Draft determinations to resolve disputes between each of Cable & Wireless, Global Crossing, Verizon, Virgin Media and COLT and BT regarding BT's charges for partial private circuits

Draft Determinations and Explanatory Statement

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Contents

Section 1

Summary

1.1 These draft determinations ("Draft Determinations") set out our proposals for resolving the disputes brought by Cable & Wireless UK ("C&W"), THUS Group Plc ("THUS")[1], Global Crossing (UK) Telecommunications Limited ("Global Crossing"), Virgin Media Limited ("Virgin"), Verizon UK Limited ("Verizon") and COLT Telecommunications ("COLT") (collectively "Disputing CPs") against British Telecommunications plc ("BT") about BT's charges for services known as partial private circuits ("PPCs") (collectively "these Disputes").

1.2 We propose to conclude that BT has overcharged the Disputing CPs for five PPC services, and that BT must make repayments to the Disputing CPs for the amounts that it has overcharged them.

1.3 Ofcom also today publishes its proposals for resolving disputes about BT's charges for various Ethernet services ("Ethernet Disputes").[2] There are some analytical issues that are common to the Ethernet Disputes and these Disputes, in particular the question of what data we should use in our analysis, which is discussed at Section 10 of this document.

Background to the Disputes

1.4 On 25 June 2008, C&W, THUS, Global Crossing, Virgin and Verizon referred disputes with BT to Ofcom for resolution. The Disputing CPs alleged that BT had overcharged them for PPC services in the period 24 June 2004 to 30 September 2008, on the basis that BT had failed to comply with its obligations to ensure that its charges for those services were cost orientated. On 20 October 2008 COLT submitted a similarly worded dispute. The Disputing CPs requested that Ofcom determine the level of charges that should have applied for the services and direct BT to refund any overcharge, with interest.

1.5 PPCs are the wholesale inputs used to create leased lines, which are fixed permanent communications connections providing capacity between two points. There are two main parts to PPCs – terminating segments and trunk segments. Terminating segments can consist of up to four services: connection, main link, local end and distribution. PPCs are purchased as either a terminating segment or as a terminating segment combined with a trunk segment. Communications Providers ("CPs") are able to combine PPCs with their own networks to offer leased line services to their own customers (see Section 6).

1.6 On 25 July 2008, we decided that it was appropriate for Ofcom to handle the Disputes on the basis of section 186(3) of the Communications Act 2003 (the "Act"). We proposed that the scope of the Disputes should be:

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[1] In 2008 Cable & Wireless Worldwide plc completed the purchase of THUS Group plc.
[2] http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/open-cases/all-open-cases/cw_01052/

"… to determine whether, in the period from 24 June 2004 to 30 September 2008:

(i) *BT has or will have overcharged the Parties for PPCs (based on whether or not BT's charges for the underlying trunk and terminating elements of those PPCs were, during that time, reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed) and, if so;*

(ii) *by how much the Parties will have been overcharged; and*

(iii) *whether and by how much BT should reimburse the Parties*".[3]

1.7 On 14 October 2009 Ofcom issued the Final Determinations to resolve the Disputes in relation to most of the PPC services ("Final Determinations").[4] The Final Determinations determined that BT had overcharged the Disputing CPs approximately £42 million for 2Mbit/s PPC trunk services over the period 1 April 2005 to 30 September 2008. Ofcom required BT to repay this overcharge with interest.

1.8 The Final Determinations did not reach conclusions in relation to 140/155Mbit/s PPC terminating segment services or 34/45Mbit/s PPC trunk services. We explained that we would issue determinations to resolve the Disputes in relation to all four 140/155Mbit/s PPC terminating segment services and 34/45Mbit/s PPC trunk services once we had obtained further data from BT to enable us to assess these services further and identify whether overcharging had occurred and whether BT is required to make repayments to the Disputing CPs.[5]

1.9 BT appealed the Final Determinations under section 192(2) of the Act. The Competition Appeal Tribunal ("CAT") issued a preliminary issues judgment on 11 June 2010[6] and its final judgment on 22 March 2011 ("PPC Judgment").[7] The CAT dismissed BT's appeal in its entirety and upheld the Final Determinations.

BT's regulatory obligations

1.10 Ofcom's 2004 Leased Lines Market Review ("LLMR") and 2008 Business Connectivity Market Review ("BCMR") found that BT has significant market power ("SMP") in a number of wholesale markets encompassing PPCs.[8] As a result, since 2004, Ofcom has imposed a number of regulatory conditions on BT that are relevant for PPCs.

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[3] http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/open-cases/all-open-cases/cw_992/

[4] *Determination to resolve disputes between each of Cable & Wireless, THUS, Global Crossing, Verizon, Virgin Media and COLT and BT regarding BT's charges for partial private circuits* http://stakeholders.ofcom.org.uk/binaries/consultations/draft_deter_ppc/PPC_final_determination.pdf

[5] Paragraphs 1.25 and 7.82 of the Final Determinations.

[6] http://www.catribunal.org.uk/files/1146_BT_Judgement_CAT15_110610.pdf

[7] http://www.catribunal.org.uk/files/1146_BT_Judgement_CAT5_220311.pdf

[8] http://stakeholders.ofcom.org.uk/binaries/consultations/llmr/statement/state_note.pdf; http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr08/statement/statement.pdf

1.11 More specifically, BT has been subject to cost orientation obligations in each of the markets for low bandwidth traditional interface symmetric broadband origination ("TISBO") (Condition G3), high bandwidth TISBO (Condition GG3) and trunk (Condition H3).[9] The purpose of these obligations is to prevent BT from exploiting its market power by setting anti-competitive or otherwise unreasonable charges. The cost orientation obligations do this by requiring BT to set its charges on the basis of its long run incremental costs ("LRIC") plus an appropriate mark-up for the recovery of common costs:

> "*Unless Ofcom directs otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by Condition H1 [GG1] is reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed*."[10]

1.12 BT is therefore subject to cost orientation obligations for both 34/45Mbit/s PPC trunk services and 140/155Mbit/s PPC terminating segment services.

1.13 BT is required to maintain appropriate cost accounting systems and to provide detailed financial statements to Ofcom.[11] These financial statements are referred to as the Regulatory Financial Statements (the "RFS") and they set out much of the data we rely on in these Draft Determinations, including revenues, volumes and calculations of the costs of services which are subject to cost orientation obligations (including measures of fully allocated cost ("FAC"), distributed long run incremental cost ("DLRIC") and distributed stand-alone cost ("DSAC"). For explanations of these measures, please see Annex 8).

Ofcom's proposed approach to resolving the Disputes

Preliminary questions

1.14 Before undertaking a substantive assessment of whether BT's charges for the relevant services were cost orientated, we must first answer the following questions:

1.14.1 which are the relevant services that are in dispute?

1.14.2 following our identification of the relevant services in dispute, which charges should be cost orientated?

1.14.3 what methodology should we use for resolving the Disputes?

1.14.4 which is the appropriate DSAC data for assessing cost orientation?

[9] TISBO is an origination service providing symmetric capacity from a customer's premises to an appropriate point of aggregation in the network.

[10] The 2004 LLMR Statement, Annex D.

[11] *The Regulatory Financial Reporting obligations on BT and Kingston Communications final statement and notification,* 22 July 2004: http://stakeholders.ofcom.org.uk/binaries/consultations/fin_reporting/statement/finance_report.pdf

Services in dispute

1.15 The scope of these Disputes is whether BT has overcharged the Disputing CPs between 24 June 2004 and 30 September 2008 ("Relevant Period") in respect of the following five PPC services:

1.15.1 34/45Mbit/s PPC trunk services;

1.15.2 140/155Mbit/s PPC terminating segment connection services;

1.15.3 140/155Mbit/s PPC terminating segment main link services;

1.15.4 140/155Mbit/s PPC terminating segment distribution services; and

1.15.5 140/155Mbit/s PPC terminating segment local end services.

Which charges should be cost orientated?

1.16 In assessing whether or not BT's charges in dispute were cost orientated over the Relevant Period, we have examined which charges must be cost orientated. This involves consideration of the explicit requirements of Conditions GG3.1 and H3.1 and the precedent provided by the CAT in assessing whether BT's charges for PPCs were cost orientated.[12]

1.17 We do not consider that we should depart from the requirement clearly set out in Conditions GG3.1 and H3.1. We therefore propose to resolve these Disputes on the basis of a disaggregated assessment of each individual charge in dispute.

Methodology

1.18 We then go on to consider how we should go about resolving the Disputes. In summary, and in accordance with the decision of the CAT in the PPC Judgment, we consider that we need to follow three steps:

Step 1: We first consider whether the evidence provided by BT demonstrates to our satisfaction that each and every charge was cost orientated in accordance with its obligations under Conditions GG3.1 and H3.1. If BT demonstrates this to our satisfaction, we do not need to proceed to carry out the other steps.

Step 2: If BT does not satisfy us in relation to step 1, we shall go on to consider whether BT's charges were nevertheless appropriate, comparing the relevant PPC charges with their respective DSACs to identify any charges exceeding DSAC.

[12] See the Final Determinations http://stakeholders.ofcom.org.uk/binaries/consultations/draft_deter_ppc/PPC_final_determination.pdf; the PPC Judgment: www.catribunal.org.uk/files/1146_BT_Judgment_CAT5_220311.pdf

Step 3: Before reaching any conclusions in relation to whether BT has overcharged for the services in dispute, we consider whether there are any other relevant factors which could affect our decision. In particular, we consider:

- the magnitude and duration of the amounts by which charges exceeded DSAC;
- whether, and the extent to which charges exceeded FAC; and
- the rate of return on capital employed.

1.19 If we conclude that BT overcharged for the services in dispute, we will then calculate the level of overcharge.

1.20 In the Final Determinations, we determined that BT had overcharged the Disputing CPs for 2Mbit/s PPC trunk services on the basis that BT had not complied with the cost orientation obligation applying to PPC trunk services (which also applies to 34/45Mbit/s PPC trunk services). As discussed in detail at Section 7 of the Final Determinations, we found that BT's charges for 2Mbit/s PPC trunk services were not cost orientated because they exceeded DSAC for four of the five years in dispute.

1.21 As noted at paragraph 1.9, the CAT in the PPC Judgment upheld the Final Determinations in their entirety. We have therefore adopted substantially the same approach in resolving the Disputes in relation to 34/45Mbit/s PPC trunk services and 140/155Mbit/s PPC terminating segment services.

Which is the appropriate DSAC data for assessing cost orientation?

1.22 Ofcom places great reliance on BT's published financial information and only adjusts the published data when assessing cost orientation where errors have been identified or an obviously inappropriate methodology has been used. In these Disputes, where we have identified such errors or mismatching we have made adjustments to the published data, including DSACs.

1.23 In these Disputes, BT has asked us to consider a revised set of cost data when considering the level of any overcharge. This new data is based on a methodology for calculating LRIC and DSACs which BT has revised since publishing its RFS. BT argues that its original methodology did not calculate DSACs in accordance with Oftel[13] guidance and with its own stated methodology.

1.24 We have considered BT's arguments and provisionally concluded that it would not be appropriate to use a revised methodology to calculate new DSACs to resolve the Disputes because:

1.24.1 BT's LRIC model, that has been used to produce the published DSACs, operates in accordance with BT's stated methodology in its own accounting documents and the underlying principles behind DSAC described in published Oftel guidance;

[13] The Office of Telecommunications.

1.24.2 BT has acknowledged that there are no mathematical errors in the actual numbers generated by the LRIC model; and

1.24.3 accepting the revised methodology in relation to historic disputes would have implications for BT's incentives to provide appropriate and accurate information in future.

1.25 We consider this provisional conclusion to be consistent with guidance provided by the CAT in the PPC Judgment and to provide appropriate incentives to BT.

Assessment of whether BT's charges were cost orientated

1.26 Having concluded that BT has not demonstrated to our satisfaction that its charges were cost orientated, we then carry out our own assessment of whether its charges were, in fact, cost orientated, or alternatively whether overcharging has occurred.

1.27 We establish whether overcharging has occurred by first comparing actual charges with their relevant DSACs and then taking into account other factors, to avoid a mechanistic approach to assessing whether there has been an overcharge. Our initial assessment shows that external revenues exceeded external DSACs for the services and years set out in Table 1.1.

Table 1.1: Summary of proposed overcharging finding

PPC service	2004/05	2005/06	2006/07	2007/08	2008/09
140/155Mbit/s PPC terminating segment connection services	Yes	Yes	Yes	Yes	Yes
140/155Mbit/s PPC terminating segment main link services	No	No	Yes	No	No
140/155Mbit/s PPC terminating segment distribution services	No	No	No	Yes	Yes
140/155Mbit/s PPC terminating segment local end services	No	No	Yes	Yes	Yes
34/45Mbit/s PPC trunk services	No	No	No	Yes	Yes

Source: Ofcom based on BT data
Key – No = Provisionally conclude no overcharging, Yes = Provisionally conclude overcharging.

1.28 We do not consider that there are any other factors present which alter our provisional view that BT's charges were not cost orientated.

Repayments

1.29 We provisionally conclude that it is appropriate to require BT to refund these overpayments to each of the Disputing CPs. We do not consider that BT sought to apply Conditions GG3.1 and H3.1 in a manner which should lead us to reduce the level of repayments to the Disputing CPs.

1.30 We consider that this provisional approach is consistent with our statutory duties and the Community requirements, as well as with the CAT's conclusions in the PPC Judgment.

1.31 Having identified that it is appropriate to direct that BT makes repayments to the Disputing CPs, we propose to require BT to refund the following sums to the Disputing CPs:

Table 1.2: Summary of repayments due to the Disputing CPs in £, split by year

Refund (£m)	THUS	C&W	Global	Virgin	Verizon	COLT	**Total**
2004/05	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2005/06	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2006/07	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2007/08	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2008/09	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	**3,064,700**

Note: values rounded to the nearest £100. Totals have been calculated by adding up the rounded figures. Source: Ofcom – based on data supplied by BT

Next steps

1.32 Interested parties have until **5pm on 5 April 2012** to comment on these proposals, after which Ofcom will issue Final Determinations to resolve these Disputes. Details of how to respond to these draft determinations are set out in Annexes 1 and 2.

