes a factor for any such over-recovery (or under-recovery).

8.8 In addition, a second potential disadvantage may arise where a control based on current year weights is applied as a control on average revenues. In this situation, average revenue can be affected by a change in the product mix within the basket. For example, average revenue will fall if the quantity sold of a lower price product within the basket increases relative to the quantity sold of a higher priced product, even if the prices of both products are unchanged. This is sometimes referred to as the “apples and pears problem”[96]. In some markets (for example gas or electricity markets) in which average revenue controls have been used, output can be expressed in a convenient common unit, which avoids this problem, but this is much less likely to be true in telecoms markets, particularly with the different mix of charges in the basket.

8.9 By contrast, a prior year weighted control relies only on revenue information which is (or can be) already known when setting prices to comply with the control. In addition, it also has some theoretical advantages which mean that it can induce the regulated firm to set relative prices which recover common costs in an efficient way.

8.10 However, a feature of prior year weighting is that it does not allow for relative price or volume changes during the year in question (though these will of course be included in the weighting for the following year). This means that prior year revenue weights can have disadvantages when revenues from different products within a basket are expected to change markedly relative to each other over the period of the charge control i.e. where service growth rates differ significantly between the services in the basket.

8.11 We have proposed a single basket for the freephone and chargeable NTS retail uplift charges. In our view a prior year revenue weight approach is more appropriate in this case, primarily because it would avoid the need for retrospective adjustments. However, we also propose to require that the freephone NTS retail uplift charge shall

[96] So called because, if apple and pears are sold at different prices, compliance with a control on the average revenue from fruit will be affected by changes in the relative quantities of apples and pears sold.

not exceed the Uplift for chargeable NTS calls to limit any potential for gaming. The prior year revenue weight formula is shown in the draft Condition AAA4NTS.(3).

We propose that BT will provide us with a compliance return using volumes prepared on the same basis as that used to set this control

8.12 For all RPI-X controls BT submits a return to us showing how, in its view, it has demonstrated compliance with the relevant price cap. This return shows how BT calculates the weighted average price from the individual prices actually charged and the associated volumes.

8.13 As set out in section 5, BT restated the basis on which it assessed the volume of NTS call minutes it had supplied to its retail customers i.e. those with whom it has a direct billing relationship. BT will therefore need to submit a return using volumes prepared on the same basis.

8.14 In addition, the volumes used to calculate the weighted average charge should relate to all the NTS calls BT retails, i.e. those NTS calls terminated on other CPs' networks and on its own network.

We propose to allow BT to carry over differences in the average charge for the basket to the next charge control year

8.15 We propose that BT should be able to carry over any price reductions it makes in excess of the requirements of the charge control for that year. That is, if BT's average charge for the basket at the end of the Relevant Year is lower than required by the associated RPI minus 'X' constraint, it will be able to carry over the difference into the next charge control year. This means that the benchmark for assessing BT's compliance with the control in the following year will be the level of charges BT was required to achieve, rather than the level it actually achieved.

8.16 Conversely, if its average charge is higher than the required level, it has to take the excess into account in the following year.

February 2011 question 13: Do you agree with our proposals for monitoring BT's compliance with the NTS Retail Uplift charge controls?

Monitoring of other pricing obligations on BT

8.17 This consultation deals only with our proposals for the setting of, and subsequent monitoring of, the NTS Retail Uplift charge control and PRS Bad Debt Surcharge. As set out at paragraph 2.14 BT is also under an obligation to supply the charge controlled services on a cost-orientated and non-discriminatory basis.

8.18 The primary mechanism we have for obtaining information to demonstrate whether BT is complying with these regulatory obligations is preparation and publication of service-level information in BT's regulatory financial statements. This information is also used to set future price caps should the need arise.

In July 2009 we flagged up the need for BT to report these services

8.19 In our July 2009 Consultation we indicated that we intended to require BT to provide us with an Additional Financial information ('AFI') schedule, broadly on the lines of the information we have received to determine the level of our charge control

proposals. AFIs are a further element of the current regulatory reporting regime whereby BT supplies to us additional information prepared on a basis consistent with the published statements.

8.20 This AFI information however neither directly identifies the revenues and volumes for the NTS Retail Uplift and PRS Bad Debt Surcharge services, nor does it treat costs in a way consistent with these proposals.

8.21 Although this aspect of the regulatory regime is not part of this consultation, we received the following feedback as part of our July 2009 Consultation.

8.22 BT argued that it was unclear why this information was required for monitoring ongoing compliance. It regarded requiring this information, on an area for which the publication requirement has been removed in the Retail Narrowband Review Statement, as onerous.

8.23 One stakeholder [✂] encouraged us to set the control based on LRIC + EPMU (Equi-Proportional Mark-Up)[97] and to require BT to produce its regulatory financial statements on the same basis. In its view such an approach would deliver tangible benefits in transparency and monitorability and would, for example, allow us and others to ascertain more easily whether BT's accounting treatment accords with cost orientation obligations. It further argued that it was a fundamental requirement that the relevant figures were prepared and audited on a regular basis.

We believe that BT should report on its NTS Call Origination services alongside other wholesale call origination services in its regulatory financial statements

8.24 Service-level unit cost and revenue information helps demonstrate whether BT is complying with its cost-orientation obligation. We acknowledge that, given the atypical 'retail' nature of the cost base, it will not be practicable for BT to prepare incremental and standalone cost information in the normal way. Nevertheless BT is able to prepare cost information prepared on a fully attributed cost (FAC) basis which, as we set out in 5.15 is broadly equivalent to LRIC plus a mark-up to allow for common cost recovery.

8.25 We have experienced difficulties in obtaining from BT the information we have required to set our proposals for the NTS Retail Uplift charge control and the PRS Bad Debt Surcharge in a timely manner. In addition there has been less transparency in relation to these services than there would be if the services were reported in BT's regulatory financial statements. We therefore believe it appropriate that BT should report on the services controlled by the NTS Retail Uplift charge and the PRS Bad Debt Surcharge within its regulatory financial statements. This additional information will help us monitor BT's compliance with its cost orientation and non-discrimination obligations as well as be a starting point for setting the level of any future charge controls. In practice this means that BT would report each year the unit costs and revenues as well as the associated total revenues and volumes.

8.26 For the avoidance of doubt, in the case of the NTS Retail Uplift these costs, revenues and volumes would need to be prepared on a basis consistent with our treatment of base year costs. For example, they would relate to all the NTS traffic which BT

[97] We set out our response to this aspect of this stakeholder's consultation response at paragraph 5.20.

retails, both that terminating on its own network and on other CP's networks and, if our proposals were adopted, BT would:

- Report separately for the chargeable and freephone NTS Retail Uplifts
- Attribute generic sales and marketing costs on the basis of net revenue
- Attribute an appropriate proportion of indirect costs not causally attributable on the basis of net revenue
- Include freephone call minutes in the volume of call minutes used to determine the per minute cost of NTS calls (excluding bad debt)
- exclude freephone call minutes from the volume of call minutes used to determine the per minute cost of bad debt for NTS calls

8.27 In the case of the PRS Bad Debt Surcharge we believe that BT should be able to report the cost of the Surcharge as a percentage of revenue using the methodology proposed in section 6 to assess its actual level in 2009/10.

Next steps

8.28 We will shortly be consulting on the form and content of BT's 2010/11 regulatory financial statements, which will include our formal proposals for the reporting of services. Stakeholders wishing to comment on these proposals should respond to this regulatory financial statement consultation.

Annex 1

Responding to this consultation

How to respond

A1.1 Ofcom invites written views and comments on the issues raised in this document, to be made **by 5pm on 24 March 2011**.

A1.2 Ofcom strongly prefers to receive responses using the online web form at http://stakeholders.ofcom.org.uk/consultations/nts-retail-uplift/howtorespond/form as this helps us to process the responses quickly and efficiently. We would also be grateful if you could assist us by completing a response cover sheet (see Annex 3), to indicate whether or not there are confidentiality issues. This response coversheet is incorporated into the online web form questionnaire.

A1.3 For larger consultation responses - particularly those with supporting charts, tables or other data - please email ntsru-prsbds@ofcom.org.uk cc catherine.galvin@ofcom.org.uk attaching your response in Microsoft Word format, together with a consultation response coversheet.

A1.4 Responses may alternatively be posted or faxed to the address below, marked with the title of the consultation.

Catherine Galvin
Floor 4
Competition Group
Riverside House
2A Southwark Bridge Road
London SE1 9HA

Fax: 020 7783 4103

A1.5 Note that we do not need a hard copy in addition to an electronic version. Ofcom will acknowledge receipt of responses if they are submitted using the online web form but not otherwise.

A1.6 It would be helpful if your response could include direct answers to the questions asked in this document, which are listed together at Annex 4. It would also help if you can explain why you hold your views and how Ofcom's proposals would impact on you.

Further information

A1.7 If you want to discuss the issues and questions raised in this consultation, or need advice on the appropriate form of response, please contact Catherine Galvin on 020 7783 4329.

Confidentiality

A1.8 We believe it is important for everyone interested in an issue to see the views expressed by consultation respondents. We will therefore usually publish all

responses on our website, www.ofcom.org.uk, ideally on receipt. If you think your response should be kept confidential, can you please specify what part or whether all of your response should be kept confidential, and specify why. Please also place such parts in a separate annex.

A1.9 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and will try to respect this. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.

A1.10 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's approach on intellectual property rights is explained further on its website at http://www.ofcom.org.uk/about/accoun/disclaimer/

Next steps

A1.11 Following the end of the consultation period, Ofcom intends to publish a statement by the end of April 2011.

A1.12 Please note that you can register to receive free mail Updates alerting you to the publications of relevant Ofcom documents. For more details please see: http://www.ofcom.org.uk/static/subscribe/select_list.htm

Ofcom's consultation processes

A1.13 Ofcom seeks to ensure that responding to a consultation is easy as possible. For more information please see our consultation principles in Annex 2.

A1.14 If you have any comments or suggestions on how Ofcom conducts its consultations, please call our consultation helpdesk on 020 7981 3003 or e-mail us at consult@ofcom.org.uk . We would particularly welcome thoughts on how Ofcom could more effectively seek the views of those groups or individuals, such as small businesses or particular types of residential consumers, who are less likely to give their opinions through a formal consultation.

A1.15 If you would like to discuss these issues or Ofcom's consultation processes more generally you can alternatively contact Vicki Nash, Director Scotland, who is Ofcom's consultation champion:

Vicki Nash
Ofcom
Sutherland House
149 St. Vincent Street
Glasgow G2 5NW

Tel: 0141 229 7401
Fax: 0141 229 7433

Email vicki.nash@ofcom.org.uk

Annex 2

Ofcom's consultation principles

A2.1 Ofcom has published the following seven principles that it will follow for each public written consultation:

Before the consultation

A2.2 Where possible, we will hold informal talks with people and organisations before announcing a big consultation to find out whether we are thinking in the right direction. If we do not have enough time to do this, we will hold an open meeting to explain our proposals shortly after announcing the consultation.

During the consultation

A2.3 We will be clear about who we are consulting, why, on what questions and for how long.

A2.4 We will make the consultation document as short and simple as possible with a summary of no more than two pages. We will try to make it as easy as possible to give us a written response. If the consultation is complicated, we may provide a shortened Plain English Guide for smaller organisations or individuals who would otherwise not be able to spare the time to share their views.

A2.5 We will consult for up to 10 weeks depending on the potential impact of our proposals.

A2.6 A person within Ofcom will be in charge of making sure we follow our own guidelines and reach out to the largest number of people and organisations interested in the outcome of our decisions. Ofcom's 'Consultation Champion' will also be the main person to contact with views on the way we run our consultations.

A2.7 If we are not able to follow one of these principles, we will explain why.

After the consultation

A2.8 We think it is important for everyone interested in an issue to see the views of others during a consultation. We would usually publish all the responses we have received on our website. In our statement, we will give reasons for our decisions and will give an account of how the views of those concerned helped shape those decisions.

Annex 3

Consultation response cover sheet

A3.1 In the interests of transparency and good regulatory practice, we will publish all consultation responses in full on our website, www.ofcom.org.uk.

A3.2 We have produced a coversheet for responses (see below) and would be very grateful if you could send one with your response (this is incorporated into the online web form if you respond in this way). This will speed up our processing of responses, and help to maintain confidentiality where appropriate.

A3.3 The quality of consultation can be enhanced by publishing responses before the consultation period closes. In particular, this can help those individuals and organisations with limited resources or familiarity with the issues to respond in a more informed way. Therefore Ofcom would encourage respondents to complete their coversheet in a way that allows Ofcom to publish their responses upon receipt, rather than waiting until the consultation period has ended.

A3.4 We strongly prefer to receive responses via the online web form which incorporates the coversheet. If you are responding via email, post or fax you can download an electronic copy of this coversheet in Word or RTF format from the 'Consultations' section of our website at www.ofcom.org.uk/consult/.

A3.5 Please put any parts of your response you consider should be kept confidential in a separate annex to your response and include your reasons why this part of your response should not be published. This can include information such as your personal background and experience. If you want your name, address, other contact details, or job title to remain confidential, please provide them in your cover sheet only, so that we don't have to edit your response.

Cover sheet for response to an Ofcom consultation

BASIC DETAILS

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

CONFIDENTIALITY

Please tick below what part of your response you consider is confidential, giving your reasons why

Nothing ☐

Whole response ☐

Part of the response ☐

Name/contact details/job title ☐

Organisation ☐

If there is no separate annex, which parts?

If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?

DECLARATION

I confirm that the correspondence supplied with this cover sheet is a formal consultation response that Ofcom can publish. However, in supplying this response, I understand that Ofcom may need to publish all responses, including those which are marked as confidential, in order to meet legal obligations. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments.

Ofcom seeks to publish responses on receipt. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here. ☐

Name

Signed (if hard copy)

Annex 4

Consultation questions

A4.1 For reference we have listed all the questions we have asked stakeholders as part of this further consultation.

NTS Retail Uplift charge control

Section 4: Approach to NTS Retail Uplift charge control framework

Question 1: Do you agree with the proposed approach to the form and structure of the NTS Retail Uplift Charge Control, including the use of an RPI-X price cap for the period to September 2013, a single basket, a sub-cap on charges for freephone calls and a glidepath approach to price adjustments?

Section 5: Estimation of the NTS Retail Uplift price cap

Question 2: Do you agree that there is no longer any basis for excluding 20% of BT's sales and marketing costs?

Question 3: Do you agree with the proposal to reattribute generic sales and marketing costs using net revenues and to treat support costs as an uplift on causally attributed costs?

Question 4: Do you agree with our approach to determining base year costs and volumes?

Question 5: Do you agree that we should use a forecast of change in BT's overall retail service activity to project BT's costs?

Question 6: Do you agree with our approach to forecasting the change in BT's overall retail activity and the proposed range of forecast decline of 3.5% to 7.5% per year? If possible, please provide evidence to support your view.

Question 7: Do you agree with our preferred efficiency improvement assumption of 2.5%?

Question 8: Do you agree that our proposal for the value X with no one off adjustment to prices at the outset of the control has no impact on any previous aspect of our proposals?

PRS Bad Debt Surcharge (Section 6)

Question 9: Do you agree with our assessment of the potential options regarding the structure of the recovery for bad debt on PRS calls?

Question 10: Do you agree that BT's attribution methodology for bad debt is an appropriate starting point to use in assessing the incidence of bad debt on PRS calls?

Question 11: Do you agree with our view that no adjustment should be made to the PRS Bad Debt Surcharge for inefficiency? If not, please provide analysis and evidence to support your arguments

Question 12: Do you agree that in the current circumstances it is appropriate for the PRS Bad Debt Surcharge charge control to have effect on the first of the month following our final statement? If not, please supply reasons why this would be the case.

Monitoring of charge control compliance (Section 8)

Question 13: Do you agree with our proposals for monitoring BT's compliance with the NTS Retail Uplift charge controls?

Annex 5

Respondents to July 2009 consultation

A5.1 In July 2009 we published our first consultation document to which the following organisations and individuals responded.

Non confidential responses

A5.2 The following is a list of respondents who supplied non-confidential responses to our consultation

- BT
- Cable & Wireless
- TalkTalk (part of Carphone Warehouse group)
- AIME (representative body for PRS community)
- 4D Interactive Limited
- InverOak Limited
- Premium Rate Association (PRA)
- George Kidd on behalf of Telecom Express Ltd and DM plc

A5.3 There were two further respondents [✂][✂]who wished to withhold their identities.

A5.4 These responses can be found at http://www.ofcom.org.uk/consult/condocs/nts/responses/

Confidential responses

A5.5 In addition there were 2 responses [✂][✂] which were entirely confidential

Annex 6

Impact of proposals on NTS value chain

Introduction

A6.1 In this annex we set out our estimates of the financial impact of our proposals on each of the players in the NTS value chain.

A6.2 We have not estimated the financial impact of our proposals on consumers as the immediate impact will be on providers of NTS termination and NTS service providers and on retailers of NTS calls. Any impact on consumers will be indirect, as service providers and operators adjust to the revised level of the uplift and PRS Bad Debt Surcharge. As previously mentioned in section 7, we believe that these charge controls serve consumers' interests by ensuring that the retail costs which BT is allowed to recover in its charges for originating NTS calls are based on reasonably incurred costs over the period of the control.

The impact of our proposals on stakeholders involved in the delivery of NTS calls

Our approach to Impact Assessment has not changed in this further consultation

A6.3 At paragraph 2.45 of the July 2009 Consultation we stated that the Sections and Annexes of the consultation represented an impact assessment. Sections 4-7 and Annexes 6-9 of this further consultation represent a further impact assessment in light of the changes to our proposals.

A6.4 In this annex we set out, in turn, our estimates of:

- the direct impact of the proposed charge controls on the amounts retained by BT as an originator of NTS and PRS calls;
- the impact on other originators of NTS calls apart from BT; and
- the wider downstream impact on the NTS value chain including terminating operators and service providers.

A6.5 To assess the likely impact of the charge controls proposed in this consultation, we have used information about the NTS value chain contained in a report entitled *"The flow of funds in the market for non-geographic calls"* (the flow of funds analysis) prepared by the business consultancy Analysys Mason for our ongoing review of Non-Geographic Call Services, which can be found with our consultation document entitled *"Simplifying Non-Geographic Numbers"* published on 16 December 2010.

A6.6 We also made use of the following additional information:

- total market call minute volumes as per Analysys Mason report;
- our forecast of volume changes over the period of the control,

and, in the case of the NTS Retail Uplift:

- BT's existing (weighted average) charge in pence per minute;
- the proposed new BT charge,

or, in the case of PRS:

- BT's percentage Bad Debt Surcharge pre 1 July 2010;
- the proposed new percentage Surcharge; and
- an assessment of the average retail price of all 09 calls using BT's retail tariffs.

A6.7 We believe that this analysis addresses the concerns expressed by one broadcaster in response to our July 2009 Consultation, to the effect that we had not adequately assessed the likely impact of our proposals on PRS providers.

We use our RPI-X model to generate an estimate of the direct impact on BT revenues

A6.8 We have calculated the impact of our proposals on the assumption that our central case estimates of X and the PRS bad debt surcharge are implemented. We do so by comparing our estimate of BT's revenues with the new controls implemented as proposed, with an estimate of those revenues with the Uplift at its current level and the surcharge at the level set in 2005 (3.03%). These revenue estimates have been derived from the financial model which we use to calculate the value of X.

A6.9 We estimate that the impact of our proposals for the NTS Retail Uplift will be to increase BT's revenues from originating NTS calls by £1.3m in the final year of the charge control. There will be a corresponding reduction in payments to TCPs. As BT is also a terminator of NTS calls, some of this impact will fall on BT itself, offsetting some of the increase in its revenues from origination, but most will fall on other terminating operators. .

A6.10 As a result of the increase in the PRS Bad Debt Surcharge we expect BT's revenues from originating PRS calls to increase by £1.5m per year in the first year of the charge control. Again there will be a corresponding reduction in payments to TCPs and, again, some of this impact will fall on BT as a terminator of PRS calls, offsetting some of the increase in its revenues from origination. As with the increase to the NTS Retail Uplift, most of the impact will however fall on other terminating operators.

We estimate that our NTS Retail Uplift price caps will lead to an overall increase in payments to originating operators of £3½m per year

A6.11 The NTS Retail Uplift forms part of the amount BT is able to retain from retail revenues to cover the costs it incurs in retailing and originating NTS/PRS calls on behalf of SPs. It also affects the amounts paid to TCPs and SPs in respect of calls which are not retailed by BT, but which pass through BT's network. When acting as transit operator, or providing wholesale call services, BT pays the same amounts to

TCPs for calls it carries on behalf of other CPs as it does for calls it retails itself. In this way the impact of changes in any of the components of BT's retention, including the NTS Retail Uplift and PRS Bad Debt Surcharge, will be felt on all termination revenues that BT pays to TCPs and ultimately to SPs and on the amounts retained by those other retailers who use BT as a provider of wholesale conveyance and transit services.

A6.12 For the NTS Retail Uplift we have quantified the likely impact of the proposed control using 2009 volumes and forecast final year costs. 2009 is the most recent year for which we have volume data relating to the whole market. Final year costs reflect the expected impact of the control in the final year, when we expect charges to equal cost. As we propose that current charges follow a glidepath towards this forecast of final year costs, this approach is likely to overestimate the impact on the market of our proposals in years before 2013/14. In addition this approach to estimation means that we quantify the impact in 2009/10 prices as this is how the final year costs have been measured.

A6.13 As set out in the flow of funds analysis (see above for reference) we obtained volume information from a range of the larger fixed and mobile OCPs. It is impossible to obtain accurate information about all calls made but the volume information we have is broadly representative of the market as a whole.

A6.14 Using data from Figures 5.7[98], 5.8[99], 5.9[100], 5.11[101] and 5.12[102] of the flow of funds analysis we calculated the total volume of call minutes made to all 08 (excluding 0870) and 09 numbers in 2009 as 27,654 million minutes. This will include calls between OCPs and TCPs that interconnect directly and also those routed via transit networks other than BT's. These calls may not attract the equivalent of a retail uplift charge and so including them may slightly exaggerate the effect of the revised charge but any overstatement is unlikely to be significant.

A6.15 The weighted average (by time of day) charges for the NTS Retail Uplift for freephone and chargeable calls combined is currently 0.2207ppm[103]. We can determine how much revenue the existing charges would generate in 2009 by multiplying the weighted average charge by total volumes.

Total revenues at current[104] prices: 27,654mm x 0.2207ppm = £61.0m

A6.16 We estimate that the weighted average charge for the NTS Retail Uplift in the final year across all call types will be 0.2335ppm. Repeating the exercise for the proposed aggregated charge multiplied by the combined 2009 volumes:

Total revenues at forecast[105] prices: 27,654mm x 0.2335ppm = £64.6m

A6.17 We therefore estimate that the increase in originating operators' revenues resulting from implementation of the proposed Retail Uplift charge control and using 2009 volumes would be:

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[98] Flow of volumes across the 080 number range
[99] Flow of volumes across the 0843/4 number range
[100] Flow of volumes across the 0845 number range
[101] Flow of volumes across the 0871/2/3 number range
[102] Flow of volumes across the 09 number range
[103] Deflated to 2009/10 prices
[104] September 2010 weighted average charge deflated to 2009/10 prices
[105] Forecast costs in 2013/14 in 2009/10 prices

£64.6m - £61.0m = £3.6m per year

A6.18 We estimate the impact on BT as an originator to be approximately £1.3m (consistent with the estimate set out in paragraph A6.9) and therefore £2.3m of these additional revenues will be retained by all other OCPs.

A6.19 Paragraphs A8.44 to A8.34 set out how we derived our forecast of BT's NTS volumes over the remainder of the charge control period. We forecast that the total of BT to BT and BT to CP call volumes for all 08 and 09 calls will decline at an average of 15% per year. We also looked at recent trends in BT's exchange line base, excluding LLU and WLR, and from this estimated that this will also decline over the control period at an average of 7% per annum. BT will then have 7% fewer customers making 15% fewer calls. This implies that each customer will make approximately 8% fewer 08 and 09 calls each year on average. If we assume that BT's consumers have similar calling patterns to those of other OCPs then this figure would also then be representative of the calling trends of consumers on other OCP network. If we also assume that BT's loss of subscribers is exactly offset by gains to competitors, leaving total subscriber numbers unchanged, then this is also our estimate of the market trend for NTS/PRS call volumes. This implies that the financial impact of an increase in the NTS Retail Uplift is likely to decline in future years.

We estimate the revised level of the Surcharge will lead to an overall increase in the amounts retained by originating operators of £5m per year

A6.20 Figure 5.28[106] in the flow of funds analysis shows that the estimated total volume of call minutes made to 09 numbers (the number range used for PRS calls) in 2009 was 342 million minutes. Again this figure may slightly overstate the impact of the new charge as it will include a small number of calls that do not originate on or transit BT's network.

A6.21 BT's prices for calls to 09 numbers range from 10p per minute or per call to £1.50 per minute or per call whereas prices from other networks are frequently much higher. As a consequence we could not use the call revenue figures from the flow of funds analysis since this is a measure of the actual retail prices charged by each OCP whereas the payments made to TCPs are calculated based on BT's retail prices.

A6.22 Thus in order to assess the average price paid for 09 calls from which the impact on termination payments can be derived we used 2009/10 call volume and revenue totals provided in response to an information request we sent to BT. From this we estimated the average price paid per call by BT consumers to be 67ppm excluding VAT across all time periods in 2009/10.

A6.23 We believe it is reasonable to assume that BT consumers' calling patterns (by time of day) are broadly representative of the market as a whole. Although other operators retail prices differ from BT's, those networks that charge more than BT do not generally share any higher margin with TCPs but either retain it as profit or use it to subsidise lower prices for other products and services. In addition calls retailed by other operators, particularly mobile operators, may have extra network costs to recover.

[106] Flow of revenues across the 09 number range

A6.24 Using the total volume of call minutes and the estimated per-minute price, we can calculate the total retail revenue to which the PRS Bad Debt Surcharge is applied. This is:

342m minutes x 67ppm = £229m per year

A6.25 Changing the Surcharge from 3.03% to 5.2%, an increase of 2.17%, would increase the effect of the Surcharge using 2009 revenues by:

£229m x 2.17% = £5m per year.

A6.26 This impact would be felt as soon as BT implemented the proposed new Surcharge, which we propose it should do from the first of the month following the date of our final statement.

A6.27 We estimate the impact on BT as an originator to be approximately £1.5m (consistent with the estimate set out in paragraph A6.10) and therefore £3.5m of these additional revenues will be retained by all other OCPs.

A6.28 As we would expect PRS call volumes to decline over time, we anticipate that the magnitude of these effects would reduce in future years.

We estimate the impact of the proposals on terminating operators and service providers

A6.29 When BT changes any element of its wholesale call origination charge the impact flows across the entire value chain and is commonly borne by the final link, the SP. Non-trivial changes to the revenues paid to TCPs usually prompt them to renegotiate their revenue sharing contracts with their SP customers. Thus where BT's charges go down, e.g. under an RPI-X charge control where X is greater than the RPI, SPs may be able to secure a higher revenue share (assuming that retail charges do not reduce at the same rate). However, when BT's charges go up the increase is inevitably passed through as lower termination payments to TCPs which in turn leads either to a reduced revenue share for SPs or increased charges to SPs for call termination and hosting.

A6.30 Figure 5.16[107] in the flow of funds analysis demonstrates that of the near £1.9bn in retail revenues paid by consumers in 2009, £435m or 23% flowed through to fund the services those consumers were seeking to access. An increase of around £3½m due to the proposed change in the NTS Retail Uplift would therefore represent less than 1% of the NTS and PRS revenues ultimately received by SPs.

A6.31 As with the NTS Retail Uplift, it is likely that the reduction in termination revenues due to the increase in the PRS bad debt surcharge will be passed down the value chain to the SPs. Little if any is likely to be absorbed by the CPs (TCPs or resellers) that host SPs' services. Again from the flow of funds analysis referred to in A6.5, we estimate that SPs' earnings from PRS calls in 2009 totalled £181m[108]. Thus a 2.17% increase in the Bad Debt Surcharge, generating £5m in 2009, represents a average reduction of (£5m ÷ £181m) or 2.8% in SPs' revenues. However, depending on SPs' commercial arrangements with their host CPs, this figure may vary considerably at the individual SP level.