Structure of the remainder of this document

1.33 The remainder of this document is structured in the following way:

1.33.1 the legal framework for Ofcom's dispute resolution is set out in **Section 2**;

1.33.2 a summary of the Disputes and our investigation is set out in **Section 3**;

1.33.3 **Section 4** explains BT's relevant regulatory obligations;

1.33.4 **Section 5** explains BT's regulatory financial reporting obligations and BT's LRIC model;

1.33.5 further information about the services in dispute is set out in **Section 6;**

1.33.6 our analytical framework is set out in **Section 7 and Section 8;**

1.33.7 our assessment of the Disputes against our analytical framework is set out in **Section 9 to Section 11**;

1.33.8 our consideration of whether we should require BT to make repayments to the Disputing CPs is set out in **Section 12**;

1.33.9 the Draft Determinations setting out how we propose to resolve these Disputes are set out in **Annex 3 to Annex 7**;

1.33.10 an explanation of the cost standards used in Ofcom's analysis is set out in **Annex 8**; and

1.33.11 there is a glossary of terms used in these Draft Determinations at **Annex 9**.

Section 2

Legal framework for resolution of the Disputes

Ofcom's dispute resolution function

Ofcom's duty to handle disputes

2.1 Section 185(1)(a) of the Communications Act 2003 (the "Act")[14] provides (in conjunction with section 185(3)) that in the case of a dispute relating to the provision of network access between different communications providers ("CPs"), any one or more of the parties to such a dispute may refer it to Ofcom.[15]

2.2 Section 186 of the Act provides that where a dispute is referred to Ofcom in accordance with section 185, Ofcom must decide whether or not it is appropriate to handle it. Section 186(3) further provides that Ofcom must decide that it is appropriate for it to handle a dispute unless there are alternative means available for resolving the dispute; a resolution of the dispute by those means would be consistent with the Community requirements set out in section 4 of the Act; and those alternative means would be likely to result in a prompt and satisfactory resolution of the dispute.

2.3 Section 188 of the Act provides that where Ofcom has decided that it is appropriate for it to handle a dispute, Ofcom must make a determination resolving the dispute within four months, except in exceptional circumstances.

Ofcom's powers when determining a dispute

2.4 Ofcom's powers in relation to making a dispute determination are limited to those set out in section 190 of the Act. Ofcom's main power is to do one or more of the following:

2.4.1 make a declaration setting out the rights and obligations of the parties to the dispute;

2.4.2 give a direction fixing the terms or conditions of transactions between the parties to the dispute;

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[14] The Act was amended by the Electronic Communications and Wireless Telegraphy Regulations 2011 on 26 May 2011. As the referral of the Disputes occurred before this date, Ofcom has considered the Disputes in accordance with sections 185 to 191 of the Act as they applied before 26 May 2011.

[15] The Act was amended by the Electronic Communications and Wireless Telegraphy Regulations 2011 on 26 May 2011. As the referral of the Disputes occurred before this date, Ofcom has considered the Disputes in accordance with sections 185 to 191 of the Act as they applied before 26 May 2011.

2.4.3 give a direction imposing an obligation to enter into a transaction between themselves on the terms and conditions fixed by Ofcom; and

2.4.4 give a direction requiring the payment of sums by way of adjustment of an underpayment or overpayment, in respect of charges for which amounts have been paid by one party to the dispute, to the other.

2.5 Ofcom may also exercise certain other powers in consequence of its consideration of a dispute, including its powers under Chapter 1 of Part 2 of the Act to set, modify or revoke conditions.

2.6 A determination made by Ofcom to resolve a dispute binds all the parties to that dispute (section 190(8)). Whilst Ofcom's dispute resolution powers can therefore only bind the parties to a dispute on a bilateral basis, we would expect dispute determinations to be read across and followed as appropriate in situations where other parties who were not a party to the dispute, are facing similar questions vis-à-vis one of the parties to the dispute which has been determined.

Ofcom's duties when determining a dispute

2.7 The dispute resolution provisions set out in sections 185 to 191 of the Act are functions of Ofcom. As a result, when Ofcom resolves disputes it must do so in a manner which is consistent with both Ofcom's general duties in section 3 of the Act, and (pursuant to section 4(1)(c) of the Act) the six Community requirements set out in section 4 of the Act, which give effect, amongst other things, to the requirements of Article 8 of the Framework Directive.[16]

The 2011 Regulations

2.8 The Electronic Communications and Wireless Telegraphy Regulations 2011 (the "2011 Regulations") insert a new subsection 185(1A) into the Act. This subsection applies in the case of a dispute relating to the provision of network access if it is a dispute between a communications provider and a person who is identified, or is a member of a class identified, in a condition imposed on the communications provider under section 45 of the Act (as amended), and the dispute relates to entitlements to network access that the communications provider is required to provide to that person by or under that condition. Had the Disputes been referred to Ofcom and Ofcom decided it was appropriate to handle them on or after 26 May 2011, the Disputes would have fallen within this subsection.

2.9 The 2011 Regulations also insert a new subsection 190(2A) into the Act. This provides that in relation to a dispute falling within section 185(1) of the Act (as amended), Ofcom must exercise their powers in the way that seems to them most appropriate for the purpose of securing efficiency, sustainable competition, efficient investment and innovation, and the greatest possible benefit for end-users of public electronic communications services. Subsection 190(2A) does not apply in relation to a dispute falling within new subsection 185(1A), and therefore would not have applied to the Disputes.

[16] Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services, 7 March 2002.

2.10 In addition, the 2011 Regulations amend section 4 of the Act and insert a new subsection 4A, under which Ofcom must take account of European Commission recommendations for harmonisation in resolving disputes.

The SMP obligations

2.11 In the 2004 LLMR BT was found to have SMP in all three markets relevant to PPC services including low bandwidth TISBO (with a bandwidth capacity up to and including 8Mbit/s) and high bandwidth TISBO (with a bandwidth capacity above 8Mbit/s and including 34/45Mbit/s).[17]

2.12 Ofcom therefore imposed SMP obligations on BT for low bandwidth TISBO, high bandwidth TISBO and trunk requiring it, among other things, to provide Network Access on reasonable request (Conditions G1, GG1 and H1). The definition of Network Access is found in section 151 of the Act (see paragraph 7.5).

2.13 The SMP obligations also include an obligation on BT to ensure and to be able to demonstrate that its 34/45Mbit/s PPC trunk services and 140/155Mbit/s PPC terminating segment service charges are cost orientated ("Conditions GG3.1 and H3.1" respectively):

> "*Unless Ofcom directs otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by Condition H1 [GG1] is reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed*."

2.14 BT is subject to SMP cost orientation obligations which are worded in the same way in a number of markets, for example alternative interface symmetric broadband origination ("AISBO") (which includes the provision of Ethernet services),[18] Wholesale Local Access services,[19] Wholesale Broadband Access in Markets 1 and 2[20] and low and high bandwidth TISBO.[21]

2.15 BT is also subject to an SMP obligation to publish detailed financial statements, known as BT's RFS. Further information on the RFS is set out in paragraph 5.5.

The PPCs Disputes

2.16 In 2008 the Disputing CPs submitted disputes against BT regarding BT's charges for PPCs. The Disputing CPs alleged that BT had overcharged them approximately £180

[17] This finding was made in the 2004 LLMR Statement (see further below at paragraph 4.23 *et seq.*).
[18] This finding was made in the 2004 LLMR Statement.
[19] http://stakeholders.ofcom.org.uk/binaries/consultations/wla/statement/WLA_statement.pdf
[20] http://stakeholders.ofcom.org.uk/binaries/consultations/wba/statement/wbastatement.pdf
[21] http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr/summary/bcmr_pt4.pdf

million for PPC services. Ofcom accepted the Disputes for resolution on 25 July 2008.[22]

2.17 PPCs can be made up of a trunk segment (which runs across the core network) and terminating segments (which run between the customer's premises and the core network). Terminating segments can consist of up to four services: connection, main link, local end and distribution. They are also subject to rental and maintenance charges. A more detailed explanation of PPCs and their constituent parts is set out in Section 6.

Scope

2.18 The scope of the Disputes that Ofcom accepted was:

> *"… to determine whether, in the period from 24 June 2004 to 30 September 2008:*
>
> (i) *BT has or will have overcharged the Parties for PPCs (based on whether or not BT's charges for the underlying trunk and terminating elements of those PPCs were, during that time, reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed) and, if so;*
>
> (ii) *by how much the Parties will have been overcharged; and*
>
> (iii) *whether and by how much BT should reimburse the Parties*".[23]

2.19 Full details of the Disputes and our reasons for accepting them are set out in Section 2 of the Final Determinations.

The Final Determinations

2.20 The Final Determinations concluded that BT had overcharged the Disputing CPs for 2Mbit/s PPC trunk services by nearly £42 million in the period 1 April 2005 to 30 September 2008, but that BT did not overcharge for these services in 2004/05. We concluded that BT did not overcharge for other PPC services (with the exception of those listed at paragraph 2.22 below) over the Relevant Period.

2.21 The Final Determinations explained that, as a result of financial information becoming available for 2008/09, we had identified concerns about whether BT had overcharged for certain 140/155Mbit/s PPC terminating segment services and for 34/45Mbit/s PPC trunk services. We set out our intention to issue separate draft or final determinations to resolve the Disputes in relation to all 140/155Mbit/s PPC terminating segment services and 34/45Mbit/s PPC trunk services, once we had obtained further data from BT. We explained that we would then assess fully these services and identify

[22] With the exception of the dispute between COLT and BT which was accepted for resolution on 2 December 2008.

[23] http://stakeholders.ofcom.org.uk/binaries/consultations/draft_deter_ppc/PPC_final_determination.pdf

whether overcharging had occurred and what, if any, repayments should be required.[24] It is these services that are the subject of these Draft Determinations.

2.22 These Draft Determinations therefore propose to resolve the Disputes in respect of five PPC services:

2.22.1 34/45Mbit/s PPC trunk services;

2.22.2 140/155Mbit/s PPC terminating segment connection services;

2.22.3 140/155Mbit/s PPC terminating segment main link services;

2.22.4 140/155Mbit/s PPC terminating segment distribution services; and

2.22.5 140/155Mbit/s PPC terminating segment local end services.

BT's appeal of the Final Determinations

2.23 BT appealed the Final Determinations under section 192(2) of the Act. By its amended Notice of Appeal ("NOA") dated 6 January 2010, BT challenged the Final Determinations.

2.24 The CAT issued its Judgment (Preliminary Issues) on 11 June 2010[25] and the PPC Judgment on 22 March 2011.[26] The CAT dismissed BT's appeal in its entirety and upheld the Final Determinations.

2.25 On 26 April 2011, BT applied to the CAT for permission to appeal to the Court of Appeal against the judgments. On 13 June 2011, the CAT refused BT leave to appeal each of the three grounds.[27] On 28 October 2011 the Court of Appeal adjourned its decision on permission for BT to appeal to the full court.

2.26 BT has asked us to use a revised set of cost data when considering the level of any overcharge rather than the data published in its RFS for the relevant year. The cost data used in the Final Determinations was based on the RFS in the years relevant to these Disputes. BT did not raise concerns about the use of this data during its appeal of the Final Determinations.

Conclusion on the exercise of Ofcom's dispute resolution function

2.27 The task for Ofcom in this case is to make a determination for resolving the Disputes, in light of:

2.27.1 the facts of the case; and

2.27.2 the legal framework, in particular Conditions GG3.1 and H3.1.

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[24] Final Determinations, paragraph 7.82.
[25] http://www.catribunal.org.uk/files/1146_BT_Judgement_CAT15_110610.pdf
[26] http://www.catribunal.org.uk/files/1146_BT_Judgement_CAT5_220311.pdf
[27] www.catribunal.org.uk/files/1146_BT_Judgment_CAT20_130611.pdf
[28] http://stakeholders.ofcom.org.uk/binaries/consultations/draft_deter_ppc/PPC_final_determination.pdf

Section 3

Summary of the Disputes and Ofcom's investigation

Scope

3.1 Ofcom informed the Disputing CPs and BT ("Parties") of its decision to accept the Disputes for resolution and published details of the Disputes on its website on 25 July 2008, including the proposed scope:

> *"… to determine whether, in the period from 24 June 2004 to 30 September 2008:*
>
> (i) *BT has or will have overcharged the Parties for PPCs (based on whether or not BT's charges for the underlying trunk and terminating elements of those PPCs were, during that time, reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed) and, if so;*
>
> (ii) *by how much the Parties will have been overcharged; and*
>
> (iii) *whether and by how much BT should reimburse the Parties*".[28]

Information provided by BT

Formal information requests

3.2 As discussed in Section 6 of the Final Determinations, we have required BT to provide a range of information for resolving these Disputes.

3.3 On 1 October 2008, in relation to the Final Determinations, we sent BT a section 191 Notice requiring it to demonstrate that each and every of the relevant charges that were in place during the Relevant Period were reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed. BT responded to this Notice on 7 and 13 October 2008.[29]

3.4 In order to resolve these Disputes in relation to BT's charges for 140/155Mbit/s PPC terminating segment services and 34/45Mbit/s PPC trunk services, we sent BT a number of further formal information requests under section 191 of the Act since the Final Determinations.

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[28] http://stakeholders.ofcom.org.uk/binaries/consultations/draft_deter_ppc/PPC_final_determination.pdf

[29] Referred to in these Draft Determinations as a "section 191 Notice".

3.5 On 12 November 2009 we sent BT a section 191 Notice requiring it to provide FAC, revenue and mean capital employed ("MCE") data in relation to 34/45Mbit/s PPC trunk services and 140/155Mbit/s PPC terminating segment services, along with billing information in relation to those services. The Notice also required BT to provide data for internal and external point of handover ("POH") costs and for protective path variants and resilience circuit revenues. BT provided its response on 20 November, 24 November and 22 December 2009. BT subsequently provided clarification and additional information in respect of its response.[30]

3.6 On 22 October 2010 we sent BT a notice under section 191 of the Act seeking information in connection with the Ethernet services which are in dispute (the "22 October section 191 notice").[31] BT responded to this notice in several tranches on 3, 15 and 22 November 2010 and 12 January 2011. We also asked a series of follow-up questions following BT's responses to the notice.