[107] Flow of aggregated revenues across all non-geographic number ranges
[108] Figure 5.28 of the Analysys Mason flow of funds report

A6.32 In the July 2009 Consultation we first consulted on our initial proposal for an increase in the Bad Debt Surcharge from 3.03% to 9.7%. In the responses received to that consultation a number of SPs commented on how such an increase posed a serious threat to their revenues and argued that some services would become totally unviable and might not be able to continue. The revised proposal in this document of an increase to the lower figure of 5.2% poses much less of a threat. SPs may still face choices on how to manage their reduced income and some may need to cut costs. However, where services are more than marginally profitable they may not need to take any action.

A6.33 Services with marginal profitability may have to consider either moving to a higher charge band (if they are not already at the maximum price for that number range) or, if they are unable to reduce their costs, risk having to close down. There may therefore be adverse impacts for some consumers if they face a higher price or the loss of the service. However, the overall impact of setting charges at levels which reflect costs is expected to be positive. A service provider which is unable to market its product profitably at a price which consumers are willing to pay and can only do so if some of the charges it pays are below cost, is unlikely to be efficient. Consumers would not be well served by the setting of prices below cost in order to allow inefficient suppliers to remain in the market.

A6.34 Whilst we appreciate that there may be a significant impact on certain service providers arising from the increase in the level of the PRS Bad Debt Surcharge we consider that BT should be able to recover its efficiently incurred costs. If it was not able to do so, there would be a significant risk that BT would effectively subsidise inefficient SPs that can only survive by purchasing origination at below cost.

Annex 7

Treatment of base year data in NTS Retail Uplift RPI-X model

Introduction

A7.1 Our RPI-X charge control model is populated with actual data (costs, revenues and volumes) supplied by BT which we adjust as necessary. The base year data supporting our revised proposals is for 2009/10, updated from the 2007/08 data which underpinned our July 2009 Consultation proposals.

A7.2 The purpose of this annex is twofold. Firstly it is to describe in further detail than set out in section 5 the nature of the costs incurred by BT in retailing NTS calls and how it attributes these costs to NTS calls. Secondly it is to describe how we propose to arrive at our base year costs by making adjustments to the source data for the base year.

Nature of BT's retail costs and approach to cost attribution

Nature of BT's retail costs

A7.3 As a starting point for our analysis we were provided information extracted by BT from its regulatory costing system which disaggregated the retail costs it had attributed to BT to CP NTS calls for 2009/10 into cost categories as shown below in table A7.1.

Table A7.1: Costs attributed to BT to CP NTS calls broken down (BT categorisation)

Other	✂	✂	✂	8.4	31%
Gen Management & Other	✂	✂	✂	6.8	25%
Bad Debts	✂	✂	✂	4.4	16%
Marketing & Sales	✂	✂	✂	4.2	16%
Customer Service	✂	✂	✂	1.5	5%
Finance & Billing	✂	✂	✂	1.1	4%
Computing	✂	✂	✂	0.7	3%
Total	12.7	6.9	7.5	27.2	100%

A7.4 This analysis indicates that as well as bad debt, sales and marketing, customer service costs and finance and billing costs, BT was also attributing a significant proportion of unspecified costs under the banner of 'general management and other' as well as 'other' to NTS calls. As our subsequent review of BT's cost attribution methodologies will show, this breakdown does not give a full representation of the costs incurred that is relevant for the setting of this charge control.

A7.5 It should be noted that the level of the costs shown in the above table are the *result* of the application of BT's chosen attribution methodology and therefore do not give us any guidance whether the costs are both relevant and appropriately attributed to

NTS calls. For these reasons we have not relied on this breakdown when determining the costs for the base year.

BT's general approach to cost attribution

A7.6 As set out in paragraph 5.65 for the purposes of determining base year costs we have analysed the costs BT incurs in retailing NTS calls into three categories:

- Service delivery
- Sales and marketing
- Support costs (in this document defined to mean those indirect costs which cannot be causally attributed to services)

A7.7 Costs which are specific to a product are directly allocated to the particular retail product without the need for further processing. An example of this would be a specific marketing campaign for BT Vision. The direct costs associated with the campaign would be attributed specifically to the BT Vision product.

A7.8 However where costs cannot be directly allocated to products, BT aggregates the costs into a number of pools[109]. It then attributes these cost pools across the relevant products on a particular basis, known as an *attribution basis* or *attribution methodology*. For example, from our review of BT's cost attribution methodologies we can see that each of the cost pools relevant to the NTS Retail Uplift fall into one of the above categories, for example:

- call centres, one pool relating to serving business customers, another to servicing residential customers ('service delivery')
- billing and credit control ('service delivery')
- publicity spend ('sales and marketing')
- BT Retail overheads ('support costs'')

A7.9 From an accounting perspective BT defines cost pools in terms of groups of one or more similar general ledger codes ('F8' codes) relating to individual BT organisational units ('OUC' codes). Each combination of F8/OUC codes has the potential to be attributed using a different methodology. These retail cost attribution methodologies have been published in BT's 'Detailed Attribution Methodologies' (DAM). This describes the basis on which costs are attributed and the products to which they are attributed[110].

A7.10 Costs which support a group of related retail products or all retail products cannot be directly allocated to a particular product, and therefore require apportionment. Where possible BT's stated aim is to determine a reasonable basis to apportion

[109] The major costs pools (also referred to as *bases*) relevant to NTS calls are shown in Table A7.3.
[110] In the 2009/10 regulatory financial statements BT has no reporting obligation for retail products and therefore the 2009/10 DAM does not contain any bases which are specific to BT retail.

these costs informed by the principal of cost causation[111] as far as practicably possible.

A7.11 We learnt from our review that none of the costs BT attributed to NTS calls had been directly associated with NTS calls, and therefore all the costs which had been attributed to NTS calls had been apportioned.

We updated our unit cost analysis for NTS calls

A7.12 In parallel with our review of BT's attribution methodologies we updated the analysis of retail costs we had relied on in our July 2009 Consultation[112]. We then compared the unit costs[113] for NTS calls with that of all calls. This cross-check showed that the retail costs attributed by BT to NTS calls were lower on a ppm basis than those attributed to all call types (including local and national geographic calls and calls to mobile) on average. As explained in paragraph 5.38 we concluded that the cost attributions had not been biased towards NTS calls and therefore considered it reasonable to use 2007/08 base year costs as submitted by BT. We therefore did not make any adjustment to exclude costs relating to marketing and sales (apart from excluding 20% of costs so categorised)[114] as we had for the 2005 control.

A7.13 However, as discussed at paragraph 5.29, we discovered that NTS call volumes were significantly overstated in the data originally submitted by BT. For 2008/09 overall NTS call minutes were overstated by 30% and it is likely that 2007/08 volumes would have been overstated by a similar proportion. For 2009/10 we required BT to submit volumes on the same basis as the revised 2008/09 data.

A7.14 We re-performed the analysis described in paragraphs 3.70 to 3.74 of our July 2009 Consultation using 2009/10 data: the results are shown in the table below. The decrease in NTS volumes had the effect of increasing unit costs for NTS calls.

[111] Cost causation is one of the Regulatory Accounting Principles as set out in BT's Primary Accounting Documents available at http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2010/PrimaryAccountingDocuments2010.pdf

[112] Paragraphs 3.71, 3.73 and 3.74

[113] This comparison excluded bad debt which we deal with separately

[114] Paragraphs 3.75 to 3.78

Table A7.2: 2009/10 (unadjusted) unit cost and revenues across different call types

		NTS Calls (BT to CP)					Geographic & CTM calls					Total
	hundreths of ppm	Basic rate	Higher rate	Basic & higher rates average	PRS	NTS Calls average	Local Calls	National Calls	Local and National avergae	Calls to mobile	Geo & CTM calls average	Global Average
Costs	Finance & Billing	✂	✂	✂	✂	**2.2**	✂	✂	✂	✂	✂	✂
	Computing	✂	✂	✂	✂	**1.5**	✂	✂	✂	✂	✂	✂
	Customer Service	✂	✂	✂	✂	**3.1**	✂	✂	✂	✂	✂	✂
	Customer Support	✂	✂	✂	✂	**0.1**	✂	✂	✂	✂	✂	✂
		✂	✂	✂	✂	**7.0**	✂	✂	✂	✂	✂	✂
	Gen Management & Other	✂	✂	✂	✂	**14.2**	✂	✂	✂	✂	✂	✂
	Other	✂	✂	✂	✂	**17.4**	✂	✂	✂	✂	✂	✂
	Marketing & Sales	✂	✂	✂	✂	**8.7**	✂	✂	✂	✂	✂	✂
		✂	✂	✂	✂	**40.3**	✂	✂	✂	✂	✂	✂
	Total Costs (exc bad debt)	31.2	70.2	**38.6**	580.8	**47.3**	27.0	25.6	**26.5**	203.4	**50.8**	50.3
Revenues	**Unit Revenue (ppm)**	2.8	6.0	**3.4**	56.1	**4.2**	✂	✂	✂	✂	✂	✂
Volumes	**Volumes mins (bn)**	✂	✂	✂	✂	✂	✂	✂	✂	✂	✂	✂

A7.15 The analysis shows that the costs (excluding bad debt) attributed to NTS calls are on average slightly lower (0.47 pence per minute) than the global average (0.50 pence per minute) when expressed on a unit basis. However, the conclusion we reached in July 2009 that cost attributions were reasonable is less apparent. At a disaggregated level, NTS basic rate ('local') and higher rate ('national') calls attract more cost than their geographic equivalents and PRS calls are attributed much more cost than any other call category. This reflects the fact that BT attributes costs largely on the basis of gross revenues.

A7.16 Given these developments we gave further thought to the cost attribution issue as described below.

We reviewed the costs BT had attributed to NTS calls for 2009/10

Our approach to reviewing BT's costs and associated cost attribution methodologies

A7.17 We examined the 10 most material retail cost[115] attribution methodologies in terms of total costs attributed to NTS calls in more detail. This analysis covered over 80% of the total costs attributed to these services.

A7.18 We requested BT to provide a detailed cost breakdown by F8 and basis of attribution for the costs associated with BT to CP NTS calls for 2009/10 so that we could identify the key attribution bases for NTS calls. For BT to CP NTS calls, the top ten bases of attribution, by value of cost attributed using that base, were responsible for attributing 81% of the costs.

A7.19 We then asked BT to provide detailed explanations of how each of the top ten bases was applied in practice and to identify the main drivers of attribution.

[115] excluding bad debt which we handle separately

Findings from our analysis

A7.20 The table below sets out the top 10 bases (or cost pools) by value of costs attributed on that basis to BT to CP NTS calls.

Table A7.3: 2009/10 costs attributed to NTS calls by attribution base

			Attribution (£m)							
			Total base		Base attributed by revs					
	Base description		% to NTS	£m	% to NTS	£m	NTS	Methodology (NB no costs specifically allocated to NTS)	Methodology code	
Business	Activities attributed on default basis*			✂						
	Marketing & sales (3rd party spend)			✂						
	Subtotal MK EXCEPT		✂	✂	✂	✂	✂	100% by business revenue	MK	EXCEPT
	Commission payments		✂	✂	✂	✂	✂	100% by business revenue	MK	COMPANY
	Total Business			✂			5.9			
Residential	Activities attributed on default basis*			✂					MY	EXCEPT
	Marketing & sales (3rd party spend)			✂						
	Subtotal MY EXCEPT		✂	✂	✂	✂	✂	Effectively ~100% by residential revenue	MY	EXCEPT
	Publicity		✂	✂	✂	✂	✂	53% non-specific element by residential revenue	MY	DTNIAH
	Total residential			✂			5.5			
	Total attributed on default basis			✂			11.4			
Call centre	Call centre activities	Bus	✂	✂	✂	✂	0.9	100% non-specific element by business revenue	MGA	EXCEPT
	Call centre activities	Res	✂	✂	✂	✂	2.4	22% non-specific element by residential revenue	M7	EXCEPT
Billing	Billing & credit control	Both	✂	✂	✂	✂	1.4	83% non-specific element by bus/res revenue	MFS	EXCEPT
Support	BT Innovate & Design	Both	✂	✂	✂	✂	1.3	49% non-specific element by bus/res revenue	D	EXCEPT
	BT Operate	Both	✂	✂	✂	✂	0.9	74% non-specific element by bus/res revenue	AR	EXCEPT
	BT Retail 'overheads'	Both	✂	✂	✂	✂	0.8	100% by previoulsy apportioned pay costs	M	EXCEPT
Top 10 bases			✂	✂			19.1			
Other							3.7			
Total							22.8			

Notes * This basis attributes all business / residential costs booked against BT Retail that are otherwise not attributed on a more specific basis
In this analysis we separate out BT's third party sales & marketing costs from the rest of these costs

A7.21 For most retailing-specific activities BT treats the cost pools supporting its business customers separately from those supporting its residential customers.

A7.22 The most material costs pools in terms of the costs actually attributed to NTS calls were the EXCEPT bases. These EXCEPT bases are the cost pools in which BT collects the costs of activities for which it has not developed a more specific attribution basis. An example of a more specific attribution basis would be the bad debt attribution basis where, as described in paragraphs 6.96 to 6.98, BT uses revenues relating to the accounts written off to attribute bad debt across products.

A7.23 For its retail EXCEPT cost attribution bases, BT had used relevant revenues to attribute the associated cost pools across products. For the other cost pools BT explained that the element of the cost pool which it had attributed to NTS calls had also effectively been attributed on the basis of revenues, for example, with the publicity base, DTNIAH.

A7.24 For each cost pool we established what proportion of the cost pool attributed on the basis of revenues had been attributed to NTS calls. For activities supporting business customers around 1.8% of total costs were attributed in this way; for residential customers it was between 4.9% and 5.1%.

Conclusion from our analysis

A7.25 None of the costs we examined had been specifically allocated to NTS calls. We found instead that most, if not all, the costs attributed to NTS calls had been attributed on the basis of BT's retail revenues. This approach to attributing retail costs reflects BT's view that these costs are largely shared across a range of services which span not just calls but access products such as a line rental. BT has

therefore used revenues, a metric which is common across calls and lines services, to attribute these costs to individual services.

A7.26 Based on this analysis we conclude that, given BT's existing attribution methodologies, the reduction in volumes described in paragraph 5.29 would have little or no impact on BT's retail costs.

We used the results of this analysis when reattributing sales and marketing costs on the basis of net revenues

We first classified BT's costs into our three categories

A7.27 As explained at paragraph 5.66 we now propose to establish base year costs in relation to BT's generic marketing and sales costs attributed on the basis of net revenues as in 2005. Net revenues are revenues minus outpayments[116]. Since NTS calls proportionally have larger outpayments than other types of retail product the resulting adjustment will be to exclude a significant proportion of marketing and sales costs from the BT to CP base year costs.

A7.28 We then recast our analysis of the costs attributed to NTS calls as per table A7.3 into the categories set out in paragraph A7.6 i.e. service delivery, sales and marketing and support costs. We used job family information supplied by BT to break out the costs within the EXCEPT cost pools between these categories. We also obtained details of any further cost pools which related to its sales and marketing activities.

A7.29 As a result of this additional analysis we were able to identify total service delivery costs of £9.6m, sales and marketing costs of £8.4m and £4.8m of support costs not causally attributable to individual services.

We estimated the value of the proposed adjustment for BT to CP costs

A7.30 In order to re-attribute the sales and marketing costs identified in paragraph A7.29 we obtained data from BT which showed gross revenues across all BT retail products. The data BT provided is shown below in Table A7.4 and shows gross revenue for all retail products split between business and residential. For NTS calls (both PRS and other) the data relates to BT to CP and BT to BT revenues combined.

A7.31 The data shows that NTS and PRS calls relate to 4.8% of gross residential revenue and 1.8% of gross business revenue across all BT retail products. These were similar percentages to those derived when reviewing BT's retail costs as set out in paragraph A7.20.

[116] Outpayments relate to the payments made by BT to other network providers, either for the provision of a network service such as geographic call termination or as revenue shares with terminating providers.

Table A7.4: 2009/10 gross retail revenues & associated percentage splits

		2009/10			
		£m		%	
		Res	Bus	Res	Bus
Calls	Other NTS	✂	✂	✂	✂
	PRS	✂	✂	✂	✂
	Subtotal NTS	✂	✂	4.8	1.8
	Other calls	✂	✂	✂	✂
	Sub-total Δcalls	✂	✂	✂	✂
	Option fees	✂	✂	✂	✂
	Total calls	✂	✂	✂	✂
Other	Lines	✂	✂	✂	✂
	Broadband	✂	✂	✂	✂
	Specified other	✂	✂	✂	✂
	Telephony/BB	✂	✂	✂	✂
	Non-specified other	✂	✂	✂	✂
Total analysed by BT		✂	✂	100.0	100.0

We had to estimate the level of outpayments for NTS calls

A7.32 For our previous consultation we did not reattribute BT's generic marketing and sales costs, partly because its accounting data at the time suggested net revenues were negative. If we had attributed these costs on the basis of these net revenues then BT's NTS calls would have attracted no costs. BT's 2009/10 accounting data still shows net revenues as negative, indicating that BT is still not correctly matching outpayments to NTS calls.

A7.33 In order to reattribute on the basis of net revenue we need fit-for-purpose outpayment information. We have therefore estimated outpayments for NTS calls as follows.

We used the following methodology to estimate the level of outpayments

A7.34 In response to formal information requests BT provided us with information on its historic retail call volumes (also split by time of day) and revenues by number range for all BT retailed calls i.e. BT to BT and BT to TCP, up to and including the 2009/10 financial year.

A7.35 Using this data we were able to calculate the average retail price paid by consumers for calls to each number range over any 24 hour period. We needed the average outpayment for each of the 084, 087 and 09 groups of ranges for the model to be used to reattribute BT's costs as described above.

A7.36 We first disaggregated the call volumes for each range using information provided by BT. This gave a single figure for the volume of minutes made in each of the daytime, evening and weekend periods for all NTS/PRS calls in total. From this we could assess the percentage of calls made in each time period. We applied these percentages to each 08 and 09 range to obtain the call volumes made in each time period. We recognise this will not yield perfectly accurate estimates since the proportions of calls made in each time period may vary from range to range and

service to service. However, we consider it will provide a sufficient level of accuracy for present purposes.

A7.37 We then disaggregated the 24 hour average 0845 and 0870 prices into daytime, evening and weekend by using average prices paid derived using BT's NTS calculator. This enabled us to disaggregate the total revenue for these ranges by time of day. We then assumed that 0844, 0871 and 09 prices were largely constant across all time periods and obtained these by dividing the total revenues by the total volumes and using the same resultant price for each time period.

A7.38 We believe this assumption is reasonable since the majority of 0844/71 calls are charged at or near to the 5p and 10p (including VAT at 17.5%) maxima for each range with minimal discounting and 09 prices are also rarely disaggregated by time of day. As a result the few calls that are priced differently by time of day will be unlikely to significantly affect the average price for that range.

A7.39 Having derived the average revenue for each range we could group this into averages for 084, 087 and 09 calls. We then divided these figures by the volumes to obtain the approximate average price paid for calls to each group of ranges for each call minute across each time period. Next, using BT's NTS calculator[117], we were able to deduct BT's single tandem call origination charge to obtain the average outpayment for each group of ranges by time of day for use in the model. We used the single tandem charge since where BT acts as transit provider it always pays termination charges based on ST interconnection. Some BT originated calls will use DLE routing and others double tandem routing but on average termination payments calls will be based on or near single tandem call origination.

We used this information to estimate the value of our proposed sales and marketing adjustment

A7.40 Using the revenue data in Table A7.4 and outpayment information we are able to calculate net revenues for NTS calls (split between PRS and other).

A7.41 We disaggregated 'other NTS' calls into 084x calls and 087x calls using the respective call volumes for 2009/10. We then calculated net revenues using outpayments calculated as described in paragraphs A7.34 to A7.39 where net revenues= gross revenues less outpayments.

A7.42 We also disaggregated other calls between the different geographic call types and calls to mobile using the respective volumes for 2009/10. BT had also provided outpayments for these calls which we used to calculate net revenues.

A7.43 We then recalculated the proportion of NTS calls of residential and business net revenues accounted for by NTS calls, as set out in the table below. Revised percentages were 0.6% for residential NTS calls and 0.3% for business. We applied these revised percentages to attribute the total costs for each base identified as sales and marketing to calculate the revised level of costs to be attributed to NTS calls.

117 http://www.btwholesale.com/pages/static/service_and_support/service_support_hub/online_pricing_hub/cpl_hub/cpl_pricing_hub/number_translation_services.html

Table A7.5: 2009/10 net retail revenues & associated percentage splits

		2009/10			
		£m		%	
		Res	Bus	Res	Bus
Calls	Other NTS	✂	✂	✂	✂
	PRS	✂	✂	✂	✂
	Subtotal NTS	✂	✂	0.6	0.3
	Other calls	✂	✂	✂	✂
	Sub-total Δcalls	✂	✂	✂	✂
	Option fees	✂	✂	✂	✂
	Total calls	✂	✂	✂	✂
Other	Lines	✂	✂	✂	✂
	Broadband	✂	✂	✂	✂
	Specified other	✂	✂	✂	✂
	Telephony/BB	✂	✂	✂	✂
	Non-specified other	✂	✂	✂	✂
Total		✂	✂	100.0	100.0

A7.44 The total decrease in costs obtained by re-attributing sales and marketing costs on the basis of net revenue is £6.9m for BT to CP NTS calls. This sum is excluded from the base year costs for BT to CP NTS calls in the RPI-X model. Annex 8 describes how we prorate these adjusted base year costs to include BT to BT NTS call costs to derive the total base year costs for 2009/10.

A7.45 As a final step we estimated the reduction to the £4.8m of support costs we would expect to see if BT had, having established the value of this cost pool, apportioned these costs between the service delivery and marketing and sales cost pools based on the relative cost totals.

A7.46 We estimated this reduction by calculating the weighted average reduction in costs attributed to service delivery and sales and marketing resulting from the re-attribution exercise. We then applied this reduction (39%) to arrive at our estimate of support costs. This approach approximates a full scale reattribution exercise for support costs, an exercise for which we did not have all the necessary information.

A7.47 This final step reduced costs attributed to NTS calls by a further £1.8m, resulting in a total reduction in the recoverable cost base of £8.8m.

We have also adjusted base year costs to remove costs of PNS services

A7.48 BT identified revenues relating to Personal Numbering Service (PNS) and paging in BT to CP PRS revenues in 08/09 of approximately £[✂]m. As explained at paragraph 5.75 PNS calls are not PRS calls. We therefore asked BT to provide details of any impact this would have on the costs related to BT-CP PRS calls. BT estimated the cost to be £0.8m.

A7.49 This estimate was obtained by:

- Determining the proportion of reported revenues accounted for by PNS and paging;
- Multiplying that percentage by the proportion of costs which are attributed on the basis of revenues; and
- Reducing the costs attributed to NTS calls by the resulting percentage (11.5%).

A7.50 When BT submitted 2009/10 data for BT to CP PRS revenues (P313), it mentioned that revenues for PNS and paging services of £[✂]m were also included. We checked with BT whether BT to CP cost for PRS calls had been adjusted to exclude costs relating to these revenues. BT confirmed they had not and suggested a similar methodology to that it had applied to the 2008/09 data should be used.

A7.51 We therefore re-performed the calculation using 2009/10 data and the assumption that 81% of costs were attributed using revenue. The adjustment we calculated was £0.4m and these costs were excluded from BT to CP PRS base year costs.

A7.52 We also ensured the PNS revenues that BT identified were not included in base year revenues.

Outputs from our analysis

A7.53 We estimated the value of two adjustments to BT to CP NTS costs. These were to:

- re-attribute sales and marketing costs using net revenues for the basis of attribution rather than gross revenues. In addition we reattribute an element of support costs not causally attributable. This has the effect of excluding £8.8m from the cost base; and
- exclude costs relating to PNS which have been wrongly included. This has the effect of excluding £0.4m from the cost base.

A7.54 Except for these adjustments we used the costs BT had attributed to NTS calls as base year costs as summarised in the table below.

Table A7.6: Costs attributed to BT to CP NTS calls before & after adjustments (£m)

Costs attributed by BT to NTS calls (2009/10)	22.8
Adjustments	
Sales & marketing costs reattribution	(8.8)
Elimination of PNS costs	(0.4)
Adjusted costs (Ofcom view)	13.6

figures exclude bad debt (as it is handled separately)

We estimate the full impact of the these adjustments on the base year within our RPI-X model

A7.55 This annex describes our analysis of chargeable NTS calls and PRS calls (i.e. 084x, 087x and 09x) which terminate on other networks (BT to CP). BT's regulatory

costing system does not provide costs for customer-paid for NTS and PRS calls which terminate on BT's network (BT to BT). We describe how we calculate total base year costs in paragraphs A8.12 to A8.20.

Annex 8

Estimation of final year unit costs in NTS Retail Uplift RPI-X model

Introduction

A8.1 This annex provides more depth to our explanations of how we have arrived at our proposals, both in relation to the value of our proposed 'X' generated by our NTS Retail Uplift RPI-X model and the percentage level of revenues for the PRS Bad Debt Surcharge.

A8.2 As such this annex complements the discussion of our approach to determining the value of X set out in section 5. There we discuss the rationale for our cost recovery principles, key inputs and assumptions whereas here we focus on methodological matters.

A8.3 In addition we set out the analysis supporting our NTS specific volumes forecast over the proposed charge control period.

Although 0870 calls are no longer subject to the NTS regime we propose to include these calls' costs and volumes when determining the value of X

A8.4 0870 calls were withdrawn from the scope of the NTS Call Origination condition from 1 August 2009. However BT has continued to group 0870 calls for the purpose of accounting for the related retail costs along with all other calls in the 5ppm to 10ppm, higher rate NTS call range.

A8.5 We need to consider how we handle this for the purposes of determining base year costs and volumes for the charge control. We discussed our proposed handling of 0870 calls in an annex to our July 2009 Consultation in the context of our traffic forecast volumes.

Table A8.1 NTS volume trends by number range (CSCS data only)

		Millions of minutes		
		2007/08	2008/09	2009/10
Basic Rate	0845	✂	✂	✂
	0844	✂	✂	✂
	Total	✂	✂	✂
Higher Rate	0870	2,076	1,233	693
	0871	✂	✂	✂
	03	✂	✂	✂
	0872	✂	✂	✂
	0843	✂	✂	✂
	Other	✂	✂	✂
	Total	✂	✂	✂
PRS		✂	✂	✂
All chargeable NTS calls		11,501	8,313	6,453

A8.6 As in July 2009 we plan to keep the volumes and costs of the re-classified number ranges in the modelling base for the purpose of determining the value of X. This did not, and does not mean that the NTS Retail Uplift would apply to these number ranges. Rather this treatment only applies for the purposes of modelling unit costs of retailing NTS calls.

A8.7 In July 2009 we noted that this approach has several advantages. First, it avoids the need to forecast migration from the re-classified number range to other NTS numbers. Secondly, the unit costs would not be likely to be biased by movements between number ranges.

A8.8 It is now nearly a year and a half since these changes were implemented. It is evident from BT's monthly volume data by number range that the use of 0870 has dropped very substantially over the period. Therefore any uncertainty about what will happen to the remaining 0870 volumes does not appear to be a material issue for this charge control.

A8.9 However as it still remains the case that 0870 calls are not separately identified by BT in its costing system we will continue to set the value of X implicitly using costs and volumes which in part relate to 0870 calls. Our base year costs therefore include those relating to 0870 calls. This means that we implicitly regard 0870 calls as making the same ppm contribution to cost recovery as NTS calls.

Step-by-step methodology of RPI-X model

Step 1: determine relevant retail costs and volumes for the base year

A8.10 We take the retail costs, revenues and mean capital employed BT has attributed to chargeable NTS calls (i.e. 084x, 087x and 09x) which terminate on other networks (BT to CP). BT provided these for the most recently available financial year, 2009/10. Annex 7 describes our treatment of these base year costs including the adjustments we plan to propose to make to re-attribute sales and marketing costs

(between paragraphs A7.27 to A7.44) and to exclude costs relating to PNS (paragraphs A7.48 to A7.52). We process these adjustments within our model.