3.7 On 9 May 2011, in relation to the Ethernet Disputes, BT informed Ofcom of a possible error in the DSAC figures published in its RFS. This included for all of the years covered by the Disputes (we address this issue in detail in Section 10). We wrote to BT on 11 May 2011 seeking further information on the issue; BT responded on 20 May ("BT's 20 May response").

3.8 On 20 May 2011 BT also provided a confidential response to the Disputing CPs' submissions ("BT's 20 May submission"), also noting that BT had discovered a number of errors in its published DSACs. BT provided a non-confidential version of this response on 27 May 2011. BT's submission set out its views as to how BT had complied with its cost orientation obligations and why BT believed that it had not overcharged the Disputing CPs.

3.9 On 26 May 2011 we met with BT to discuss its proposed amendments to its published DSACs. On 16 June 2011 we sent BT a section 191 notice seeking further information on BT's proposed DSACs (the "16 June section 191 notice").[32] BT responded in two tranches on 22 June and 30 June 2011.

3.10 As noted at paragraph 3.24, BT confirmed in its representations of 27 May 2011 that its proposals in relation to the appropriate data for assessing cost orientation would also impact on the PPCs Disputes. We therefore sent BT two joint information requests covering both the Ethernet and PPCs Disputes:

3.10.1 On 16 June 2011 we sent BT a section 191 Notice seeking further information on BT's proposed DSACs. BT responded on 22 June and 30 June 2011.

3.10.2 On 23 June 2011 we sent BT a draft section 191 notice seeking further information on the role and the work of BT's advisers in calculating BT's revised long LRICs and DSACs. On 27 June 2011 BT wrote to Ofcom

[30] Email from Tony Reeder (BT) to Martin Hill (Ofcom), 12 January 2010.
[31] Referred to in these Draft Determinations as a "section 191 notice".
[32] This was sent as a joint information request covering both these Disputes and the Ethernet Disputes, as BT's proposals impacted published data in relation to the Ethernet and PPCs services.

claiming that some of the information requested was subject to legal litigation privilege.

3.11 We wrote to BT on 30 June 2011 seeking further explanation of BT's reasons for claiming litigation privilege in relation to the work done by its advisers on its proposed DSACs. We held a meeting with BT on 6 July 2011, after which BT provided a worked example of its DSAC calculations on 14 July 2011. On 22 July 2011 BT provided an outline of the instructions given to its advisers (including a timeline) and the resulting output. We met with BT and its advisers to discuss this matter on 4 August 2011, and on 11 August 2011 BT provided written responses to the questions we had set out in the agenda to the meeting ("BT's 11 August response").

3.12 On 5 July 2011 we sent BT a section 191 Notice requiring it to provide further financial information relating to Siteconnect, POH and 21CN and documents relating to price reduction decisions taken by BT following amendments to the *Leased Lines Charge Control - Statement* ("LLCC Statement").[33] BT provided its response on 7 July and 21 July and subsequently provided clarification and additional information in respect of its response.[34]

BT's representations of 27 May 2011

3.13 BT wrote to Ofcom on 27 May 2011 making a number of arguments relating to our assessment of whether BT has overcharged for 34/45Mbit/s PPC trunk services and 140/155Mbit/s PPC terminating segment services.[35]

3.14 In its letter, BT referred to Annex 12.4 of the Final Determinations, which compared BT's external PPC revenues with Ofcom's estimate of the external DSAC for all the services in dispute. BT went on to argue that its prices for 140/155Mbit/s PPC terminating local end services, 34/45Mbit/s PPC trunk services and 140/155Mbit/s PPC terminating distribution services did not amount to an overcharge despite the data in the Annex indicating revenues in excess of DSAC.

Local end services

3.15 BT argues that a comparison of external revenues and external DSAC is not a "like for like" comparison in the case of 140/155Mbit/s PPC terminating segment local end services:

> "...*until 1 October 2009 (when Ofcom set separate Point of Handover ("POH") charges), BT's external Local End price included an "uplift" to account for the cost of POH. Internal Local Ends do not utilise POH and, therefore, prior to 1 October 2009 the internal Local End price did not include the uplift*."

33 *Leased Lines Charge Control – Statement*, 2 July 2009. http://stakeholders.ofcom.org.uk/consultations/llcc/statement/

34 Email from Tom James (BT) to Louise Marriage (Ofcom), 26 July 2011; letters from Neena Rupani (BT) to Teresa Krajewska (Ofcom), 13 September 2011 and 26 September 2011; letter from Neena Rupani (BT) to Louise Marriage (Ofcom), 20 October 2011.

35 Letter from Neena Rupani (BT) to Teresa Krajewska (Ofcom), 27 May 2011.

3.16 In the published RFS, the POH uplift is reflected in the prices but not in the DSACs. To allow for the POH uplift, BT‟s prices for internal Local Ends are 77% of external Local Ends. But the unit DSAC for external and internal Local Ends are the same. Therefore, in order for the comparison between the external Local End price and DSAC to be "like for like", the DSAC must also allow for the POH uplift.

3.17 This can be done by calculating a weighting factor to apply to the DSAC using the relative volumes of external and internal Local Ends. Applying the 77% factor to the internal volumes and adding this to the external volumes would provide a suitable "Weighted Volume" figure. The Weighted Volume figure can then be used as a denominator in a (Total DSAC)/(Weighted Volume) figure to give a DSAC value consistent with the external Local End product and suitable for comparison with the external price.

3.18 We discuss BT's suggested treatment of POH costs in paragraphs 10.126 to 10.142.

Trunk services

3.19 BT notes the CAT's comment at paragraph 298 of the PPC Judgment that Ofcom:

> "...*must have regard to the fact that whereas the regulated company is prospectively seeking to comply with the [cost orientation] condition, Ofcom is retrospectively assessing whether there has been compliance*."

3.20 BT draws Ofcom's attention to the timing of events in this case which it considers leads to the conclusion that:

> "*BT's pricing in these years was actually below the level of DSAC that would have been available to BT at the time....no re-payments can be due to the disputing operators under Ofcom's own assessment criteria*".

3.21 We consider BT's arguments in relation to 34/45Mbit/s PPC trunk services at paragraphs 11.13 to 11.36.

Distribution services

3.22 BT argues that "...the situation with 140/155Mbit/s per km Terminating [Distribution] Segment prices is almost identical to 34/45Mbit/s Trunk services", in that "BT's prices in the dispute period are clearly reasonable when assessed against the DSAC information that would have been available at that time".

3.23 We consider BT's arguments in relation to 140/155Mbit/s PPC terminating segment distribution services at paragraphs 11.37 to 11.48.

DSACs

3.24 Finally, BT's letter confirms that the arguments it has made in relation to the Ethernet Disputes about the appropriate data for Ofcom's analysis apply also to the PPCs Disputes:

> "*Ofcom will be aware that we have separately sent details of adjustments to some of the historic DSAC data reported for the*

Ethernet services which are subject to a separate dispute investigation by Ofcom. These adjustments also affect the reported DSACs for the PPC services subject to further scrutiny by Ofcom in this investigation".

3.25 This issue is addressed at paragraphs 10.48 to 10.81 below.

Section 4

History of BT's cost orientation obligations

4.1 This Section sets out the history of BT's cost orientation obligations in relation to PPCs.

4.2 As set out in detail below:

4.2.1 the cost orientation requirements on BT have been clearly set out in policy statements and guidelines; and

4.2.2 the distributed long run incremental cost ("DLRIC") floors and distributed stand alone cost ("DSAC") ceilings are well established as benchmarks of cost orientation (see Annex 8 for an explanation of these measures).

The development of BT's cost orientation obligations

4.3 The concepts of DLRIC and DSAC, and their use as floors and ceilings respectively in a test of BT's compliance with its cost orientation obligations, have a history going back to the mid-1990s.

4.4 Prior to October 1997, BT's charges for all of its interconnection services (except for those that were deemed competitive) were set directly by the Office of Telecommunications ("Oftel"). This was done annually, with charges set on the basis of historic cost accounting ("HCA") and on the basis of FAC.

The Network Charge Control consultations

4.5 The December 1995 Network charge control ("NCC") consultation[36] started the process of moving away from the use of HCA and FAC methodology. Oftel stated that it was minded to:

> "…*move away from detailed control of charges for all interconnection services in every year*..."

4.6 and towards a forward looking LRIC standard. This included a system of "*floors and ceilings*" for charges for each "*network component*",[37] so that such charges would be:

> "...*limited by ceilings set by reference to stand-alone cost*".[38]

[36] Pricing of Telecommunications Services from 1997, controls and consultative document on BT's price interconnection charging, December 1995 (the "1995 NCC Consultation"). http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/pri1997/contents.htm
[37] Services use a combination of components, so the cost of a service is the sum of the cost of the individual components which make up the service.
[38] Paragraphs 5.1 to 5.4 of the 1995 NCC Consultation.

4.7 In March 1996 Oftel published a further consultation, in which it refined its approach in relation to the "floors and ceilings" so that the focus was on "services" rather than "components".[39]

4.8 In June 1996, Oftel published a consultation entitled *Pricing of Telecommunications Services from 1997: Oftel's proposals for Price Control and Fair Trading* (the "June 1996 Consultation"). The June 1996 Consultation set out the proposed "floors and ceilings" approach and proposed that the burden of proof would lie with BT to demonstrate that its charges were not anti-competitive or unfair if they were above the level of the ceiling. Oftel set out draft amendments to Condition 13 of BT's licence to introduce a cost orientation obligation.[40]

4.9 In December 1996, Oftel published a further NCC consultation document. Oftel proposed a more flexible approach to floors and ceilings:

> "*Oftel now proposes that floors and ceilings should not be used so deterministically. They will be the main yardsticks which Oftel will use as a first test to consider whether a charge is anti-competitive or not. Other factors will also be considered*."[41]

4.10 Oftel consulted again in May 1997, reiterating that floors and ceilings would be used as a first order test:

> "*Oftel proposes to use floors and ceilings as a first test when investigating whether or not a charge is anti-competitive or excessive. Floors and ceilings constitute one type of evidence, but other factors are also important. In assessing the economic effects of any charge it is vital to consider the context of the market in which that charge applies. The relevant economic market must be identified and the nature of competition in that market analysed. … charges below the floor might typically be expected to be anti-competitive and charges above the ceiling usually excessive, but circumstances may exist in which a charge below the floor is beneficial to customers and has no adverse effect on the competitive process, or a charge above the ceiling may be justified*."[42]

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[39] *Pricing of Telecommunications Services from 1997, second consultative document on BT price controls and interconnection charging*, March 1996
http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/pri1997a/contents.htm

[40] *Pricing of Telecommunications Services from 1997: Oftel's proposals for Price Control and fair Trading*, June 1996, Annex D
http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/pri1997b/contents.htm

[41] *Network Charges from 1997 – Consultative Document*, December 1996, paragraph 1.14.
http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/netcha97/contents.htm

[42] *Network Charges from 1997, Further consultation on proposals for new charging arrangements*, May 1997, paragraph 6.28
http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/ncctitle.htm

The 1997 NCC Statement

4.11 In July 1997, Oftel published a statement entitled *Network charges from 1997* (the "1997 NCC Statement"). The 1997 NCC Statement noted that BT would be producing:

> *"...audited LRIC Cost Statements… that give Oftel and [Other Licensed Operators] the BT floors and ceilings for the components comprised in the Standard Services*."[43]

4.12 The 1997 NCC Statement clarified that the use which would be made of such floors and ceilings was to be found in draft guidelines (Annex A of the 1997 NCC Statement) which were intended to:

> "*1.22…set out the structure of the controls, how they will operate, and how Oftel will approach investigations of competition issues raised about interconnection charges or other terms and conditions of interconnection*."

Introduction of a cost orientation obligation

4.13 On 26 July 1997, European Directive 97/33/EC was published (the "Interconnection Directive").[44] Article 7(2) of the Interconnection Directive required charges for interconnection made by entities with SMP to be transparent and cost orientated:

> "*Charges for interconnection shall follow the principles of transparency and cost orientation. The burden of proof that charges are derived from actual costs including a reasonable rate of return on investment shall lie with the organization providing interconnection to its facilities. National regulatory authorities may request an organisation to provide full justification for its interconnection charges, and where appropriate shall require charges to be adjusted*."

4.14 Articles 7(5) and 8(2) of the Interconnection Directive required National Regulatory Authorities ("NRA's") such as Oftel to ensure that entities with SMP in relevant interconnection markets kept regulatory accounts for the purpose of assessing compliance with the obligations under the Directive.

4.15 Oftel had proposed in its NCC consultations that BT would be subject to a cost orientation obligation in respect of interconnection services which were not competitive. On 1 October 1997, BT's licence was amended to include the following cost orientation obligation:

> "*The Licensee shall secure, and shall be able to demonstrate to the satisfaction of the Director, that the charges offered, payable or proposed to be offered or payable by an Operator to the Licensee for*

[43] http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/ncct797.htm, paragraph 2.28.
[44] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997L0033:EN:HTML

each Standard Service are reasonably derived from the costs of providing the Service based on a forward looking incremental cost approach (except to the extent the Director considers it appropriate that for a transitional period, or in any particular case, the Licensee apply another cost standard) and related to the amounts applied to the relevant Network Components or Network Parts."[45]

The Network Charge Control Guidelines

4.16 In October 1997, Oftel issued the *Network Charge Control Guidelines* ("1997 NCC Guidelines").[46] Annex C provided guidance to BT on how Oftel would approach the question of BT's compliance with the cost orientation obligation:

> "*Condition 13.4 of BT's Licence requires that the charge for each of BT's standard services be reasonably derived from the forward looking incremental costs of that service … In the event of a complaint … a first order test will be whether the charge in question falls between its incremental cost floor and stand-alone cost ceiling … The methodology for deriving floors and ceilings is described in detail at Annex C to these Guidelines*."

4.17 Annex C stated that the "stand alone cost ceiling" would not be the stand alone cost ("SAC") of an individual component or service, but rather DSAC, being the SAC of the broad increment (as defined in BT's LRIC model – see paragraph 5.8 *et seq.* for more detail), distributed among the services in that increment. Paragraph C.5 stated that:

> "*The methodology derives floors and ceilings initially in terms of component costs but, to be used as a test for abusive charging, they will be applied to interconnection services (because interconnecting operators purchase services not components*)."