A8.11 We also take the call origination volumes that BT retailed associated with these call types covering the same period. We use these to calculate unit retail costs for these 084x, 087x and 09x services (BT to CP) separately.

A8.12 As explained at paragraph 5.92 BT's regulatory costing system does not provide costs for chargeable NTS calls which terminate on BT's network (BT to BT). To account for these we assume they have the same unit costs as the equivalent BT to CP call type and scale up the total costs for BT to CP calls by using BT to BT call origination minutes to establish total base year costs for chargeable calls.

A8.13 The total cost base for 2009/10 therefore relates to chargeable NTS calls which terminate both on BT's network and on other networks. We apply the same methodology to calculate total mean capital employed.

A8.14 Total volumes are provided by BT and relate to all chargeable NTS calls which terminate both on BT's network and on other networks. We also include call origination minutes for freephone calls split between those terminating on BT's network and other networks to arrive at total base year volumes.

A8.15 Freephone calls do not attract any costs in BT's regulatory costing system and therefore, as set out between paragraphs 5.94 and 5.105, we assume the total cost base for chargeable calls relates to both all chargeable NTS calls and freephone calls. When calculating unit costs we spread the costs attributed to chargeable calls by BT over combined (chargeable and freephone) volumes.

A8.16 The table below shows the inputs into our base year (regulatory accounting information provided by BT), and our intermediate calculations in arriving at our totals. Volumes for all call categories are all simply those volumes figures provided by BT.

A8.17 We identify bad debt costs as a separate column in the table because:

- BT is able to provide bad debt costs for BT to CP and BT to BT NTS and PRS calls; and

- we project these costs into the future using a different set of assumptions to all the other costs.

Table A8.2: Volume, cost and revenue information input into RPI-X model

		Retail call minutes (million mins)	Financial data (£m)				
			Profit & loss				
			Revs	Bad debt	Other costs	Total	MCE
Charegable NTS calls							
BT to CP	Basic rate	Y	X	X	X	T	X
	Higher rate	Y	X	X	X	T	X
	PRS	Y	X	X	X	T	X
	Total	T	T	T	T	T	T
BT to BT	Basic rate	Y	C	X	C	T	C
	Higher rate	Y	C	X	C	T	C
	PRS	Y	C	X	C	T	C
	Total	T	T	T	T	T	T
BT to All	Basic rate	T	T	T	T	T	T
	Higher rate	T	T	T	T	T	T
	PRS	T	T	T	T	T	T
	Total	T	T	T	T	T	T
Freephone NTS calls							
BT to CP		Z	No cost and revenue data for freephone calls				
BT to BT		Z					
BT to All	**Total**	T					
Total NTS calls		T	T	T	T	T	T

Key to cell contents

X	Data inputs from BT's regulatory costing system (adjusted if appropriate)
Y	Volumes from BT's retail 'operational' systems
Z	Volumes from BT system which captures freephone volumes
C	Revenues, costs and MCE calculated using relevant data fro BT to CP calls pro-rated by volumes
T	Totals

A8.18 We then combine mean capital employed and operating costs into a single measure. We achieve this by multiplying the total for mean capital employed by the latest central estimate for our proposed cost of capital for BT's non access services of 9.3% (as discussed at paragraph 5.90) and adding this to the operating costs. As there are few long-lived assets employed by BT's retail businesses there is no need to adopt a more sophisticated approach to handling BT's capital employed[118] within the RPI-X model.

A8.19 As a final stage, and not shown in the table above, we exclude 'excess' PRS bad debt from the cost base as we only need 'standard' bad debt to forecast the costs for the NTS Retail Uplift, which applies to all NTS call types. This additional cost of bad debt for PRS calls is that in excess of the standard level of bad debt associated with non-PRS NTS calls and is recovered by the PRS Bad Debt Surcharge.

A8.20 To exclude this we calculate the unit pence per minute cost for the 'standard' level using the 2009/10 base data average across all non PRS NTS calls. We then multiply this unit cost by call minutes for PRS calls to calculate the standard level of bad debt associated with PRS calls. We then exclude the amount of bad debt beyond this unit figure from the overall PRS bad debt cost figure. Paragraphs A9.11 to A9.12 set out these calculations.

[118] Where there are significant fixed assets, we usually make projections of gross replacement cost, net replacement cost, depreciation etc.

Step 2: project these costs and volumes to end of price control

A8.21 We forecast bad debt differently to all other costs. As explained in paragraphs 5.190 to 5.197 'standard' bad debt is forecast for all NTS calls except freephone using a cost revenue relationship of 1.0. Revenue is forecast in line with forecast volumes and price and we have assumed price changes in line with expected annual inflation.

A8.22 For all other costs we project forward 4 years (2009/10 to 2013/14, the mid point of which is September 2013, the proposed end point of the charge control) assuming an estimate of annual efficiency gains as explained between paragraphs 5.170 and 5.175 and a cost volume elasticity of 0.25.

A8.23 We use our forecast of changes in BT's overall retail activity and apply the year-on-year change for each of the 4 years starting from actual 2009/10 data. We explain our rationale for using this volume metric, and the value we have assumed for this metric, between paragraphs 5.120 to 5.126.

A8.24 We calculate 2013/14 unit costs for bad debt and other costs separately by dividing total cost by 2013/14 forecast volumes. The FAC cost for 2013/14 for all calls except freephone is the combination of forecast retail costs and standard bad debt. Freephone unit costs comprise all retail costs excluding bad debt.

Step 3: compare current prices with end-of-period unit costs to generate our values of 'X'

A8.25 We calculate the current 24-hour average charges by multiplying the current time of day charges from the NTS Calculator for both freephone and other NTS calls weighted by the 2009/10 time of day volumes for the relevant set of NTS calls.

A8.26 As discussed between paragraphs 4.37 and 4.42 we now estimate that the charge control will last approximately 2½ years. However as discussed at paragraphs 5.199 we propose to calculate the value of X as though the control had been implemented from 1 October 2010, with appropriate adjustment.

A8.27 It should be noted that we need to deflate the nominal level of the weighted average charges at September 2010 by the movement in RPI between September 2009 and September 2010. This adjustment is necessary to ensure that, before calculating the value of X, the level of charges is expressed in the same currency as the level of costs, namely September 2009 £s, September 2009 being the mid-point between April 2009 and March 2010, the period to which our base year costs relate.

We take into account expected inflation over the lifetime of the control

A8.28 We calculate 'x' so that it brings projected revenues into line with projected costs over the period of the control. In our model, we do this after removing expected inflation so that all costs and revenues are measured in September 2009 prices. This means we need to make a further adjustment to X to allow for inflation, as we explain below. When there is inflation, all revenues and costs are higher by the same proportion each year, that is, they are each increased by the rate of inflation (RPI). The reduction in prices needed to bring revenues into line with costs is then also increased by the same proportion, that is, by RPI. We need to adjust the value of X we calculate to allow for this.

A8.29 If we wanted to ensure that the price control would always bring (projected) revenues into line with (projected) costs whatever the rate of inflation, we could use a different formula instead of RPI-X, such as (1+RPI).(1-X)-1 (the "." indicates multiplication). It is easy to see by multiplying out the brackets that this is equivalent to RPI - X – RPI.X. In effect there is a missing term in the standard RPI-X formula, the product of RPI and X. This means that, because we actually use RPI-X, the value of X also needs to be increased by RPI if it is to bring revenues *after* inflation into line with costs *after* inflation. If we do not do this, revenues will be greater than costs by a (usually) small amount. We allow for this by multiplying the value of x by (1+RPI), in effect reinstating the missing term in the price control formula. We call this the "real terms adjustment"[119].

A8.30 The best way to illustrate this is with a simple example. Suppose we are setting a one-year charge control. Suppose also that initially revenues are 100 and, with no inflation, we want to bring them into line with costs of 90 at the end of the period. It is easy to calculate that X should be 10%. Now suppose inflation is also 10%. Revenues will then be constant in nominal terms at 100 because RPI-X = 10% – 10% = 0. But costs will only go up by 10% of 90, to 99. Revenues are now above costs. The value of X which would bring revenues into line with costs of 99 is 11% (so that RPI – X = 10% - 11% = -1%), which is equal to the product of the initial value of X (10%) and (1 + RPI). So we apply the real terms adjustment of (1 + RPI) to get the correct value of X

A8.31 We therefore convert 'x' into 'X' by multiplying 'x' by (1+RPI), where RPI is the geometric average expected inflation. We expect RPI to be on average 3.4%[120] over the lifetime of the control.

A8.32 Therefore the trajectory of the glide path is calculated as follows:

$$X = [(C_{13/14} / P_{Sep10}))^{(1/3)}-1](1+RPI)$$

where

P_{Sep10} = 24-hour weighted average[121] charge for the NTS Retail Uplift at 30 September 2010 deflated to September 2009 £s

and

$C_{13/14}$ = final year FAC unit cost

A8.33 In order to determine the value of X for our proposed single basket we calculate a single current 24-hour average charge. We do this by weighting the separate freephone and other NTS call charges as calculated above by freephone and chargeable NTS call volumes. The FAC unit cost used is that for all calls and is simply 2013/14 total forecast costs divided by 2013/14 total forecast volumes.

[119] Note that the adjustment allows for the expected rate of inflation rather than the actual rate. For a more technical explanation of this "real term adjustment" see footnote 210, at Figure 14 of http://stakeholders.ofcom.org.uk/binaries/consultations/wmctr/summary/wmvct_consultation.pdf

[120] This estimate is the geometric mean of our forecast RPI assumptions as set out on page 159 of the WBA Charge Control consultation

[121] Weighted by 2009/10 volumes

BT NTS volume trends

A8.34 As set out paragraph 5.126 we plan to project costs on the basis of a forecast of volume changes in BT's overall retail activity. We set out below our view of likely decline in NTS volumes over the period covered by the proposed charge control.

A8.35 We have looked at BT's NTS volume trends over recent years and considered how these may change over the period of the control. Using the history of call volumes by number range provided by BT to August 2010 we have derived forecasts of NTS call volumes, with and without 0870 calls. We have made assumptions based on the fact that the recent structural changes in the NTS market, namely the fall in dial-up internet and migration from 0870 to 0844/5 and 0871, will have stopped influencing trends from 2011 onwards. Thus most ranges should see similar rates of decline driven by a combination of BT's falling market share in lines and the movement of many types of services from the telephone to online sources.

A8.36 In summary we forecast that on average NTS call minutes will decline at around 15% per year, a level of decline in excess of the decline we expect for BT's telephony lines of a little over 7%% pa. Inevitably it is difficult to make accurate projections for individual number ranges but we believe that the overall forecast is reasonable, given the available information.

A8.37 BT's NTS volumes have been affected by a number of factors over recent years. Firstly specific to BT is its loss of retail market share, in part through the take-up of wholesale products such as Local Loop Unbundling and Wholesale calls by competitors seeking to attract business away from BT. From data supplied by BT on the historic change in its exchange line base we have forecast that BT exchange lines on which consumers make calls charged by BT, i.e. not CPS or wholesale calls, will decline over the life of the control at an average rate of 7%% per annum.

A8.38 A further factor is the substitution effect of people making more calls on their mobiles. We know this is having an impact on geographic calls but the extent of any impact on NTS is less clear. From our consumer surveys (see below) we know that many consumers are wary of making mobile calls other than to geographic or mobile numbers because of the risk of high charges. Many consumers may not be aware until they see the cost on subsequent bills and they may then refrain from calling these numbers. For this reason the proportion of NTS calls made from mobiles is much lower than other types of calls and the mobile substitution effect is not thought to have a significant impact on NTS volume trends.

A8.39 Affecting the NTS call market more generally are the reputational issues with NTS. These issues include high consumer prices on some networks, in particular mobiles, and the wide range of price points. These are coupled with a view among many consumers that companies use NTS numbers simply to secure a revenue share which creates a reluctance to call those numbers if it can be avoided.

A8.40 Poor price transparency has been revealed by consumer research[122] carried out over a number of years, most recently in connection with our ongoing review of Non-Geographic Call Services[123] on which we have recently (16 December 2010) consulted. Furthermore, despite the fact that BT's prices are generally used as the

[122] *Non-Geographic Call Services Review, Research Document* (October 2010) available at http://stakeholders.ofcom.org.uk/binaries/consultations/nongeo/annexes/nts.pdf
[123] http://stakeholders.ofcom.org.uk/consultations/simplifying-non-geo-numbers/

yardstick in advertising by Service Providers, BT consumers' knowledge of NTS call prices is also poor.

A8.41 The reputational factor was one of the key drivers that led to our decision in 2006 to change the way in which calls to 0870 numbers would be treated. 0870 was the range most complained about and led to our announcing that we would restore the link between geographic and 0870 call prices and removing regulatory support for revenue sharing. Even though this did not take effect until August 2009, services that were dependent on their revenue share started to migrate to other ranges following our announcement and have continued to do so since the changes took place. As a result, by 2009/10 BT's 0870 call volumes stood at only around 15% of their level in 2007/8. This decline was to some extent countered by much slower rates of decline in calls to other ranges such as 0844.

A8.42 One of the most significant factors driving NTS usage over the years has been technology. When NTS was first introduced in 1996 it was a relatively small market and growth in new services remained fairly steady until, in 1999, the first dial-up internet access services were launched, led by Freeserve. The result was that the first half of the current decade saw explosive growth primarily in calls to 0845 numbers, which were charged at BT's headline rate for local calls when made from the BT network. This growth peaked around 2005/6 as affordable broadband access became increasingly available. Since then calls to 0845 have declined such that by 2010 non-voice calls to 084 numbers had declined to very low levels.

A8.43 The slowest rates of volume decline have been seen in 080 Freephone and 09 PRS calls. However, decline across all 08 and 09 ranges is forecast to continue as services use alternative technologies to reach their target audience, including computers and smart phones used to access internet based services.