4.18 The 1997 NCC Guidelines were re-issued in December 2001 (the "2001 NCC Guidelines") and reiterated a first order test using DLRIC and DSAC as the relevant floor and ceiling.[47]

The Common Regulatory Framework

4.19 On 25 July 2003, the suite of EU directives known as the Common Regulatory Framework ("CRF") came into effect, superseding earlier EU instruments regulating electronic communications. Those directives were implemented in the UK via the Act. The CRF comprises five EU communications directives.

4.20 Article 16 of Directive 2002/21/EC ("Framework Directive") requires each NRA to carry out an analysis of the relevant markets; where it determines that a relevant market is not effectively competitive it must identify undertakings with SMP on that

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[45] http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/licmod.htm
[46] http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/ncc1097.htm
[47] *Guidelines on the operation of the Network Charge Controls from October,* December 2001 http://www.ofcom.org.uk/static/archive/oftel/publications/ind_guidelines/pcrg1201.pdf

market and impose on them appropriate regulatory obligations.[48] These obligations, commonly referred to as "the SMP conditions", include the setting of price controls and basis of charges (cost orientation) obligations. Section 45 of the Act empowers Ofcom to set conditions of various kinds, including SMP conditions.

4.21 Article 13(3) of Directive 2002/19/EC ("Access Directive") makes clear that (as under the Interconnection Directive) the burden of proof in relation to cost orientation lies on the operator concerned:

> "*Where an operator has an obligation regarding cost orientation of its prices [because it has SMP], the burden of proof that charges are derived from costs including a reasonable rate of return on investment shall lie with the operator concerned*."[49]

4.22 Ofcom has to date carried out two market reviews that have imposed regulatory obligations on BT in relation to PPCs.

The 2004 Leased Lines Market Review

4.23 On 24 June 2004, Ofcom published a market review of leased lines (the "2004 LLMR Statement") which set out its analysis and conclusions in relation to leased lines markets at that time.[50]

4.24 Ofcom concluded that BT had SMP in the market for wholesale trunk segments at all bandwidths. As a result of these conclusions, Ofcom imposed a number of SMP conditions on BT under section 45 of the Act, including a cost orientation obligation, SMP Condition H3:

"Condition H3 – Basis of charges

> "*H3.1 Unless Ofcom directs otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by Condition H1 is reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs and an appropriate return on capital employed*".

4.25 Ofcom further concluded that BT held SMP in the wholesale high bandwidth TISBO market, which includes circuits of bandwidths above 8Mbit/s and up to and including 140/155Mbit/s, so also imposed SMP Condition GG3 on BT. The wording of Condition GG3.1 is identical to that of Condition H3.1.

4.26 We set out the reason we imposed these cost orientation obligations in the 2004 LLMR Statement:

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[48] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002L0021:EN:HTML
[49] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:108:0007:0007:EN:PDF
[50] *Review of the retail leased lines, symmetric broadband origination and wholesale trunk segments markets*, published on 24 June 2004: http://stakeholders.ofcom.org.uk/consultations/llmr/

"*Regulation at the wholesale level is designed to address the problems which result from the existence of SMP in the relevant wholesale market. In particular it is designed to ensure that the SMP at the wholesale level does not restrict or distort competition in the relevant downstream markets or operate against the interests of consumers, for example through excessively high prices"*[51]

"It might be argued that the Competition Act provides adequate provision to address allegations or evidence of discriminatory behaviour. However, Ofcom considers that at the wholesale level sectoral regulation provides a faster and more secure means of giving effect to decisions and determinations.[52]

The 2008 Business Connectivity Market Review

4.27 On 8 December 2008, Ofcom published its second review of the markets for retail leased lines, symmetric broadband origination and wholesale trunk segments, publishing its conclusions in a statement (the "2008 BCMR Statement").[53]

4.28 The conclusions set out in the 2008 BCMR Statement included that BT's cost orientation obligations should be retained in these markets. Additional conclusions included that, in principle, BT should be subject to charge controls in the markets where it was found to have SMP.[54]

The 2009 Leased Lines Charge Control

4.29 The Leased Lines Charge Control consultation (the "2008 LLCC Consultation") was published at the same time as the 2008 BCMR Statement and set out proposals as to the scope and form of the new charge controls that should apply to leased line services in light of the conclusions in that statement.[55] The 2008 LLCC Consultation included details of the charge controls proposed on TISBO services.

4.30 The charge controls were set in a further statement, published on 2 July 2009 (the "2009 LLCC Statement").[56] The 2009 LLCC Statement defines six charge control baskets, of which the traditional interface basket (which covers low and high

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[51] 2004 LLMR Statement, paragraph 6.14.
[52] 2004 LLMR Statement, paragraph 6.58.
[53] http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr08/summary/bcmr08.pdf
[54] Charge controls are typically imposed on the prices for a basket of goods and services rather than on individual services. It is the weighted average of prices for all the services across the basket that is regulated by the price cap. By imposing price regulation at the basket level, the regulated firm is given flexibility in pricing individual services, as long as the prices across the basket are compliant with the control.
[55] http://stakeholders.ofcom.org.uk/binaries/consultations/llcc/summary/leasedlines.pdf
[56] The 2009 LLCC Statement was appealed to the CAT, which referred certain price control matters to the Competition Commission which resulted in the CAT directing Ofcom to make a number of changes to the charge control, which led to a revised charge control being published on 14 October 2010. References to the 2009 LLCC Statement in these Draft Determinations are to the statement as amended.
http://stakeholders.ofcom.org.uk/binaries/consultations/openreachframework/statement/revisedsmpconditions.pdf
http://stakeholders.ofcom.org.uk/binaries/consultations/llcc/statement/llccstatement.pdf

bandwidths) is of particular relevance to the issues under consideration in the Disputes.

4.31 The charge controls were put in place because Ofcom considered that, in the absence of competitive pressures, BT would have limited incentives to seek to reduce its costs of providing wholesale leased lines services. The charge control is therefore intended to promote efficiency in the costs of providing wholesale services by requiring BT not to increase its charges by more than a fixed amount each year.

4.32 Para 3.49 of the LLCC statement states:

> "*We do not think reliance on cost orientation would be sufficient ex-ante remedy on its own, as it is intended to complement rather than replace price cap regulation. The absence of price caps would be likely to allow BT to raise its prices significantly. In addition, a cost orientation obligation only looks at the relationship of BT's prices to its costs. A cost orientation obligation would not for example give BT's the same incentives to keep its costs under control in the same way that price cap would*."

Conclusion on the development of BT's cost orientation obligations

4.33 As demonstrated in the preceding paragraphs, the requirements on BT relating to cost orientation have been set out clearly in numerous policy consultations, statements and guidelines made by both Oftel and Ofcom. These various statements have established DLRIC floors and DSAC ceilings as well understood benchmarks of cost orientation. This is intended to achieve a balance between regulatory certainty for all CPs and flexibility for BT. This approach is well understood by BT and industry.

Section 5

BT's regulatory financial reporting obligations and BT's LRIC model

History of BT's regulatory financial reporting obligations

5.1 The reporting of financial data is a key regulatory requirement to ensure that BT complies with its cost orientation obligations. BT was first required to publish financial information in 1998, following publication of the 1997 NCC Statement and the 1997 NCC Guidelines, with the aim of allowing Ofcom to monitor BT's performance against the NCC. The 1997 NCC Statement confirmed that BT would have to produce:

> *"...audited LRIC Cost Statements … that give Oftel and [Other Licensed Operators] the BT floors and ceilings for the components comprised in the Standard Services."* [57]

5.2 The 1997 NCC Guidelines set out the financial information BT was required to publish:

> "3.22 BT is required to publish:
>
> - *Statements of incremental costs for the Network Business for 1997/8 by 30 November '98, for 1998/9 by 31 August '99, and thereafter by 31 July each year. These will show the attribution of costs to each network component and part, a matrix of interconnection components (showing the make-up from cost categories), and provide incremental cost floors and stand-alone cost ceilings for all services in the call termination, general network, and interconnection specific baskets and for those subject to RPI+0% safeguard caps.*
> - *CCA FAC statements annually. These are to be published each year at the same time as the LRIC Statements (for 1996/7 and 1997/8 though, CCA accounts will be published by 30 September whereas LRIC was required by 30 November as set out above).*
> - *HCA FAC statements until the year 1998/9. HCA FAC accounts will then be discontinued."*

5.3 Oftel further set out BT's reporting obligations and their purpose in the 2001 NCC Guidelines:

> "*BT is required to prepare and publish financial information for interconnection services unless Oftel is satisfied that it is not a proportionate obligation for it to require this level of cost and charge information. BT has to publish financial information to enable: a) the*

[57] http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/ncct797.htm, paragraph 2.28.

industry to view actual long run incremental, current and stand alone costs and charges for interconnection services and the components making up these services; and b) to provide transparency in the calculation of interconnection charges so that other market players are in a position to ascertain that these charges have been fairly and properly calculated. The financial information also helps to enable Oftel to make determinations on specific charges or in assessing whether BT has breached competition rules."[58]

5.4 The 2004 LLMR Statement proposed the imposition on BT of additional cost accounting and accounting separation obligations to allow for monitoring of compliance with the SMP cost orientation obligations imposed on BT in certain markets:

> *"[…] obligations of cost orientation, price controls and non discrimination can require the imposition of financial reporting regimes to monitor dominant providers' compliance with these obligations […]"*[59]
>
> *"Given the imposition of LRIC with an appropriate mark-up for the recovery of common costs on both BT and Kingston, and a charge control for BT, Ofcom is proposing that BT and Kingston should maintain appropriate cost accounting systems, that demonstrate that the obligations of cost orientation and (for BT) the charge control are being met. This will enable Ofcom to monitor compliance with those obligations*".[60]
>
> "*In order to demonstrate cost orientation of a service or product, it is necessary for the dominant provider to establish cost accounting systems that capture, identify, value and attribute relevant costs to its services and products in accordance with agreed regulatory accounting principles, such as cost causality. A key part of this process is the stage which identifies those parts of the underlying activities or elements that directly support or are consumed by those services or products. These elements are referred to as network components. As these components are frequently used to provide more than one product or service, it is also necessary to determine how much of each component is used for each service or product that should be cost-orientated. The service/product costing methodology applies the utilisation of these components (which are characterised by common usage measures) to the appropriate service product*."[61]

5.5 The reporting obligations proposed in the 2004 LLMR Statement were imposed on 22 July 2004 in *The Regulatory Financial Reporting obligations on BT and Kingston Communications final statement and notification* (the "Financial Reporting

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[58] 2001 NCC Guidelines, paragraph 3.17.
[59] 2004 LLMR Statement, paragraph 10.1.
[60] 2004 LLMR Statement, paragraph 10.10.
[61] 2004 LLMR Statement, paragraph 10.13.

Notification").[62] BT is obliged annually to provide to Ofcom and to publish detailed financial statements in accordance with the conditions set out in that statement. We refer to these documents as BT's RFS. The RFS set out, among other data, the revenues, volumes, FAC, DLRIC and DSAC for services that are subject to cost orientation conditions. They are published after the end of the financial year to which they relate. [63]

5.6 BT also produces Additional Financial Statements ("AFS"), which give a breakdown of the published accounts information by individual service, which the RFS does not. BT does not publish the AFS but provides them to Ofcom on a confidential basis.

5.7 Each year, Ofcom reviews the detailed reporting requirements with BT in the light of regulatory developments in the year. Ofcom consults on any changes or updates to be adopted in the forthcoming RFS for that year, in advance of BT preparing the year end regulatory accounts. Ofcom's review does not involve an assessment of whether charges are cost orientated.

The application by BT of its LRIC model since 1997

5.8 BT has therefore had to comply with its regulatory financial reporting obligations since 1997 and take responsibility for setting its own prices, subject to the requirement that they comply with any charge controls imposed and that they be cost orientated. The RFS provide Ofcom and CPs with data that they can use to assess whether BT is setting charges which are cost orientated.

5.9 As part of this compliance process, BT adopted a model ("BT's LRIC model") to calculate the costs of providing services in many different markets in relation to which BT has SMP obligations, for example in the fixed call termination market. BT's LRIC model has been used as the basis for identifying its incremental costs of providing services and identifying how common costs have been apportioned between different services to derive DLRIC and DSAC information and forms an important input into the RFS. BT's LRIC model contains BT's views of what its costs are and how they are distributed across the different revenue streams, including calculations of the relevant DSACs.

5.10 In these Disputes, BT is questioning on a retrospective basis the validity of the model and the resulting DSACs. BT had not indicated in previous disputes that there was a problem with the way in which the LRIC model was apportioning costs as between services.

5.11 A detailed explanation of how BT's LRIC model works, and the specific aspects which apply to our calculations for the purpose of resolving these Disputes, is set out at paragraphs 10.7 to 10.20. The purpose of this section is to explain the historic and ongoing function of BT's LRIC model.

Regulatory use of BT's LRIC model

5.12 The RFS, which reflect the outputs from BT's LRIC model, have been used by:

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[62] http://stakeholders.ofcom.org.uk/binaries/consultations/fin_reporting/statement/finance_report.pdf
[63] SMP Condition OA6, set in the Financial Reporting Notification, requires that the RFS are published within 4 months after the end of the period to which they relate.

5.12.1 Ofcom when setting charge controls and carrying out assessments of compliance with cost orientation obligations;

5.12.2 the CAT when hearing appeals in relation to our decisions on these matters (for example, the PPC appeal); and

5.12.3 the CC when determining price control matters arising in appeals of charge controls set by Ofcom.

5.13 In the PPC Judgment the CAT commented that one of the purposes of RFS is to ensure that the appropriate data is published to enable compliance with SMP conditions to be monitored.[64]

5.14 Ofcom has set cost orientation and financial reporting obligations on BT in relation to a range of different service markets. In each of these markets an SMP condition applies which contains a cost orientation obligation which is worded in a similar way to the SMP obligation in this case.

Commercial application of BT's LRIC model

5.15 BT's charges, which are subject to cost orientation obligations, have been paid by CPs over many years (including by the customers in this case who have been purchasing services which are the subject of these Disputes).

5.16 Equally, there are many more customers who have purchased other services which are the subject of cost orientation SMP obligations and also covered by BT's LRIC model. Ofcom notes as a preliminary point that, because the LRIC model distributes costs across a number of services which are subject to a cost orientation obligation, any change in that distribution of costs to PPCs products has the potential to have material consequential effects on other regulated products.

5.17 The RFS (which use the outputs of BT's LRIC model) have been relied on by BT in disputes and in responding to consultation documents.

[64] PPC Judgment, paragraph 161.

Section 6

Leased lines and PPCs

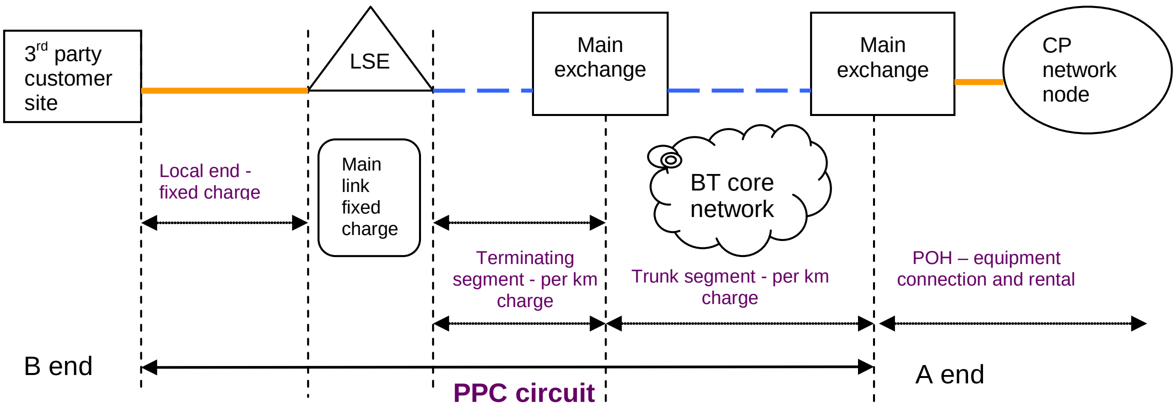
6.1 Leased lines, also known as private circuits, provide a connection which has dedicated capacity, at a range of bandwidths, between two points and can be used to carry voice and data traffic. They are a key building block in the communications networks on which UK businesses depend. CPs compete to provide retail leased line services to business customers.

6.2 Wholesale leased lines are used by CPs as inputs to their retail leased lines services. These may take the form of complete circuits connecting two or more end-user sites, or PPCs connecting customer sites to points in the purchasing CP's network. PPCs are the most widely used wholesale leased line in the UK.

6.3 PPCs comprise third party infrastructure, a POH and the circuit connecting them. The third party infrastructure attracts a single charge and an annual rental charge. The POH attracts a connection charge and annual rental charges. Note that one POH can support many PPCs. The circuit comprises three segments; the local end, between the 3rd party customer and the local exchange; the terminating segment, between the local services exchange ("LSE") and the main exchange and the trunk segment between the main exchange and the POH. The local end attracts a fixed annual charge that is not distance related. The terminating and trunk segments attract a fixed annual charge (main link fixed charge) and distance related annual charges (terminating segment and trunk segment charges).

6.4 The diagram below illustrates the constituent parts of a PPC.[65]

Figure 6.1: Constituent parts of a PPC



6.5 Not all PPCs will be sold with a trunk segment – this will generally depend on the proximity of the POH to the local serving exchange. All PPCs will have at least one

[65] Diagram adapted from BT Wholesale – Partial Private Circuits Product Handbook, 2011, figure 4.3; https://www.btwholesale.com/pages/downloads/service_and_support/contractual_information/docs/ppcoffer/briefings/ppc_product_handbook_Issue_4_sept2010.pdf

terminating segment. The exact charges are dependent on the PPC elements purchased and the bandwidth of the circuit.

6.6 Local end and terminating segments run between the respective customer premises or other communications provider ("OCP") and the closest BT LSE and are provided over copper or fibre-optic pair local ends using SDH or PDH distribution.[66] The main link and trunk segments run between the LSE and the associated main exchange and are provided over fibre-optic cable.

6.7 While all PPCs will have a local end, the need for a main link will be determined by where the purchaser interconnects with BT. If the purchaser is interconnected at the LSE then no main link will be required, otherwise at least some main link will be required. Terminating segment prices also consist of connection and distribution charges.

6.8 At the OCP end (A above), a PPC provides connectivity between an OCP's network and an end user, across BTs network via a POH. The POH is one element of a PPC. A POH is a high capacity link, which comprises the physical infrastructure (duct and fibre) as well as electronics at both or one end of the link.

[66] SDH and PDH (Synchronous and Plesiochronous Digital Hierarchy) are transmission technologies that support the transmission of various bandwidths of data over fibre optic networks and are used extensively in the provision of leased lines services.

Section 7

Which charges should be cost orientated?

Overview

7.1 In assessing whether or not BT's charges in dispute were cost orientated over the Relevant Period, we first have to consider which charges must be cost orientated. In this section we therefore consider the appropriate approach to aggregation in these Disputes.

7.2 The section is structured as follows:

7.2.1 our consideration of the explicit requirements of Conditions GG 3.1 and H3.1 and the precedent provided by the PPC Judgment;

7.2.2 our assessment of the appropriate level of aggregation in these Disputes in light of the arguments raised by BT; and

7.2.3 our proposed conclusions on the level of aggregation to adopt in resolving these Disputes.

The requirements of Conditions GG3.1 and H3.1

7.3 The services within the scope of these Draft Determinations are BT's 34/45Mbit/s PPC trunk services and BT's various 140/155Mbit/s PPC terminating segment services. As we explained in Section 2, both have been subject to separate SMP cost orientation obligations (imposed through the 2004 LLMR Statement and reconfirmed in the 2008 BCMR Statement) during the Relevant Period (see paragraphs 4.23 to 4.32).

7.4 Condition H3 was imposed in relation to services that fall within the wholesale trunk segments market, which includes 34/45Mbit/s PPC trunk services. Condition GG3 was imposed in relation to services that fall within the wholesale high bandwidth TISBO market, which includes 140/155Mbit/s PPC terminating segment services. The wording of the conditions is identical (save for the condition number to distinguish to which services each applies):

> "*Condition H3 – Basis of charges*
>
> *" H3.1 .....*
>
> *"Condition GG3 – Basis of charges*
>
> *"GG3.1 ...*
>
> *"Unless Ofcom directs otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by Condition [GG1/H1] is reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.*"

7.5 Conditions GG1 and H1 requires the provision of Network Access on reasonable request. The definition of Network Access is found in section 151 of the Act:

> *(3) In this Chapter references to network access are references to—*
>
> *(a) interconnection of public electronic communications networks; or*
>
> *(b) any services, facilities or arrangements which—*
>
> *(i) are not comprised in interconnection; but*
>
> *(ii) are services, facilities or arrangements by means of which a communications provider or person making available associated facilities is able, for the purposes of the provision of an electronic communications service (whether by him or by another), to make use of anything mentioned in subsection (4);*
>
> *and references to providing network access include references to providing any such services, making available any such facilities or entering into any such arrangements.*
>
> *(4) The things referred to in subsection (3)(b) are—*
>
> *(a) any electronic communications network or electronic communications service provided by another communications provider;*
>
> *(b) any apparatus comprised in such a network or used for the purposes of such a network or service;*
>
> *(c) any facilities made available by another that are associated facilities by reference to any network or service (whether one provided by that provider or by another);*
>
> *(d) any other services or facilities which are provided or made available by another person and are capable of being used for the provision of an electronic communications service.*

7.6 Given the explicit requirements of Conditions GG3.1 and H3.1, Ofcom considers that in order to resolve the Disputes it should assess whether BT has secured that each and every disputed charge is cost orientated.

The PPC Judgment

7.7 This view is in accordance with the findings of the CAT in the PPC Judgment, which we consider directly relevant to our application of Conditions GG3.1 and H3.1 in these Disputes.

7.8 Condition H3.1 applies to the services supplied by BT in the market for the provision of wholesale trunk segments at all bandwidths (which includes PPC trunk segments). Condition H3.1 was first imposed by Ofcom in the 2004 LLMR and subsequently re-imposed in the 2008 BCMR.

7.9 Condition H3.1 was applied by Ofcom in the Final Determinations and considered by the CAT during the PPC appeal. In the PPC Judgment, the CAT considered the appropriate level of aggregation for assessing BT's compliance with Condition H3.1, given the requirement that BT secure that *"each and every charge offered, payable or proposed for Network Access"* is cost orientated.

7.10 The CAT found that Ofcom was correct to consider, discretely, the charges for each separate trunk service offered by BT. It considered that "*the starting point for any question about BT's cost orientation obligations… is the true construction of Condition H3.1*"[67] and held that:

> "*According to Condition H3.1, "each and every charge offered" must be cost orientated. We consider that the effect of these words is to render the test for cost orientation applicable separately to* <u>*each discrete trunk service - i.e. the charge for each bandwidth must be cost orientated*</u>."[68] (Emphasis added)

7.11 In the CAT's view such a construction "*makes sense*" because a purchaser of any particular service "*will want to know that the particular service he is buying is cost orientated. He will doubtless be rather less concerned with the cost orientation of services he is not purchasing*".[69]

7.12 In addition, if cost orientation was assessed on an aggregated basis, this would permit cross-subsidisation between different groups of purchasers of PPC circuits. The CAT considered this to be *"a powerful pointer in favour"* of its construction of Condition H3.1. [70]

7.13 Furthermore, the CAT found that:

> "…*we fail to see how either OFCOM or this Tribunal could sanction an approach to cost orientation that disregarded the clear meaning of Condition H3.1*."[71]

7.14 Ofcom is therefore of the view that we should consider BT's charges on a disaggregated basis, i.e. we should consider whether BT has secured that each and every disputed charge is cost orientated.

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[67] PPC Judgment, paragraph 214.
[68] PPC Judgment, paragraph 228.
[69] PPC Judgment, paragraph 228.
[70] PPC Judgment, paragraph 228.
[71] PPC Judgment, paragraph 229.

Section 8

Our proposed approach to determining whether BT's charges were cost orientated

Introduction

8.1 In Section 7 we provisionally concluded that we should assess BT's charges on a disaggregated basis, in that each and every charge should be cost orientated. In this section we set out how we plan to consider whether BT's charges are cost orientated or not, and how we will resolve these Disputes if they are not.

8.2 We consider it appropriate to adopt the same approach that we adopted in the Final Determinations, which were upheld by the CAT in the PPC Judgment, for resolving these Disputes. Where we have deviated from the approach we adopted in the Final Determinations, we have done so in response to the views expressed by the CAT in the PPC Judgment.

8.3 The various cost concepts relevant to these Draft Determinations were discussed in detail in the Final Determinations[72] and the PPC Judgment.[73] Rather than explain these concepts again in this document, we have provided brief definitions in Annex 8.

8.4 The section is structured as follows:

8.4.1 paragraphs 8.5 to 8.11 discuss BT's obligations in relation to cost orientation for the services in dispute;

8.4.2 paragraphs 8.12 to 8.15 discuss the implications of BT's obligations for determining these Disputes;

8.4.3 paragraphs 8.16 to 8.23 explain our proposed use of the DSAC test;

8.4.4 8.24 to 8.38 summarise our proposed approach to assessing whether BT has overcharged for the services in dispute and our proposals as to how we would calculate the level of any overcharging that we might identify as a result of our assessment.

What do BT's obligations in relation to cost orientation require?

8.5 The charges in dispute are subject to the SMP cost orientation obligations imposed on BT through the 2004 LLMR Statement (see paragraphs 4.23 to 4.26). The relevant obligations are Condition GG3.1 and Condition H3.1 ("Relevant Conditions"). The wording of the conditions is identical (save for the condition number to distinguish to which services each applies) and considered in the PPC Judgment.

[72] PPC Final Determinations, Annex 11.
[73] PPC Judgment, Section IV: "The Economics of Cost Orientation" and Annex B.

8.6 BT's compliance with these cost orientation obligations is at the heart of these Disputes. Therefore in order to determine whether or not BT has overcharged the Disputing CPs, we need to assess BT's compliance with its cost orientation obligation in respect of each of the distinct charges in dispute.

8.7 The Relevant Conditions require that:

8.7.1 first, each and every charge covered by the Relevant Conditions must:

a) be reasonably derived from the costs of provision based on a forward looking long run incremental cost approach;

b) allow for an appropriate mark up for the recovery of common costs; and

c) include an appropriate return on capital employed.

8.7.2 second, BT must be able to demonstrate this to Ofcom's satisfaction.

8.8 If BT is unable to fulfil these two requirements for any of the charges covered by Condition GG3.1and/or H3.1, it will be in breach of Condition GG3.1 and/or H3.1 respectively.

8.9 The CAT considered in the PPC Judgment how the first of these requirements operates:

> *"**Stage 1: Deriving prices from LRIC**. In the first instance, prices must be reasonably derived from LRIC. This means that, essentially, SAC is to be disregarded when setting prices, and the prices are to be based upon (or reasonably derived from) incremental costs. In other words, in the first instance, prices are to be set without reference to common costs.*
>
> *"**Stage 2: A mark-up for common costs**. It is well recognised... that if a firm prices all products or services at LRIC, common costs fall out of account, and will not be recovered. The firm will make a loss. This is recognised in the second stage of Condition H3.1, which permits "an appropriate mark up for the recovery of common costs". As we have noted (paragraphs 85 to 95 above), there are a number of ways in which common costs can be allocated between services/products, and Condition H3.1 does not stipulate which, save to say that the mark-up (and so, the method of allocation for common costs) must be "appropriate".*
>
> *"**Stage 3: The cross-check. Condition H3.1** expressly states that prices shall include an appropriate return on capital employed. At first blush, this provision may seem redundant, since interest on borrowed capital is a common cost that should be reflected in prices derived using Stages 1 and 2. However, return on shareholders' equity is not an accounting cost but still should be "appropriate". The provision is an*

important one, because it ensures that prices orientated in accordance with Stages 1 and 2 are fair in this respect."[74]

8.10 The key question for resolving the Disputes is how to determine what constitutes "*an appropriate mark up for common costs*" in Stage 2 above.