A8.44 All of these factors have been driving the decline in call volumes to the extent that BT's total 08 and 09 volumes fell by more than 25% from 2007/8 to 2008/9. This figure slowed to a little over 20% from 2008/9 to 2009/10 and would appear to be slowing again to a little over 15% in the current year (2010/11). The most volatile drivers of volume loss – i.e. the diminution of dial-up internet traffic and any service closure as a result of the 0870 policy changes – will have little further effect going forward and we are thus expecting a more consistent rate of decline in future. For these reasons we forecast an ongoing decline at the lower rate of 15% per annum until the end of the control period in 2013.

Annex 9

Calculation of the level of the PRS Bad Debt Surcharge

Introduction

A9.1 Our proposals for the PRS Bad Debt Surcharge are based on actual data (bad debt charge, revenues and volumes) supplied by BT and reviewed by BDO. The base year supporting our revised proposals is 2009/10, updated from the 2008/09 data (now corrected) which underpinned our July 2009 proposals.

A9.2 The purpose of this annex is twofold. First it is to define the bad debt to be recovered by BT via both the NTS Retail Uplift and PRS Bad Debt Surcharge and secondly to describe how we have arrived at our proposed level for the Surcharge.

Definition of bad debt

A9.3 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.

A9.4 What is relevant for the PRS Bad Debt Surcharge is the bad debt charge in BT's income statement, which reflects the value of BT's revenues for the period which will, in BT's view, prove to be uncollectable. As a result, the bad debt charge will also reflect an estimate of the total revenue for the period which BT expects to ultimately remain unpaid even when it has not identified this at the individual customer level ('doubtful' debt).

A9.5 For the avoidance of doubt in BT's case it excludes:

- VAT;
- fraudulent AIT which BT has detected (but includes any fraudulent revenues which it has not detected on which the customer subsequently defaults);
- the write off of individual charges on an account (be they PRS charges or any other type of charge) where BT relents to individual customer pressure; and
- the write off of early termination charges.

Elements of the bad debt charge

A9.6 From an accounting perspective BT's bad debt charge in the income statement comprises:

- the value of balances written off on individual customers' accounts in the period, when BT closes a customer's account for non-payment;

- the value of balances written back when BT receives money for balances which it has already written-off; and

- the change in the value of the bad and doubtful debt provision in the period.

A9.7 The purpose of the bad and doubtful debt provision at any point in time is to reflect how much of total outstanding debt at that point in time will not ultimately be paid, given the ageing of outstanding customer debt and other known factors likely to affect payment. As a result, including the movement in the bad and doubtful debt provision between the beginning and end of the period allows the bad debt charge to be properly matched to the corresponding revenue for that period. In other words the bad debt charge should realistically reflect how much of that period's revenues will ultimately not be paid.

Attribution of total bad debt charge to PRS and other NTS calls

A9.8 The methodology used by BT to attribute bad debt to PRS and other NTS calls is described in outline at paragraph 6.97 and repeated here for convenience.

A9.9 BT estimates the share of its total bad debt charge which relates to PRS calls. In essence BT examines the revenues relating to a sample of its customers whose account balances it has written off: the proportion (%) which relates to PRS calls is then applied to the BT total bad debt charge to derive an estimate of PRS bad debt. We refer to this approach to estimating the share of the total bad debt charge which relates to PRS calls as BT's bad debt attribution methodology. The key assumption underpinning this methodology is that the revenues examined are representative of the composition of the balances written-off.

A9.10 BDO's report published alongside this consultation contains a fuller explanation of this methodology.

Calculation of PRS Bad Debt Surcharge

A9.11 The starting point for this calculation is total bad debt attributed to BT's PRS calls and other NTS calls (both BT to BT and BT to CP) as well as associated call minute volumes. The additional cost of bad debt for PRS calls is that in excess of the standard level of bad debt associated with non-PRS NTS calls.

A9.12 The unit cost for this standard level is calculated using the 2009/10 base data for other NTS calls. This unit cost is then multiplied by call minutes for PRS calls to calculate the standard level of bad debt associated with PRS calls. This is excluded from the overall PRS bad debt figure. This adjustment is necessary because the bad debt figure includes the 'excess' PRS bad debt and standard NTS bad debt. Standard bad debt is covered by the NTS Retail Uplift charge.

Table A9.1: Calculation of PRS Bad Debt Surcharge step 1

Normal bad debt (recovered via NTS Retail Uplift)	
Tota bad debt apportioned to chargeable 08x NTS calls (£m)	5.1
Associated minutes (millions)	6,462
Unit cost (pence per minute)	0.08

A9.13 We then multiply this standard bad debt unit cost by the total call minutes for PRS calls to calculate the standard level of bad debt associated with PRS calls. We then exclude this from the overall PRS bad debt cost figure. We need to do this adjustment to avoid standard bad debt for PRS calls being recovered twice, once in the NTS Retail Uplift charge and again in the PRS Bad Debt Surcharge.

Table A9.2: Calculation of PRS Bad Debt Surcharge steps 2 and 3

PRS bad debt recovered via NTS Retail Uplift	
Unit cost normal bad debt (pence per minute)	0.08
PRS minutes (millions)	105
Amount of bad debt recoverd (£m)	0.1
Excess bad debt	
PRS bad debt (£m)	3.7
Normal bad debt already recovered	(0.1)
Excess PRS bad debt (£m)	3.6

A9.14 Finally we express the excess bad debt as a percentage of the associated PRS revenue to arrive at the value of the Surcharge

Table A9.2: Calculation of PRS Bad Debt Surcharge step 4

Surcharge	
Excess PRS bad debt (£m)	3.6
PRS revenue (£m)	68.2
Value of Surcharge based on BT's 2009/10 data	5.2%

Annex 10

Legal Framework

Introduction

A10.1 The purpose of this annex is to set out the relevant legal framework and the tests which must be satisfied before we impose any SMP remedies.

EU regulatory framework

A10.2 The regulatory framework for electronic communications networks and services entered into force on 25 July 2003. The framework is designed to create harmonised regulation across Europe and is aimed at reducing entry barriers and fostering prospects for effective competition to the benefit of consumers. The basis for the regulatory framework is five EU Communications Directives (together "the Directives"):

i) Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services ("Framework Directive");

ii) Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities ("Access Directive");

iii) Directive 2002/20/EC on the authorisation of electronic communications networks and services ("Authorisation Directive");

iv) Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services ("Universal Service Directive"); and

v) Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector ("Privacy Directive").

A10.3 A revised framework for electronic communications was adopted by the EU in November 2009. The revised framework includes Directive 2009/140/EC ("Better Regulation Directive"), amending the Framework Directive, Access Directive and Authorisation Directive, and Directive 2009/136/EC ("Citizen's Rights Directive"), amending the Universal Service Directive and Privacy Directive. The Better Regulation Directive and Citizen's Rights Directive have not yet been implemented in the UK; they must be implemented by 26 May 2011.

Communications Act 2003

A10.4 The Framework Directive, Access Directive, Authorisation Directive and Universal Service Directive were implemented in the United Kingdom on 25 July 2003 via the Communications Act 2003 ("the Act"). The Privacy Directive was implemented by regulations which came into force on 11 December 2003.

A10.5 Part 2 of the Act sets out the majority of the Act's provisions that implement the Directives. Sections 32, 45-50 and 78-90 are of particular importance. In addition, Ofcom is required to act in accordance with its general and specific duties in sections 3 and 4 of the Act respectively.

A10.6 Under section 3, Ofcom must, in carrying out its functions, further the interests of citizens in relation to communications matters and the interests of consumers in relevant markets, where appropriate by promoting competition.

A10.7 Section 3(3) requires that Ofcom have regard to the principles of transparency, accountability, proportionality, consistency, targeting only cases where action is needed and any other principles representing best regulatory practice.

A10.8 Section 3(4) lists criteria to which Ofcom must have regard where they appear relevant in the circumstances. The list includes:

- (b) the desirability of promoting competition in relevant markets
- (d) the desirability of encouraging investment and innovation in relevant markets.

A10.9 Section 3(5) confirms that in furthering the interests of consumers Ofcom must have regard, in particular, to the interests of those consumers in respect of choice, price, quality of service and value for money. This corresponds with the policy objective in Article 8(2) of the Framework Directive.

A10.10 Section 4 of the Act requires that Ofcom act in accordance with the Community requirements set out at sections 4(3) to 4(9). Where it appears to Ofcom that its general duties conflict with its section 4 duties, priority must be given to the latter.

A10.11 Ofcom has, however, a wide measure of discretion in balancing its statutory duties and objectives including where they conflict. In doing so, Ofcom will take all relevant considerations into account, including consultation responses. Sections 4 to 7 of this document consider the application of duties relevant to our proposals in more detail.

Market Reviews

A10.12 The Directives require National Regulatory Authorities ("NRAs") to carry out reviews of competition in communications markets to ensure that regulation remains appropriate and proportionate in the light of changing market conditions.

A10.13 Each market review normally has three stages, namely:

- definition of the relevant markets;
- assessment of competition in each market, in particular whether any undertakings have SMP[124] in a given market; and
- assessment of appropriate regulatory obligations where there has been a finding of SMP.

A10.14 On 15 September 2009, Ofcom published a Review of the fixed narrowband services wholesale markets (the "2009 Wholesale Market Review Statement"), where decisions were made in relation to market definition, market power assessment and appropriate remedies.

[124] Significant Market Power, which is the power to influence markets in a way that could be detrimental to consumers.

Relationship between this consultation and the 2009 Wholesale Market Review Statement

A10.15 Charge Controls are a specific remedy that Ofcom can impose upon a market once a finding of SMP has been made in that market.

A10.16 We do not propose to set out in further detail the legal framework for the market review process in this document and will concentrate on the framework that allows the imposition of a Charge Control regime. A detailed discussion of the underlying legal framework for the market review process is set out in the 2009 Wholesale Market Review Statement.

A10.17 The 2009 Wholesale Market Review Statement decided that wholesale call origination on a fixed narrowband network in the UK except the Hull Area is a market in which BT holds SMP.

A10.18 That market was further analysed and appropriate remedies imposed to address the competitive concerns in it were imposed. Condition AAA11 requires BT to provide NTS call origination on fair and reasonable terms, conditions and charges. It further requires BT to pass the net retail call revenue to a TCP less the charge for NTS call origination. BT may make no charge for the provision of NTS call origination except for (a) a charge for the call origination service, (b) a charge for the NTS Retail Uplift element and (c) the PRS Bad Debt Surcharge.

A10.19 The 2009 Wholesale Market Review Statement further concluded that the NTS Retail Uplift charge and the PRS Bad Debt Surcharge should be subject to price controls in order to address the risk that BT's SMP in NTS call origination could give rise to price distortion..

A10.20 The scope of this consultation is to consider in detail the implementation of the charge control for the NTS Retail Uplift and put forward proposals as to its level. In addition, we are consulting on the level of the PRS Bad Debt Surcharge. It is therefore important to set out the framework within which a Charge Control is considered as a specific SMP remedy.

SMP Remedies

Subject matter of the SMP remedies

A10.21 The third and final market review stage concerns remedies. Article 16 of the Framework Directive dictates the imposition or removal of SMP remedies depending upon whether or not a finding of SMP in an identified services market has been made. Where an SMP finding has been made, Ofcom will consider what appropriate SMP remedies are available. This process was completed in the 2009 Wholesale Market Review Statement, with the proviso that certain Charge Control remedies would be further consulted upon.

A10.22 Under section 45 of the Act, Ofcom is empowered generally to set SMP services conditions authorised or required by sections 87 to 92. The latter implement Articles 9 to 13 of the Access and Interconnection Directive and Articles 17 to 19 of the

Universal Service Directive[125]. In addition, Ofcom's power to set such conditions includes additional powers specified in section 45(10), such as powers to include provisions in SMP services conditions for Ofcom to make directions in respect of specified markets.

A10.23 Section 46 of the Act provides that SMP services conditions set under section 45 may only be applied if the person to whom they are to apply is a communications provider (or a person who makes associated facilities available) and is a person whom Ofcom has determined to be a person having SMP in a services market. It is therefore important to consider the precise identity of the regulated entity on whom it is appropriate to impose obligations.

A10.24 In relation to the imposition of charge controls, section 87(9)(a) empowers Ofcom to set

> "such price controls as Ofcom may direct in relation to matters connected with the provision of network access to the relevant network, or with the availability of the relevant facilities"

Regulated entity

A10.25 As noted above, section 46 provides that a person to whom an SMP services condition is applied must be a "communications provider" or a "person" who makes associated facilities available and a "person" who Ofcom has determined to have SMP in a specific market for electronic communications networks, electronic communications services or associated facilities (a "services market").

A10.26 Article 16 of the Framework Directive requires that, where an NRA determines that a relevant market is not effectively competitive, it shall identify "undertakings" with SMP on that market and impose appropriate specific regulatory obligations. For the purposes of EC competition law, "undertaking" includes companies within the same corporate group (*Viho v Commission* Case C-73/95 P [1996] ECR I-5447), for example, where a company within that group is not independent in its decision making.

A10.27 Ofcom considers it appropriate to prevent a dominant provider[126] to whom an SMP services condition is applied, which is part of a group of companies, exploiting the principle of corporate separation. The dominant provider should not use another member of its group to carry out activities or to fail to comply with a condition, which would otherwise render the dominant provider in breach of its obligations.

A10.28 As set out above, the 2009 Wholesale Market Review Statement identified BT as having SMP in the provision of wholesale call origination on a fixed narrowband network in the United Kingdom except the Hull Area and considered it appropriate to impose SMP obligations on BT.

[125] We note that Articles 18 and 19 of the Universal Service Directive have been repealed by the Citizen's Rights Directive.
[126] i.e. a provider with SMP.

The legal tests

A10.29 However, before Ofcom can set or modify SMP services conditions on such a regulated entity, it must be satisfied that certain legal tests have been satisfied in imposing the SMP condition in question.

A10.30 In section 7 of this document, Ofcom sets out its reasons why those tests would be satisfied based on evidence presently before Ofcom. The 2009 Wholesale Market Review Statement imposed appropriate remedies in accordance with the legal tests set out below and imposed Condition AAA11 on the supply of NTS call origination. The 2009 Wholesale Market Review Statement further concluded that it was appropriate for charge controls to be imposed on the NTS Retail Uplift and the PRS Bad Debt Surcharge. Nevertheless, it remains important to apply the tests to the implementation of those charge controls to ensure that they remain consistent with the requirements of the Act.