8.11 As the CAT noted in the quote above, and as we explained in Annex 11 of the Final Determinations, there is no uniquely correct or appropriate method for allocating common costs.[75] The SMP conditions therefore give BT flexibility to adopt whatever methodology it chooses for the allocation of common costs provided it is appropriate, as confirmed by the CAT:

> *"BT is given a discretion in terms of how it allocates common costs, which discretion is circumscribed by the need for the method of allocation to be "appropriate"."*[76]

Implications of BT's cost orientation obligations for Ofcom in determining the Disputes

8.12 BT's discretion over its allocation of common costs at Stage 2 (see paragraph 8.9), and the allied requirement for it to be able to demonstrate to Ofcom's satisfaction that its exercise of discretion is appropriate, has implications for how we should approach disputes regarding BT's compliance with its cost orientation obligations. We explain these implications below.

8.13 At paragraph 249 of the PPC Judgment the CAT explained how it expects BT's discretion and Ofcom's "right to monitor the exercise of that discretion" to operate:

> *"(1) It is, in the first instance, for BT to decide how to allocate common costs. Were BT to do so "appropriately" then – provided this was capable of demonstration to the satisfaction of OFCOM – we do not consider that it would be open to OFCOM to impose upon BT an alternative method of allocating common costs, even if that were also an "appropriate" method. (As we have noted, there is no one way of allocating common costs, and we consider that there will generally be several "appropriate" ways.)*
>
> *(2) If, however, BT were unable to demonstrate to the satisfaction of OFCOM that it had allocated common costs appropriately, this would amount to a breach of Condition H3.1…[…]...*
>
> *(3) Assuming, for the moment, non-compliance with Condition H3.1, the next question that arises is how it is tested whether BT's prices for the relevant product or service are or are not cost orientated. Such a question might well arise in the course of a Compliance Process or – as here – in the course of a Dispute Resolution Process. Even assuming that BT has failed to demonstrate that its cost orientation obligation has been complied with, this does not necessarily mean*

[74] PPC Judgment, paragraph 245.
[75] PPC Final Determinations, Annex A11.10.
[76] PPCs Judgment, paragraph 246. See also paragraph 247.

that BT's prices are not cost orientated. All that has happened is that BT has failed to demonstrate that they are cost orientated. In our view, in such circumstances, it is for Ofcom – given that BT has failed to demonstrate compliance – to test whether common costs have been appropriately allocated".[77]

8.14 We propose to follow the CAT's approach for resolving these Disputes. As such, our assessment of the alleged overcharge essentially involves answering two key questions:

8.14.1 Has BT demonstrated to our satisfaction that its charges in dispute were cost orientated (i.e. were they based on an appropriate allocation of common costs)? If it has done so, then there is no overcharging.

8.14.2 If it has not done so, we must ask whether BT's charges were nevertheless appropriate (i.e. based on an appropriate allocation of common costs). This raises an important question: what is the most appropriate cost benchmark or test for Ofcom to use in assessing compliance? We consider this issue next.

8.15 The scope of the Disputes relates to overcharging. Therefore, while BT's failure to demonstrate to our satisfaction that its charges are based on an appropriate allocation of common costs constitutes a breach of its obligations (i.e. a 'no' to question 1 above), it is only where such a breach is accompanied by overcharging (i.e. a 'no' to question 2 too) that we consider whether to require a remedy in these Draft Determinations.

DSAC as an appropriate accounting mechanism for allocating costs

8.16 In order to assess whether charges are cost orientated, it is necessary to allocate costs across services. There are a number of accounting methodologies which could potentially be used to allocate costs. We explain here why we consider that DSAC is the appropriate cost benchmark to use in assessing whether the charges relevant to these Disputes are cost orientated.

8.17 In Section 5 of the Final Determinations we explained why we considered DSAC to be the most appropriate cost benchmark for our assessment of BT's compliance with the relevant condition. Our decision was based on a number of reasons including:

8.17.1 the DSAC approach reflects the practical application of underlying economic theory, recognising the major conceptual and practical challenges of implementing the full-blown approach of SAC/combinatorial tests;[78]

8.17.2 in our view DSAC strikes an appropriate balance between the desire to provide BT with the incentives and flexibility to both reduce costs and efficiently recover common costs, and the desire to protect consumers and

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[77] PPC Judgment paragraph 249.
[78] PPC Final Determinations, paragraph 5.56.

competition from either harmful or anti-competitive charges that could arise from boundless pricing flexibility;[79]

8.17.3 the use of DSAC was recognised by BT (including in its own yearly Primary Accounting Documents throughout the Relevant Period) as the approach that Ofcom would adopt for analysing complaints that charges were unreasonable "*in order to avoid complex combinatorial tests*" and that the DSAC represents the "*maximum price that can be charged*".[80]

8.18 The CAT found in the PPC Judgment that:

> "*In this case, DSAC represented the best single measure for assessing whether the condition had been satisfied and so marked the upper limit or ceiling on the permissible mark up of prices*."[81]

8.19 The CAT found that the two other approaches available to Ofcom (SAC/combinatorial testing and FAC) were not appropriate on the basis of:

> "*FAC being too rigid and combinatorial tests being unworkable*".[82]

8.20 As a consequence the CAT found: [83]

8.20.1 "...*our conclusion is that in the context of orienting to cost prices like 2Mbit/s trunk, DSAC was the only practicable test to use".*

8.20.2 *"...We consider the operation of Condition H3.1 to be clear and we are not persuaded that there is any legal uncertainty in the present case".*

8.20.3 *"...DSAC was not unknown in the context of communications regulation, including to BT: given the materials that we have described, we do not consider that BT can have been in any way surprised or taken aback by Ofcom's resort to the DSAC test*".

8.20.4 "...*BT's third contention was that OFCOM treated prices above DSAC as intrinsically excessive and in breach of Condition H3. Our conclusion is that this is precisely what Condition H3.1 requires*."

8.21 There are clear similarities and overlaps between these Disputes and those considered in the Final Determinations and BT's appeal of the Final Determinations. For example:

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[79] PPC Final Determinations, paragraph 5.112.
[80] PPC Final Determinations, paragraph 5.56. See section 5.3.5 *(Distributed Stand Alone Cost (DSAC) of Network Components)* of the Primary Accounting Documents which BT published each year throughout the Relevant Period. For example, the 2009/10 Primary Accounting Documents http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2010/PrimaryAccountingDocuments2010.pdf
[81] PPC Judgment, paragraph 307(3).
[82] PPC Judgment, paragraph 307(2)(i).
[83] PPC Judgment, paragraph 307.

8.21.1 as we have noted in paragraph 4.25, the wording of the cost orientation obligations for the services in dispute (Conditions GG3.1 and H3.1) is identical;

8.21.2 Conditions GG3.1 and H3.1 originated from findings of SMP in the same market review, i.e. the 2004 LLMR; and

8.21.3 the PPC services currently under consideration are in the scope of the dispute covered by the Final Determinations.[84]

8.22 Given the clear similarities and overlaps between the issues in these Disputes and those considered in the Final Determinations and BT's appeal of the Final Determinations, we consider that the use of DSAC as the primary cost benchmark for considering cost orientation for the charges in dispute in this case is appropriate. Where BT has failed to demonstrate that its charges are cost orientated, we therefore propose to consider the appropriateness of BT's charges on the basis of comparing its external revenues against DSAC for those charges in dispute. This is a process that we refer to as the "DSAC test".

8.23 We have explained why we think that using disaggregated data to assess cost orientation is appropriate in Section 7. We consider that the DSAC test is central to any consideration of cost orientation. We explain later in this section why we consider that rate of return analysis may provide a supporting role in assessing cost orientation,

Ensuring that the DSAC test is not implemented in a mechanistic way

8.24 In the Final Determinations we explained that we did not consider it appropriate to apply the DSAC test in a purely mechanistic manner.[85] Rather we considered that "*other factors need to be taken into consideration before it can be concluded that charges are unreasonable or otherwise anti-competitive*".[86] The specific factors to be taken into account are dependent on the details of the case under consideration.

8.25 In the Final Determinations, we considered a range of factors beyond the DSAC test. For a number of services, this led us to conclude that, despite failing the DSAC test for at least one year, the charges for those services nevertheless did not constitute overcharging.

8.26 In the PPC Judgment the CAT concluded that, although Condition H3.1 (and therefore by implication Condition GG3.1) requires Ofcom to treat prices above DSAC as intrinsically excessive and in breach of the Condition:[87]

> "*Ofcom must guard against the possible injustices of a mechanistic application of a test for the allocation of common costs*".[88]

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[84] As we have explained in paragraph 2.21, we were unable at that time to resolve as part of the Final Determinations concerns about overcharging for 34/45Mbit/s PPC trunk and 140/155Mbit/s PPC terminating segment services.
[85] Final Determinations, paragraph 5.37. See also paragraphs 5.91-5.121.
[86] Final Determinations, paragraph 5.37.
[87] PPC Judgment, paragraph 307(3).
[88] PPC Judgment, paragraph 305.

8.27 The CAT considered that:

> "*Ofcom acted appropriately in looking to other factors in addition to the mere fact that DSAC had been breached by BT's prices*".[89]

8.28 The CAT's reasoning for adopting this position reflects the fact that the regulated firm (in this case BT) is prospectively seeking to ensure that it complies with the cost orientation obligation (at the time it sets its charges) while Ofcom is retrospectively assessing whether BT has been compliant (at the time the Disputes were brought to Ofcom). The CAT accepted that:

> "....*even a firm doing its level best to comply with Condition H3.1 (by, for example, seeking to apply DSAC) might find that, even so, the DSAC ceiling was on occasion breached. We consider that, in such circumstances, such a firm might well be in compliance with Condition H3.1, in that its mark up for the recovery of common costs would have been "appropriate*".
>
> "*Accordingly, when retrospectively seeking to determine compliance with Condition H3.1, it would not be right for Ofcom to apply DSAC (or, no doubt, any test for the allocation of common costs) in a mechanistic way. That would overlook the fact that that it is hard in practice for the regulated firm to comply absolutely with whatever test is being used to determine the appropriate allocation of common costs*."[90]

8.29 The CAT concluded that Ofcom acted correctly in considering:

8.29.1 the magnitude and duration of the amounts by which charges exceeded DSAC;

8.29.2 whether, and the extent to which, charges exceeded FAC; and

8.29.3 the rate of return on capital employed.[91]

8.30 Reflecting the considerable overlap between this document and the Final Determinations, we propose to consider each of these three factors before drawing our conclusions on whether BT has overcharged the Disputing CPs for the services in dispute. In the paragraphs below, we discuss how, in particular, we propose to take into account the magnitude and duration by which charges exceeded DSAC.

8.31 We note that the CAT also concluded that "the need to show economic harm – of any sort – is not a pre-requisite for a finding that Condition H3.1 has been breached"[92] and therefore "we do not consider there to be a role for an economic harm test when Ofcom is seeking to assess whether BT has breached Condition H3.1".[93] On the

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[89] PPC Judgment, paragraph 305.
[90] PPC Judgment, paragraph 303 and 304.
[91] PPC Judgment, paragraph 305.
[92] PPC Judgment, paragraph 327.
[93] PPC Judgment, paragraph 329.

basis of the CAT's conclusions we do not consider economic harm in these Draft Determinations.

Magnitude and duration by which charges exceed DSAC

8.32 When we consider whether the charges in dispute are cost orientated, we propose to take into account the magnitude and duration by which charges exceeded DSAC as part of our assessment of overcharging.[94] This is consistent with the approach we adopted in the Final Determinations.

8.33 The reason for doing so is that the DSACs of an individual service can vary from year to year, meaning that an unchanged charge that was below DSAC in one year might be above DSAC the following year.[95] In considering the extent to which charges above DSAC in individual years can constitute overcharging, it is therefore relevant to bear in mind that BT sets its charges on the basis of the information that is available to it at the time. Given that the DSACs for the year are only known after the end of the year, BT does not know with certainty what the appropriate value will be when setting its charges. If charges do not change materially in a year but the DSAC unexpectedly declines, it could be argued that it is unreasonable to consider that this one charge in isolation represents an overcharge.[96]

8.34 In the Final Determinations we therefore concluded that, for the purposes of resolving the PPC Disputes, overcharging had occurred where charges had been persistently above DSAC for the majority of the period (i.e. for at least three out of the five financial years to which the PPC Disputes related). We argued that charges above DSAC for this length of time indicate that BT had failed to take action to alter its charges appropriately. However, where charges exceeded DSAC in fewer than three financial years, we argued that consideration of the specific circumstances is warranted.[97]

8.35 Given the CAT's view of the appropriateness of our approach in the Final Determinations, we propose to adopt a similar approach to resolving these Disputes.

8.36 It is clearly appropriate for us to take into consideration any factors that we identify as relevant to our decision, as we did in the Final Determinations. However, given BT's better understanding of its pricing decisions and the information available to it at the time of making those decisions, we would normally expect BT to identify and explain the specific circumstances that we should consider when assessing individual charges.

8.37 The CAT made it clear that the DSAC benchmark is important. Therefore, as we explain further in Section 11, in order to conclude that a charge that exceeds DSAC does not constitute overcharging due to the circumstances surrounding the pricing

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[94] We consider in Section 11 the DSAC data we should use for our assessment.
[95] In its submission to the 2008 LLCC Consultation (submitted on 6 March 2009), BT argued that the principal causes of DSAC volatility are: (i) the level of asset inflation for the year (i.e. holding gains/losses); (ii) changes in the methodology for valuing assets; (iii) volume variations (particularly for per unit DSAC estimates); and (iv) changes in the reporting system used by BT.
[96] For example, as a result of an unexpected holding gain incurred on an asset used by the relevant services.
[97] PPC Final Determinations, paragraphs 5.95 and 5.96.

decision, we would need BT to provide us with a specific and evidence-based explanation of those circumstances.

Summary of our proposed approach to assessing whether BT has overcharged for the services in dispute

8.38 We set out below the three steps we propose to take in the assessment we carry out in Sections 9 to Section 11:

Step 1

Having considered the preliminary issues above, we start our analysis by considering whether the evidence BT has provided in response to the Disputes demonstrates to our satisfaction that each and every charge was reasonably derived from the costs of provision based on a forward looking LRIC approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed, in accordance with its obligations under Conditions GG3.1 and H3.1.

Step 2

In the event that BT's evidence does not satisfy us that it has met the requirements of Conditions GG3.1 and H3.1, we then go on to consider whether BT's charges were nevertheless cost orientated. We do this by comparing the relevant PPC charges with their respective DSACs to identify any revenues exceeding DSAC.

Step 3

Finally, before drawing our conclusions on overcharging, we consider:

- the magnitude and duration of the amounts by which charges exceeded DSAC;
- whether, and the extent to which charges exceeded FAC; and
- the rate of return on capital employed.

8.39 If we conclude that BT overcharged for the services in dispute, we will then calculate the level of overcharge.

Section 9

Has BT satisfactorily demonstrated that its relevant charges were cost orientated?

Introduction

9.1 In this section we assess whether BT has demonstrated to our satisfaction that each and every one of its PPCs charges in dispute was cost orientated during the Relevant Period.

9.2 As set out by the CAT in paragraph 249 of the PPC Judgment, in the first instance, it is for BT to decide how it chooses to recover common costs from the various services it provides. However, for it to be in compliance with its cost orientation obligations (i.e. Conditions GG3.1 and H3.1) it must be able to demonstrate to Ofcom's satisfaction that its charges recover an "appropriate" mark-up for common costs.

9.3 The starting point of our assessment of BT's charges is therefore consideration of whether BT can satisfactorily demonstrate that the mark-up for common costs embodied in its charges is "appropriate".

9.4 In response to the Disputes, BT provided three forms of evidence in support of why its charges were cost orientated:

9.4.1 data on individual service SAC and a sub-set of combinatorial tests;

9.4.2 international benchmarking; and

9.4.3 analysis of the individual circuits sold to CPs.

9.5 Each of these types of evidence was considered by Ofcom in the Final Determinations and by the CAT in BT's appeal of the Final Determinations. We summarise both sets of conclusions on this evidence below, before considering the relevance to these Draft Determinations.

BT's arguments as to why it believes that its charges were cost orientated

BT's combinatorial tests

9.6 In its response to the draft of the Final Determinations BT provided evidence on standalone costs for individual services and a set of combinatorial tests.[98] It argued that the results of this analysis showed that it had not overcharged for PPCs.

9.7 In the Final Determinations, we provided a detailed explanation of why we concluded that this evidence was not sufficiently relevant or reliable to alter our conclusions on overcharging.[99] As well as identifying a number of general difficulties in applying and

[98] Final Determinations, paragraph 7.16.
[99] In particular see paragraph 5.56 of the Final Determinations for a summary of our arguments.

interpreting SAC and combinatorial test evidence, we also explained our concerns over the quality and robustness of the specific evidence provided by BT.

9.8 We highlight here two of these concerns:[100]

9.8.1 the appropriateness of BT's SAC estimates – we undertook both a conceptual review of the approach adopted by BT and a high-level review of BT's calculations. This review process identified a number of significant conceptual deficiencies in BT's approach, as well as a number of problems with BT's calculations. As a consequence of this, we did not (and do not) consider that BT's SAC evidence was robust; and

9.8.2 the completeness of the set of combinatorial tests – BT reported the results from six different combinatorial tests, based on a range of different combinations of PPC trunk and terminating segment services. BT did not provide results for any tests that considered services other than PPCs.[101] Therefore, in our view BT failed to demonstrate that the revenues for all services (PPCs and other services) that share common cost did not exceed the relevant combinatorial SACs. In effect, BT only undertook a small sub-set of the necessary combinatorial tests. Furthermore, as we explained in paragraph 7.131 of the Final Determinations, not only did BT focus on a sub-set of tests, it seems likely that it focussed on a number of the more favourable tests it could have performed.

9.9 The CAT in the PPC Judgment also considered BT's evidence on combinatorial tests. In paragraph 256 of the Judgment the CAT notes that:

> "*Had BT demonstrated an absence of over-recovery of common costs through a series of combinatorial tests, then this would have been an appropriate way of demonstrating an appropriate mark-up for the recovery of common costs. However, at the end of the day, it was common ground that such combinatorial test as were conducted by BT during the course of the Dispute Resolution Process were insufficient to establish this*."

9.10 As a consequence the CAT goes on to conclude in paragraph 261:

> "*The limited combinatorial tests carried out by BT were insufficient to demonstrate that BT had complied with its cost orientation obligation*..."

International benchmarking

9.11 As part of its submission of 14 October 2008 in response to the Disputes, BT provided evidence on international benchmarking produced on its behalf by Deloitte. The study used data from nine incumbent operators in Western Europe that were subject to the same EU regulatory framework as BT is in the UK. BT argued that this

[100] See paragraphs 5.71, 7.96-7.133 and Annex 15 of the Final Determinations.
[101] BT subsequently provided a SAC test for a combination that it argued included all of the services in its Core increment.

evidence demonstrated that its PPC charges were not high compared to those of the other incumbent operators.

9.12 In paragraphs 7.136 to 7.150 of the Final Determinations we considered BT's evidence and explained why we concluded that it could not be given significant weight in our assessment. In summary our concerns were:

9.12.1 the circumstances compared in the international benchmarking were not similarly defined, given the differences in networks, geography, competition and regulation in the countries included;

9.12.2 the analysis did not consider cost differences between countries;

9.12.3 there was an obligation for cost orientated trunk charges in only three of the nine countries included in the analysis;

9.12.4 for four of the nine countries, trunk prices were not available and terminating segment prices were used as a proxy, resulting in a likely overestimation of prices; and

9.12.5 it was no substitute for actual price and cost data for BT's services in the UK.

9.13 The CAT considered the role of BT's benchmarking evidence in the PPC Judgment, noting that:

> *"The importance of international comparisons depends upon the issue in question. Here we are considering compliance with a cost orientation obligation that is, so we have found, tightly and clearly drawn. BT's prices must be orientated to BT's LRIC, with a mark-up for BT's common costs, and taking into account BT's cost of capital. It seems to us that in this context, even if it comprised very detailed and clear information as to the charges of other operators, <u>an international comparison can say very little about BT's compliance with Condition H3.1</u>."*[102] [Emphasis in original]

9.14 The CAT went on to conclude that:

> "…*we consider that OFCOM was right, in this case, to regard the Deloitte report as having really very little relevance to the question of whether BT's common costs had been appropriately allocated in compliance with Condition H3.1. We consider that the answer to this question was firmly rooted in BT's own costs and prices*."[103]

9.15 BT has not submitted any further evidence in relation to its international benchmarking analysis. There is therefore no basis for Ofcom to form a view here that differs from the view it formed in the Final Determinations regarding BT's international benchmarking analysis, as reflected in paragraph 9.13 above in the conclusion of the CAT.

[102] PPC Judgment, paragraph 226.
[103] PPC Judgment, paragraph 273.

BT's circuit analysis

9.16 As part of its response to the draft Final Determinations[104] BT also submitted an analysis of the revenues earned for individual circuits (i.e. the specific combination of trunk and terminating segment services) compared to DSAC for those circuits. On the basis of this analysis BT argued that very few circuits were sold above DSAC.

9.17 We considered the relevance of BT's circuit analysis to the Disputes in paragraph 7.57 of the Final Determinations, concluding that it was of "limited relevance" on the basis that it is predicated on considering the appropriateness of charges on an aggregated basis. This position was supported by the CAT:

> "…*we consider that OFCOM was right, in the Determination, to conclude (in paragraph 7.57 of the Determination) that "BT's circuit analysis is of limited relevance to these Disputes. While it is informative to note that, even on the basis of BT's preferred approach of offsetting trunk charges with terminating charges, it is still possible to conclude that there was overcharging (given that charges exceeded DSAC)…we fundamentally disagree with the aggregation of trunk and terminating charges upon which BT's circuit analysis is based*."[105]

Conclusions on whether BT has demonstrated that its charges in dispute were cost orientated

9.18 For the reasons we have presented above, Ofcom concluded in the Final Determinations that the evidence supplied by BT was not sufficiently relevant and/or reliable to demonstrate that its PPC charges was cost orientated over the period of the Disputes.

9.19 The CAT's conclusions in paragraphs 274 and 275 of its PPC Judgment provide support for our position:

> *"Our conclusion is that none of the material adduced by BT to OFCOM, whether before or during the Dispute Resolution Process was sufficient to discharge the onus, which was on BT, to show that its prices for 2 Mbit/s trunk segments were compliant with the requirements of Condition H3.1. In particular:*
>
> *(1) The data on which BT relied – which we have summarised in paragraphs 132 to 135 above – looked at the prices for PPCs on an aggregated basis, which is not what Condition H3.1 calls for.*
>
> *(2) The same objection can be made in respect of BT's circuit analysis, which is also an aggregated assessment, albeit one done by reference to the actual circuits purchased by the Altnets.*

[104] http://stakeholders.ofcom.org.uk/binaries/consultations/draft_deter_ppc/summary/main.pdf
[105] PPC Judgment, paragraph 264.

(3) BT's international benchmarking and combinatorial tests were inconclusive and essentially irrelevant, for the reasons we have given.

Accordingly, BT was in breach of Condition H3.1 in that it could not demonstrate to the satisfaction of OFCOM that Condition H3.1 was satisfied."

9.20 Although the CAT's conclusions are in relation to 2Mbit/s PPC trunk services (the primary focus of the appeal), the rationale underpinning those conclusions (i.e. the CAT's points 1 to 3 quoted above) are, in our view, equally applicable to all PPC services, including those currently under consideration.

9.21 BT has not subsequently (following the PPC Judgment) provided any additional evidence in relation to its combinatorial tests, international benchmarking or circuit analysis. Furthermore, it has not submitted any additional evidence in relation to 140/155Mbit/s PPC terminating segment local end, main link or connection services.[106] As a consequence, and consistent with our conclusions in the Final Determinations and the CAT's conclusions in the PPC Judgment, we conclude that BT's evidence is not sufficient to demonstrate to our satisfaction that its recovery of common costs from 140/155Mbit/s PPC terminating segment local end, main link or connection services, over the period of the disputes was appropriate. We therefore conclude that BT was in breach of Condition GG3.1, in respect of these specific services over the period of the Disputes.

9.22 In its letter of 27 May 2011 BT provided additional representations as to why it considers its charges for 34/45Mbit/s PPC trunk and 140/155Mbit/s PPC terminating segment distribution services were cost orientated over the period of the disputes.[107] Rather than providing new cost or price benchmarking evidence, BT's representations focussed on its view of the circumstances surrounding its charges and how it believes these circumstances should be taken into account in considering the appropriateness of those charges that we find to be in excess of DSAC.[108]

9.23 BT's representations are relevant for us to consider for ensuring that the application of the DSAC test is not undertaken in a mechanistic manner. Reflecting this, and for the purposes of these Draft Determinations, we therefore do not consider BT's 27 May 2011 representations here, but rather in paragraphs 11.18 to 11.75 below. As a consequence, we do not at this stage draw any conclusions as to BT's compliance with Condition H3.1 in relation to 34/45Mbit/s PPC trunk services or Condition GG3.1 in relation to 140/155Mbit/s PPC terminating segment distribution services.

Next Steps

9.24 Having provisionally concluded that BT has failed to demonstrate compliance with its cost orientation obligations we now carry out our own assessment of whether BT's charges for 34/45Mbit/s PPC trunk and 140/155Mbit/s PPC terminating segment distribution services were cost orientated. However, in order to do this, we first need

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[106] Other than its arguments with regard to local end terminating segments considered in paragraphs 10.126 to 10.142.
[107] BT letter (from Neena Rupani) to Ofcom (Teresa Krajewska) dated 27 May 2011.
[108] BT's letter also highlighted certain adjustments to BT's base data.

to consider BT’s arguments regarding the correct DSAC data to use in this case; we do this in Section 10.

Section 10

Which is the appropriate data set for assessing cost orientation?

Introduction

10.1 Given our proposed conclusion that BT has failed to demonstrate to our satisfaction that its relevant charges were cost orientated during the Relevant Period, we must now undertake our own assessment of BT's charges.

10.2 As described in paragraph 8.22, we use the DSAC test to assess cost orientation when BT has failed to demonstrate that its charges are cost orientated.

10.3 This section sets out BT's views that we should not use the DSAC figures it has published in its annual RFS as the basis for the DSAC test and that we should instead use new DSAC figures that BT has calculated in a separate exercise for the purposes of these Disputes.[109]

10.4 We begin by setting out how BT's LRIC model calculates DSACs. We then set out BT's views on the appropriateness of its LRIC model and its proposed alternative methodology for calculating DSACs. We also provide our assessment of BT's arguments and our provisional conclusion that we should use BT's published DSACs as the basis for our resolution of these Disputes.

10.5 Finally, we set out our approach to the adjustments that we consider are required to be made to the base data in these disputes.

BT's methodology for calculating the DLRICs and DSACs reported in its RFS

10.6 This sub-section provides a brief overview of the methodology BT has used for calculating DSACs for publication in its annual RFS since 1997. Further detail can be found in BT's Primary Accounting Documents ("PAD")[110] which are published annually with its RFS.[111]

BT's LRIC model structure

10.7 As set out in Section 5, DLRICs and DSACs are calculated using BT's LRIC model. An illustration of the high-level structure of BT's LRIC model is set out below in Figure 10.1.