A10.31 Before setting any charge contro, Ofcom must be satisfied that the conditions set out in section 88 of the Act in relation to price controls are met. Section 88 only allows Ofcom to impose such obligations where:

- it appears to Ofcom from the market analysis carried out for the purpose of setting that condition that there is a relevant risk of adverse effects arising from price distortion (see below for the meaning of this term); and

- it also appears to Ofcom that the setting of the condition is appropriate for the purposes of promoting efficiency, promoting sustainable competition, and conferring the greatest possible benefits on the end-users of public electronic communications services.

In considering these matters, Ofcom may have regard to the prices at which services are available in comparable competitive markets and may determine what they consider to represent efficiency by using such cost accounting methods as they think fit.

A10.32 There is a relevant risk of adverse affects arising from price distortion if the SMP designated undertaking might fix and maintain some or all of its prices at an excessively high level, or impose a price squeeze, so as to have adverse consequences for end-users of public electronic communications services.

A10.33 It is to be noted that the term “price control” has not been defined in the EC Communications Directives. The 20th recital to the Access and Interconnection Directive suggests that it could cover a range of obligations concerning prices:

“Price control may be necessary when market analysis in a particular market reveals inefficient competition. The regulatory intervention may be relatively light, such as an obligation that prices for carrier selection are reasonable as laid down in Directive 97/33/EC, or much heavier such as an obligation that prices are cost oriented to provide full justification for those prices where competition is not sufficiently strong to prevent excessive pricing. In particular, operators with significant market power should avoid a price squeeze whereby the difference between their retail prices and the interconnection prices charged to competitors who provide similar retail services is not adequate to ensure sustainable competition. When a national regulatory authority calculates costs incurred in establishing a service mandated under this Directive, it is appropriate to allow a reasonable return on the capital employed

including appropriate labour and building costs, with the value of capital adjusted where necessary to reflect the current valuation of assets and efficiency of operations. The method of cost recovery should be appropriate to the circumstances taking account of the need to promote efficiency and sustainable competition and maximise consumer benefits."

A10.34 Article 12 of that Directive, however, expressly empowers NRAs to impose obligations on operators to meet reasonable requests for access to, and use of, specific network elements and associated facilities, inter alia in situations where the NRA considers that denial of access or unreasonable terms and conditions having a similar effect would hinder the emergence of a sustainable competitive market at the retail level, or would not be in the end-user's interest, and that NRAs may attach to those obligations conditions covering fairness, reasonableness and timeliness.

A10.35 In the light of the potential interplay between these provisions, Ofcom has addressed the section 88 test also under the requirement to provide network access on fair and reasonable terms and conditions, including charges.

A10.36 Having determined that the conditions set out in section 88 are met, Ofcom may proceed to impose a charge control. However, Ofcom must also ensure that a number of additional tests are met in respect of the proposed manner of implementation of the charge control. First, under section 47(2) of the Act, Ofcom must show for each and every SMP services condition that it is:

- *objectively justifiable* in relation to the networks, services, facilities, apparatus or directories to which it relates;
- *not such as to discriminate unduly* against particular persons or against a particular description of persons;
- *proportionate* to what the condition or modification is intended to achieve; and
- in relation to what it is intended to achieve, *transparent*.

A10.37 Second, each of the tests set out in section 87(4) of the Act which Ofcom considers relevant must be satisfied. That section requires that Ofcom:

"…must take into account, in particular, the following factors—

- (a) the technical and economic viability, having regard to the state of market development, of installing and using facilities that would make the proposed network access unnecessary;
- (b) the feasibility of the provision of the proposed network access;
- (c) the investment made by the person initially providing or making available the network or other facility in respect of which an entitlement to network access is proposed;
- (d) the need to secure effective competition in the long term;

- (e) any rights to intellectual property that are relevant to the proposal; and
- (f) the desirability of securing that electronic communications services are provided that are available throughout the member States."

A10.38 In the context of setting charge controls, Ofcom must also show, in accordance with section 88(2) that in setting the network access pricing obligation it has taken account of the extent of the SMP provider's investment in the matters to which the condition relates.

A10.39 It is to be emphasised that this list is not exhaustive and other reasons can therefore be added by Ofcom for imposing the obligation(s) in question.

ERG Common Position on Remedies

A10.40 At a plenary meeting on 18/19 May 2006, the European Regulators Group ("ERG") adopted a revised version of its document entitled 'Revised ERG Common Position on the approach to Appropriate remedies in the new regulatory framework', ERG (06) 33 (the "Common Position on Remedies").

A10.41 That document sets out NRAs' views on imposing remedies in a manner that contributes to the development of the internal market and ensures a consistent application of the regulatory framework under the EC Communications Directives.

A10.42 Ofcom has therefore taken into account those views in considering Charge Controls as an appropriate remedy.

Annex 11

Legal Instrument: Notification of proposed SMP conditions

Introduction

A11.1 The purpose of this section is to set out the intended wording of the proposed new and amended conditions. As such it is the mechanism by which we formally notify stakeholders of our proposals before we set them in their final form.

Notification under Section 48(2) of the Communications Act 2003

Proposals for the setting on BT of a new SMP services condition AAA4(NTS) and a modification of the SMP services conditions AAA11 and AAA3 as notified in Schedule 1 to the Notification at Annex 7 to the Review of the fixed narrowband services wholesale markets published on 15 September 2009 as a result of the market power determinations set out in that same Notification

Background

1. On 28 November 2003, the Director General of Telecommunications ("the Director") published a statement *Review of the fixed narrowband line, call origination, conveyance and transit markets* containing a notification identifying the market for call origination on fixed public narrowband networks for the UK excluding the Hull Area in which he found that BT had significant market power ("SMP") and set certain SMP conditions on BT taking effect on 28 November 2003, including SMP services conditions AA4 and AA11[127];

2. On 29 December 2003, OFCOM took over the functions and responsibilities under the Communications Act 2003 (the "Act") relating to the EC Communications directives from the Director;

3. OFCOM published notifications on 30 July 2004, 10 February 2005 and 18 August 2005 making various modifications to SMP services condition AA4, and on 4 April 2005 a consultation containing a notification of proposals to set a new SMP services condition AA4(f) (the charge control for the NTS Retail Uplift) and modify the existing SMP services condition AA11 (Requirement to provide NTS Call Origination). On 28 September 2005 OFCOM published a statement *Charges between communications providers: number translation services retail uplift charge control and premium rate services bad debts surcharge*. The statement included a notification at Annex 1 imposing on BT the SMP services condition AA4(f) and modifying SMP services condition AA11, to take effect on 1 October 2005[128];

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[127] *Review of the fixed narrowband line, call origination, conveyance and transit markets,* 28 November 2003 (http://www.ofcom.org.uk/consult/condocs/narrowband_mkt_rvw/nwe/)

[128] *Number Translation Services Retail Uplift charge control and Premium Rate Services bad debt surcharge,* 28 September 2005 (*http://www.ofcom.org.uk/consult/condocs/NTSfin/statement_nts_uplift/statement_nts_uplift.pdf*)

4. On 19 March 2009, OFCOM published its consultation document Review of the fixed narrowband services wholesale markets[129].

5. On 28 July 2009, OFCOM published its consultation document Wholesale charges for Number Translation Services and Premium Rate Services (the "July 2009 Consultation").

6. On 15 September 2009, OFCOM published its Review of the fixed narrowband services wholesale markets statement (the "2009 Wholesale Market Review")[130]. The 2009 Wholesale Market Review decided, amongst other matters, that:

   i) wholesale call origination on a fixed narrowband network in the UK except the Hull Area be defined as a relevant market;

   ii) BT holds SMP in that defined market;

   iii) BT be subject, as an appropriate SMP services condition, to an obligation to provide NTS call origination (the "NTS Condition");

   iv) the NTS Retail Uplift charge which BT is allowed to recover under the NTS Condition be subject to a charge control;

   v) the charge for bad debt relating to the retailing of Premium Rate Services calls (the "PRS Bad Debt Surcharge") which BT is allowed to recover under the NTS Condition be subject to a charge control.

7. Ofcom noted in the 2009 Wholesale Market Review that details of the NTS Retail Uplift and the level of the PRS Bad Debt Surcharge were being addressed separately in the July 2009 Consultation.

8. Following the July 2009 Consultation Ofcom decided to undertake a further consultation on the details of the NTS Retail Uplift and the level of the PRS Bad Debt Surcharge and issued a further consultation document entitled Wholesale charges for Number Translation Services and Premium Rate Services on.[DATE OF PUBLICATION].

9. These proposals are made by reference to the market power determination referred to in paragraph 6 above, and, as such, are to be treated as supplementary to the Notification of SMP services conditions set out in the 2009 Wholesale Market Review.

Proposals

10. OFCOM hereby makes, in accordance with section 48(2) of the Act, the following proposals to set SMP services condition AAA4(NTS) on BT, as set out in Schedule 1 to this Notification for the purposes of controlling charges which may be made by BT in respect of the NTS Retail Uplift as identified and proposed by the 2009 Wholesale Market Review.

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[129] *Review of the fixed narrowband services wholesale markets,* 19 March 2009 (http://www.ofcom.org.uk/consult/condocs/review_wholesale/fnwm.pdf)

[130] http://stakeholders.ofcom.org.uk/binaries/consultations/wnmr_statement_consultation/summary/main.pdf

11. The effect of and OFCOM's reasons for making the proposals to set the SMP condition set out in Schedule 1 to this Notification is set out in sections 4, 5 and 7 of the accompanying consultation document.

12. OFCOM hereby also proposes, in accordance with section 48(2) of the Act, to modify as set out in Schedule 2 to this Notification SMP services condition AAA11 in the Notification in Schedule 1 of Annex 7 to the 2009 Wholesale Market Review.

13. The effect of, and OFCOM's reasons for making the proposals to modify the SMP condition set out in Schedule 2 to this Notification is set out in sections 6 and 7 of the accompanying consultation document.

14. OFCOM hereby also proposes, in accordance with section 48(2) of the Act, to modify as set out in Schedule 3 to this Notification SMP services condition AAA3 in the Notification in Schedule 1 of Annex 7 to the 2009 Wholesale Market Review.

15. The effect of, and OFCOM's reasons for making the proposals to modify the SMP condition set out in Schedule 3 to this Notification is set out in section 7 of the accompanying consultation document.

Ofcom's duties and legal tests

16. In making the proposals referred to in paragraphs 10, 12 above of this Notification, OFCOM has considered and acted in accordance with its general duties set out in section 3 of the Act and the Community requirements in section 4 of the Act. In considering whether to make the proposals set out in this Notification, OFCOM are proposing SMP conditions by reference to the market power determinations made in relation to the identified services markets made in the Notification in Annex 7 of the *Review of the fixed narrowband wholesale markets* dated 15 September 2009.

17. Further, OFCOM consider that the proposed new and modified SMP services conditions referred to in paragraphs 10, 12 and 14 of this Notification comply with the requirements of sections 45 to 47, 87 and 88 of the Act as appropriate and relevant to each of those SMP services conditions.

18. In making all of the proposals referred to in paragraphs 10 to 15 of this Notification, OFCOM has considered and acted in accordance with its general duties set out in section 3 of the Act and the Community requirements in section 4 of the Act.

Making representations

19. Representations may be made to OFCOM about any of the proposals set out in this Notification and the accompanying explanatory statement by no later than 24 March 2011.

20. Copies of this Notification and the accompanying explanatory statement have been sent to the Secretary of State in accordance with section 50(1)(a) of the Act, as well as the European Commission and to the regulatory authorities of every other member State in accordance with section 50(3) of the Act.

Interpretation

21. In this Notification:

a) **“2009 Wholesale Market Review Statement”** has the meaning given to it in Paragraph 6 of this Notification;

b) **“Act”** means the Communications Act 2003 (c.21);

c) **"BT"** means British Telecommunications plc, whose registered company number is 1800000, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006;

d) **"Director"** means the Director General of Telecommunications as appointed under section 1 of the Telecommunications Act 1984;

e) **“Hull Area”** means the area defined as the 'Licensed Area' in the licence granted on 30 November 1987 by the Secretary of State under section 7 of the Telecommunications Act 1984 to Kingston upon Hull City Council and Kingston Communications (Hull) plc (now known as KCOM Group plc), and

f) **“OFCOM”** means the Office of Communications.

22. Save for the purposes of paragraph 6 of this Notification and except as otherwise defined in paragraph 21 of this Notification, words or expressions used shall have the same meaning as they have in the Act.

23. For the purpose of interpreting this Notification:

    a) headings and titles shall be disregarded; and

    b) the Interpretation Act 1978 (c. 30) shall apply as if this notification were an Act of Parliament.

24. The Schedules to this Notification shall form part of this Notification.

Competition Policy Director

A person authorised by Ofcom under paragraph 18 of the Schedule to the Office of Communications Act 2002

[ ] [month] 2011

SCHEDULE 1

Proposed SMP services condition AAA4(NTS) to be imposed on BT as a result of the market power determination made by OFCOM in the *Review of the fixed narrowband services wholesale markets published on 15 September 2009* in respect of the services market for wholesale call origination on a fixed narrowband network in the UK except the Hull area in which it has been found that BT is a person having significant market power.

1. In Part 2 of Schedule 1 to the Notification published at Annex 7 of the statement entitled *Review of the fixed narrowband services wholesale markets* published on 15 September 2009 by Ofcom, the following SMP services condition AAA4(NTS) shall be inserted after Condition AAA4(WLR).

Condition AAA4(NTS) *Charge control – NTS Retail Uplift*

AAA4(NTS).1 Without prejudice to the generality of Condition AAA3, and subject to paragraphs AAA4(NTS).2, AAA4(NTS).4, AAA4(NTS).5 and AAA4(NTS).10, the Dominant Provider shall take all reasonable steps to secure that, on the last day of each Relevant Year, the Percentage Change (as determined in accordance with paragraph AAA4(NTS).3 in the aggregate of the NTS Retail Uplift for Chargeable calls and the NTS Retail Uplift for Freephone calls (the "NTS Basket"), is not more than the Controlling Percentage (as determined in accordance with paragraph AAA4(NTS).6).

AAA4(NTS).2 For the purpose of complying with paragraph AAA4(NTS).1, the Dominant Provider shall take all reasonable steps to secure that the revenue it accrues as a result of all individual Charge Changes during any Relevant Year shall be no more than that which it would have accrued had all of those Charge Changes been made

i. For the First Relevant Year, on [x][131] of that year; and

ii. For each of the Second Relevant Year and the Third relevant year, on 1 October of that year.

[131] The date of coming into effect of the condition, as set out at paragraph [#] above.

The Dominant Provider shall be deemed to have satisfied this obligation where, in the case of a single Charge Change in the Relevant Year in question, the following formula is satisfied—

$$RC(1-D) \leq TRC$$

where—

RC is the revenue change associated with the single Charge Change made in the Relevant Year in question, calculated by the relevant Percentage Change immediately following the Charge Change multiplied by the revenue accrued during the Relevant Financial Year;

TRC is the target revenue change required in the Relevant Year in question to achieve compliance with paragraph AAA4(NTS).1, calculated by the Percentage Change required in the Relevant Year in question to achieve compliance with paragraph AAA4(NTS).1 multiplied by the revenue accrued from the provision of the services in the NTS Basket during the Relevant Financial Year; and

D is the elapsed proportion of the Relevant Year in question calculated as:

(i) For the First Relevant year, the date on which the charge change takes effect, expressed as a numeric entity on a scale ranging from [x][132] = 0 to 30 September = [x][133], divided by [x][134]

(ii) for the Second Relevant Year, this being the Leap Year, the date on which the Charge Change takes effect, expressed as a numeric entity on a scale ranging from 1 October = 0 to 30 September = 365, divided by 366; and,

(iii) for the Third Relevant Year, the date on which the Charge Change takes effect, expressed as a numeric entity on a scale ranging from 1 October = 0 to 30 September = 364, divided by 365.

AAA4(NTS).3 The Percentage Change shall be calculated for the purposes of complying with paragraph AAA4(NTS).1 by employing the following formula—

$$C_t = \frac{\sum_{i=1}^{n}\left[R_i \frac{(p_{t,i} - p_{0,i})}{p_{0,i}}\right]}{\sum_{i=1}^{n} R_i}$$

[132] The date of coming into effect of the condition as set out at paragraph [#] above.
[133] The number of days between start date of the charge control and 30 September 2011, minus 1
[134] The number of days between start date of the charge control and 30 September 2011.

where—

C_t is the Percentage Change in the aggregate of charges for the provision of the services in the NTS Basket at a particular time *t* during the Relevant Year;

n is the number of individual services that form part of (or are comprised in) the provision of the services in the NTS Basket;

R_i is the sum of the revenue accrued during the Relevant Financial Year in respect of the individual service *i* that forms part of (or is comprised in) the provision of the services in the NTS Basket where *i* is a unique number from 1 to *n* for each of the *n* individual services in the NTS Basket;

$p_{0,i}$ is the published charge made by the Dominant Provider for the individual service *i* that forms part of (or is comprised in) the provision of the NTS Basket immediately preceding the beginning of the Relevant Year; and

$p_{t,i}$ is the published charge made by the Dominant Provider for the individual service *i* that forms part of (or is comprised in) the provision of the services in the NTS Basket at time *t* during the Relevant Year.

AAA4(NTS).4 For the purposes of the provision of the services in the NTS Basket, where the Percentage Change in the Relevant Year in question is less than the Controlling Percentage (so that the Dominant Provider has made smaller than allowed increases or larger than required reductions), (the 'Excess') then the Controlling Percentage for the following Relevant Year for the provision of the services in the NTS Basket shall be determined in accordance with paragraph AAA4(NTS).6, but increased by the absolute value of such Excess.

AAA4(NTS).5 For the purposes of the provision of the services in the NTS Basket, where the Percentage Change in the Relevant Year in question is more than the Controlling Percentage (so that the Dominant Provider has made larger than allowed increases or smaller than required reductions), (the 'Deficiency') then the Controlling Percentage for the following Relevant Year for the provision of the services in the NTS Basket shall be determined in accordance with paragraph AAA4(NTS).6, but decreased by the absolute value of such Deficiency.

AAA4(NTS).6 Subject to paragraphs AAA4(NTS).4 and AAA4(NTS).5, the Controlling Percentage in a Relevant Year means:

i. for the First Relevant Year, RPI increased by [X1][135] percentage points.

ii. For the Second Relevant Year and the Third Relevant Year, RPI increased by [X][136] percentage points

AAA4(NTS).7 Where—

(a) the Dominant Provider makes a material change (other than to a Charge) to the Charge Controlled Service for which a Charge is charged;

(b) the Dominant Provider makes a change to the date on which its financial year ends; or

(c) there is a material change in the basis of the Retail Prices Index,

paragraphs AAA4(NTS).1 to AAA4(NTS).6 shall have effect subject to such reasonable adjustment to take account of the change as OFCOM may direct to be appropriate in the circumstances. For the purposes of paragraph AAA4(NTS).7(a), a material change to the Charge Controlled Service includes (but is not limited to) the introduction of a new product and/or service wholly or substantially in substitution for the existing Charge Controlled Service.

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[135] If formula is RPI + X, the value of X1 = [Sum{wi * $P_{m,i}$} / Sum{wi * P_0,i)}]* (1+ change in RPI + X) - (1+ change in RPI), where *wi* is the weight of the service in the basket as calculated in paragraph AAA4(NTS).3; *Po,i* is the published charge made by the Dominant Provider for the individual service i that forms part of the basket immediately preceding the Relevant Year, excluding any discounts offered by the Dominant Provider; $P_{m,i}$ is the published charge made by the Dominant Provider for the individual service i that forms part of the basket on 1 October 2010, excluding any discounts offered by the Dominant Provider; and *change in RPI* is the change in the Retail Prices Index in the period of 12 months ending on 30 June 2010 expressed as a percentage (rounded to two decimal places) of that Index as at the beginning of that period.
If formula is RPI - X, the value of X1 = 1 + change in RPI - [Sum{wi * $P_{m,i}$} / Sum{wi * P_0,i)}]* (1+ change in RPI - X), where *wi* is the weight of the service in the basket as calculated in paragraph AAA4(NTS).3; *Po,i* is the published charge made by the Dominant Provider for the individual service i that forms part of the basket immediately preceding the Relevant Year, excluding any discounts offered by the Dominant Provider; $P_{m,i}$ is the published charge made by the Dominant Provider for the individual service i that forms part of the basket on 1 October 2010, excluding any discounts offered by the Dominant Provider; and *change in RPI* is the change in the Retail Prices Index in the period of 12 months ending on 30 June 2010 expressed as a percentage (rounded to two decimal places) of that Index as at the beginning of that period.

[136] Ofcom is seeking views on the appropriate value of X within the range of XX% and XX% as discussed in Section X of the explanatory statement attached to this notification.

AAA4(NTS).8 The Dominant Provider shall, no later than three months after the end of each Relevant Year, supply to OFCOM, in writing, the data necessary to perform the calculation of the Percentage Change.

AAA4(NTS).9 If it appears to OFCOM that the Dominant Provider is likely to fail to secure that the Percentage Change does not exceed the Controlling Percentage for the last Relevant Year beginning on 1 October 2012 and ending on 30 September 2013, the Dominant Provider shall make such adjustment to any of its charges for the provision of the services in the category of services in question and by such day in that Year (or, if appropriate in OFCOM's opinion, by such day that falls after the end of the Relevant Year) as OFCOM may direct for the purpose of avoiding such a failure.

AAA4(NTS).10 For the purpose of complying with AAA4(NTS).1, the Dominant Provider shall take all reasonable steps to ensure that the NTS Retail Uplift for any Freephone call does not exceed the NTS Retail Uplift for any Chargeable call at any point during each Relevant Year.

AAA4(NTS).11 If it appears to OFCOM that the Dominant Provider is likely to fail to comply with the requirements of AAA(NTS).10, in any Relevant Year, the Dominant Provider shall make such adjustment to any of its charges for the provision of the services in the category of services in question and by such day in that Year (or, if appropriate in OFCOM's opinion, by such day that falls after the end of the Relevant Year) as OFCOM may direct for the purpose of avoiding such a failure.

AAA4(NTS).12 Paragraphs AAA4(NTS).1 to AAA4(NTS).10 shall not apply to such extent as OFCOM may direct.

AAA4(NTS).13 In this Condition—

(a) "Charge" means, for the purposes of paragraph AAA4(NTS).7, the charge (being in all cases the amounts offered or charged by the Dominant Provider) to a Communications Provider for the Charge Controlled Service;

(b) "Charge Change" means a change to any of the charges for the provision of the services in the NTS Basket;

(c) "Charge Controlled Service" means a product or service which forms part of (or is comprised in) the provision of the services in the NTS Basket;

(d) "Controlling Percentage" is to be determined in accordance with paragraph AAA4(NTS).6;

(e) "Freephone Calls" means NTS calls to Freephone numbers, starting 080 or 0500;

(f) "Leap Year" means the Relevant Year beginning on 1 October 2011 and ending on 30 September 2012;

(g) "Chargeable Calls" means all NTS Calls, including Premium Rate Service Calls, other than Freephone Calls

(h) "NTS Basket" means Freephone Calls and Chargeable Calls;
(i) "OFCOM" means the Office of Communications;
(j) "Percentage Change" has the meaning given to it in paragraph AAA4(NTS).3;

(k) "Relevant Financial Year" means the period of 12 months ending on 31 March immediately preceding the Relevant Year in question;

(l) "Relevant Year" means each of the following three periods:

(i) the period beginning on X 2011 and ending on 30 September 2011 (the "First Relevant Year");

(ii) the period beginning on 1 October 2011 and ending on 30 September 2012 (the "Second Relevant Year");

(iii) the period beginning on 1 October 2012 and ending on 30 September 2013 (the "Third Relevant Year").

(m) "Retail Prices Index" means the index of retail prices compiled by an agency or a public body on behalf of Her Majesty's Government or a governmental department (which is the Office of National Statistics at the time of publication of this Notification) from time to time in respect of all items; and

(n) "RPI" means the amount of the change in the Retail Prices Index in the period of twelve months ending on 31^{sth} May immediately before the beginning of a Relevant Year, expressed as a percentage (rounded to two decimal places) of that Retail Prices Index as at the beginning of that first mentioned period.

SCHEDULE 2

[Proposed] Modification to SMP condition AAA11

1. SMP Condition AAA11 shall be modified by inserting the following paragraph AAA11.5 after paragraph AAA11.4 of Condition AAA11 in Part 2 of Schedule 1 to the Notification published at Annex 7 of the statement entitled *Review of the fixed narrowband services wholesale markets* published on 15 September 2009 by Ofcom -

AAA11.5 For the charge referred to in Condition AAA11.4 (c) above, the Dominant Provider shall charge the Third Party no more than [ ] per cent of the Net Retail Call Revenue for that Premium Rate Service call.

SCHEDULE 3

[Proposed] Modification to SMP condition AAA3

1. SMP Condition AAA3 shall be modified by inserting the following new paragraph AAA3.2(b) after paragraph AAA3.2(a) of Condition AAA3 in Part 2 of Schedule 1 to the Notification published at Annex 7 of the statement entitled *Review of the fixed narrowband services wholesale markets* published on 15 September 2009 by Ofcom -

AAA3.2(b) For the avoidance of doubt, where the charge offered, payable or proposed for Network Access covered by Condition AAA1(a) is for a service which is subject to the charge control under Condition AAA4(NTS), the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that such a charge satisfies the requirements of paragraph AAA3.1 above.

Annex 12

Glossary

This glossary contains definitions of terms used in this document. These definitions are for guidance only and have no legal standing.

BT: British Telecommunications plc.

Communications provider (CP): a person who provides an Electronic Communications Network or provides an Electronic Communications Service.

Communications Act 2003 ('the Act'): The Act of Parliament that established Ofcom, set out its duties, and the powers which Ofcom has to discharge those duties.

CCA (Current Cost Accounting): An accounting convention, where assets are valued and depreciated according to their current replacement costs whilst maintaining the operating or financial capital of the business entity.

CVE (Cost Volume Elasticity): The CVE is the percentage change in total costs for a one percent change in output

DLRIC (Distributed Long Run Incremental Costs): is the Long-Run Incremental Cost of an individual service (see definition below) with a contribution of intra-core common costs.

EPMU (Equal Proportionate Mark-up): This methodology allows the recovery of common costs in relation to LRIC.

FAC (Fully Attributed Costs): an accounting method for attributing all the costs of the company to defined activities such as products and services. Typically this method would follow the principle of cost causality.

LRIC (Long Run Incremental Costs): The costs caused by the provision of a defined increment of output, taking a long run perspective, assuming that some output is already produced. The 'long run' means the time horizon over which all costs (including capital investment) are variable.

MCE (Mean Capital Employed): total assets less current liabilities, excluding corporate taxes and dividend payable, and provisions other than those for deferred taxation. The mean is computed from the start and the end values for a period.

NTS: Number Translation Services – telephone services using numbers identified in the National Telephone Numbering Plan ('the Plan') as Special Services numbers (broadly, numbers that start with 08 and 09).

NTS Condition: SMP Condition AA11.

OCP: Originating Communications Provider – a CP providing call origination services to retail consumers.

PRS: Premium Rate Services – a form of NTS for telephone services using 09 numbers where calls generally cost from between 10 pence per minute and £1.50 per minute from fixed lines.

RPI: Retail Price Index- the index of retail prices compiled by the Office of National Statistics

SMP: The Significant Market Power test is set out in European case law, the new EU Communications Directives and the Commission's SMP Guidelines. It is used by the national regulatory authorities (NRA) such as Ofcom to identify those operators who must meet additional obligations under the Access Directive.

SAC (Stand Alone Costs): the sum of the incremental costs of a service and all the costs which are common to that service and the other services which a firm produces.

SPs: Service providers

Support costs: Indirect costs which are incurred on behalf of a range of services and which cannot be attributed to services on a causal basis

TCP: Terminating Communications Provider – a CP providing call termination services to OCPs and SPs.