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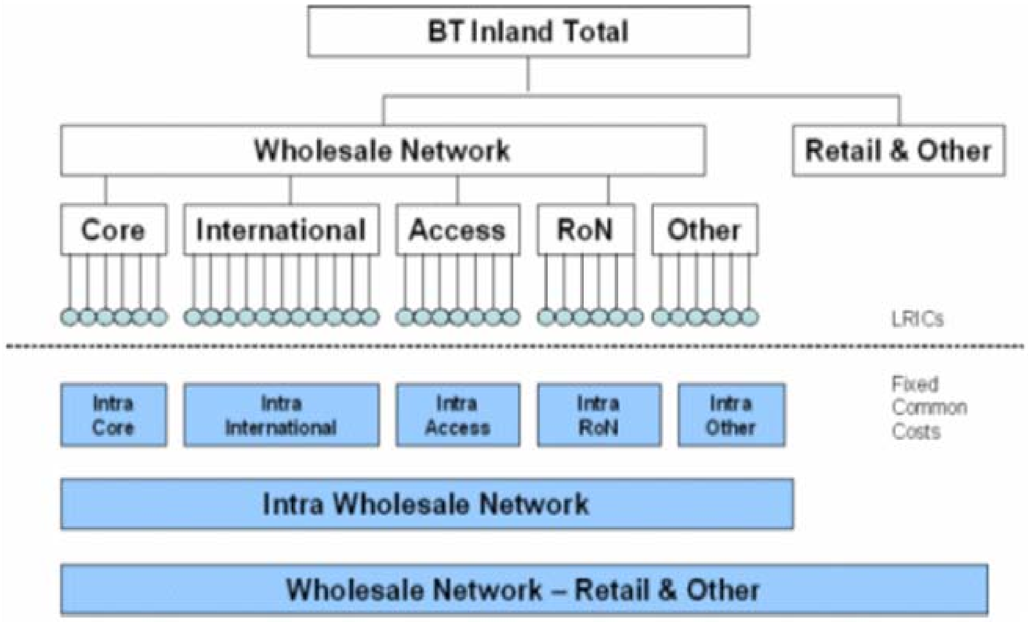
[109] We note that BT has also adopted this revised approach for its 2010 RFS.
[110] For 2008/09, BT's PAD can be found at:
http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2009/PrimaryAccountingDocuments.pdf
[111] For 2008/09, BT's RFS and associated accounting documents can be found at:
http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2009/index.htm

Figure 10.1: BT's LRIC Model Structure



Source: Extracted from page 52 of BT's Primary Accounting Documents 2009

10.8 For resolving these Disputes, the DSACs of interest are those related to the *services* in dispute. BT's LRIC model however does not directly generate DSACs for individual services. Rather, it calculates DSACs for the individual *components* that are used by services. To generate the service DSACs reported in the RFS, BT aggregates (in a calculation made outside of BT's LRIC model) the relevant component DSACs into service DSACs on the basis of fixed usage factors (i.e. how much of each component is used by a service).

10.9 When allocating costs, BT's LRIC model divides BT's Wholesale Network into sections known as "increments". As shown in Figure 9.1 above, these five increments are Core, International, Access, Rest of Network and Other. These increments are in turn divided into components (indicated by the circles in the diagram above). The model contains LRICs for each component, each increment and each section of the network (as shown above the line in the diagram) and Fixed and Common Costs ("FCC") that are shared between the components in each increment, between increments and across the whole network (shown below the line).

Calculating LRICs

10.10 BT's LRIC model consists of around 400 distinct "cost categories" which form the building blocks for the component costs. For an individual component the total LRIC is the sum of the shares of the various relevant LRICs for the cost categories that are used by that component. The LRIC for the various combinations of cost category and component are calculated using cost volume relationships ("CVRs"). A CVR specifies how BT's total costs within a cost category (which is produced in BT's ASPIRE[112]

[112] See page 12 of BT's "Detailed Attribution Method" document available at: http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2009/DetailedAttributionMethods.pdf

accounting software) vary as the volume of a network component or set of components changes. For example, a CVR may specify that 90% of the costs within a category are fixed and that the remaining 10% are driven linearly by volume. These CVRs are then used to calculate LRICs. The CVRs and a more detailed explanation of how they are used by BT are contained in BT's Long Run Incremental Cost; Relationships & Parameters ("R&P") document.[113]

Distribution of fixed and common costs for DLRICs and DSACs

10.11 DLRICs are calculated by distributing FCCs between the LRICs of the components that share the FCCs in a proportionate manner by cost category. FCCs that are shared between components within all wholesale increments of the model are shown in Figure 9.1 as "Intra-Wholesale Network" FCCs. FCCs that are only shared between components in the Core increment are shown as "Intra-Core" FCCs.

10.12 The DLRIC of a component in the Core increment would therefore be calculated by taking the LRIC of that individual component and adding to it a share of the Intra-Core FCCs. The share of the FCC is worked out using an Equi-Proportionate Mark Up ("EPMU") methodology. Essentially this means that Intra-Core FCCs are distributed between the components within the Core increment based on the relative size of their LRICs by cost category (i.e. if Component X has twice the LRIC of Component Y in the cost category that gives rise to the FCC, its DLRIC will include twice as much Intra-Core FCCs).

10.13 A similar approach is adopted when calculating the DSAC of a component. However, rather than only including a proportion of the intra-increment FCCs, the DSAC also includes a proportion of the FCCs of the "Intra-Wholesale Network" (i.e. those FCCs shared across the whole of the BT wholesale network) and a share of the "Wholesale Network – Retail and Other" FCCs. The DSAC of a component in the Core increment will therefore be calculated by taking the LRIC of that individual component and adding to it a share of the Intra-Core FCCs, a share of the Intra-Wholesale Network FCCs and a share of the Wholesale Network – Retail & Other FCCs.

The role of split cost categories in calculating DSACs

10.14 The calculation of a DSAC for a Core network component therefore consists of two main stages. First, the calculation of LRICs and FCCs for each of the network component and cost category combinations. Second, the allocation of the residual FCC in proportion to the calculated LRICs. BT has a degree of discretion in how it chooses to implement these two stages within the broad approach for calculating DSAC described above. As set out above, its chosen approach involves the two stages being performed across around 400 distinct "cost categories".

10.15 Most cost categories use a single CVR to calculate LRICs reflecting the existence of one cost driver for that cost category. However, for some cost categories there are two cost drivers for the cost category.[114] In such circumstances the underlying CVR is

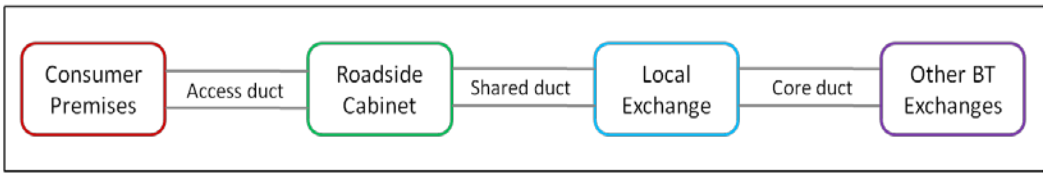
[113] See Section 5 of BT's PAD. References to pages of the R&P in this document are to the 2009 R&P document.
[114] 14 cost categories are split in BT's actual LRIC model but only one split and one non-split cost category is shown in the example below.

three dimensional in that it comprises of two different types of incremental costs (i.e. one for each driver) but only one set of FCCs.

10.16 The nature of the three dimensional CVRs is perhaps more easily demonstrated with a (simplified) practical example and illustrated in Figure 9.2 below. Consider a duct network. There is some duct that only carries access lines (e.g. duct from a roadside cabinet to the customer's premises), some duct that only carries core cables (e.g. duct between two local exchanges) and some duct that carries both (e.g. duct from a roadside cabinet to the local exchange). If you removed all the access lines, then you would no longer require the access only duct and the associated cost saving could be thought of as LRIC for the access duct sub-category.

10.17 Alternatively, if you removed all of the core traffic, then you would no longer require the core network and the associated saving could be thought of as LRIC for the core duct sub-category. However, in both cases there remains shared duct that is required regardless of the changes in the number of access lines or the amount of core traffic. The costs associated with this shared duct could be thought of as FCC shared between the access and core services. Therefore, while we can separately and meaningfully identify LRICs for the two sub-categories (i.e. core and access), the FCCs are shared between them and therefore relate to the combination of the core and access sub-categories. In such cases the FCCs cannot be meaningfully split on a causal basis between the two cost categories.

Figure 10.2: Illustration of duct network



10.18 Rather than directly modelling the three dimensional cost volume relationships for split cost categories, BT's LRIC model adopts a simplification to split the affected cost categories into two separate sub-categories (i.e. one for each driver) and applies separate two dimensional CVRs to each of the sub-categories. In BT's LRIC model these sub-categories are referred to as ".c" and ".l" sub-categories (referring to "calls" and "lines").

10.19 This approach still allows BT to individually identify the LRICs associated with each of the two cost drivers for each component, reflecting the underlying cost relationships. Therefore the approach has the potential to produce a more accurate mapping of the underlying costs of provision to individual components (and therefore services) compared to a less granular approach which may not reflect the underlying cost drivers.

10.20 However, because the FCCs are shared between both sub-categories, there is no non-arbitrary way of splitting them on a causal basis at the sub-category level (consistent with the split cost categories representing a simplification of a single three dimensional CVR).[115] BT's LRIC model therefore effectively combines the LRICs of

[115] There are some increment-specific fixed costs which can be uniquely identified with a sub-category, and BT's LRIC model treats these differently.

the sub-categories before it distributes the FCCs to calculate DSACs.[116] As such, although the LRICs are based on the sub-category level, the DSACs are calculated in a manner that is consistent with an allocation of common costs at the cost category level.

10.21 In the next sub-section we set out BT's views that it is the use of these split cost categories and how FCCs are allocated as a result that has led to "anomalies" in the calculation of DSACs such that some of BT's published DSACs are below the relevant FAC.

BT's views

BT's claims regarding the methodology of its LRIC Model

10.22 In the context of the Ethernet Disputes, BT informed Ofcom on 9 May 2011 of possible anomalies in the DSAC figures published in its RFS ("published DSACs") for all of the years covered by these Disputes. We wrote to BT on 11 May 2011 seeking further information on this issue; BT responded on 20 May setting out what it considered to be the reasons why some published DSACs were below FAC in the AISBO market. BT told us that:

> "*In this case, DSAC should never be below FAC and these flaws must be corrected especially if Ofcom intends to use DSAC as a measure of cost orientation and/or as a proxy for a cost orientated price to establish the quantum of any excessive pricing."*
>
> *"Following a review of the calculation of Ethernet DSACs, in BT's LRIC model, we have discovered that there are anomalies in BT's LRIC model that have resulted in certain fixed and common costs not being attributed to BES and WES services as they should have been*".[117]

10.23 BT also states that:

> "*BT discovered a number of errors that results in the calculated DSACs [published in BT's annual RFS] being less than FAC for a number of cost categories. These plainly showed errors in the underlying attribution process*."[118]

10.24 BT considers the approach it has used to produce its published DSACs is not:

[116] It is unclear from BT's model documentation whether the model actually combines the LRICs of the sub-categories before allocating the FCCs. However, as the FCCs that are allocated relate to the cost category level, not the sub-category level, the calculated DSAC is the same whether the category FCC distribution is based on: (1) the sub-category LRICs and the results subsequently combined, or (2) the combined sub-category LRICs.

[117] BT's response of 20 May to follow up question 17 to the Ethernet dispute 22 October 2010 section 191 notice, paragraphs 2 to 4.

[118] BT's 20 May response, paragraph 76.

"*in conformity with the agreed and stated methodology". It considers that "fixed and common costs are not being allocated to Ethernet [services] in proportion to their LRICs*."[119]

10.25 It argued that the:

> "*R&P sets out that the fixed and common costs for each category will be attributed to components in proportions to their LRICs.[...].FCCs will not be allocated to components in proportion to their LRICs if LRICs are calculated at one level of disaggregation and DSACs at another*."[120]

10.26 BT also considers that its existing approach is inconsistent with both Geoffrey Myers'[121] witness statement in BT's appeal of the Final Determinations and Oftel's 1997 and 2001 NCC Guidelines. BT did not explain why it considers its methodology to be inconsistent with these documents, other than to state that:

> "*The LRIC model does not allocate FCCs to components in proportion to LRICs as described in the 1997 and 2001 Guidelines and in Geoffrey Myer's witness statement*."[122]

10.27 In summary, BT considers that its published DSACs were inaccurate and should not be used to resolve either the Ethernet Disputes or these Disputes. It considers this because:

10.27.1 DSACs should never be below FAC;[123]

10.27.2 the calculation of LRICs and the distribution of FCC were not carried out at the same level of granularity;[124]

10.27.3 the approach to calculating DSACs was inconsistent with BT's own methodology;[125] and

10.27.4 the approach to calculating DSACs was inconsistent with Ofcom's views of how DSACs should be calculated.[126]

10.28 BT considers that we should disregard its published DSACs. It argues that if Ofcom proposes to use a DSAC test to resolve these Disputes, we should use its new

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[119] BT's response to follow up question 17 to the Ethernet dispute 22 October 2010 section 191 notice, paragraphs 14 and 15.
[120] BT's 11 August response, paragraph 1b.
[121] Director of Competition Economics, Ofcom.
[122] BT's 11 August response, Question 1c.
[123] BT's response to follow up question 17 to the Ethernet dispute 22 October section 191 notice, paragraphs 4 and 16.
[124] BT's 11 August response, questions 1b and 1c; presentation to Ofcom by BT dated 4 August.
[125] BT's response to follow up question 17 to the Ethernet dispute 22 October section 191 notice, paragraphs 3 and 16.
[126] BT's response to follow up question 17 to the Ethernet dispute 22 October section 191 notice, paragraph 16.

DSACs (the "revised DSACs"), which it has generated by applying an "off-line" correction to its LRIC model.

BT's proposals to amend its DSACs

10.29 BT commissioned a report to identify the underlying cause of the instances of DSAC being below FAC within its RFS. The report identified a number of cases where components had a DSAC below their FAC. Furthermore, it found that the most significant examples of component DSAC below FAC were those affected by split cost categories.[127] We are not aware that is there are instances of DSAC being below FAC for the PPC services in dispute in these Draft Determinations. Notwithstanding this, BT's proposed revisions also affect DSACs in relation to the PPCs services in dispute.

10.30 BT suggests that there are two options for eliminating the alleged anomaly both of which involve changing how DSACs are calculated. Either:

(i) *"both the LRIC and common cost allocation should be performed at the level of sub-category or*

(ii) *the LRIC and common cost allocation should both be calculated at the full category level*."[128]

10.31 BT proposes to address the issue by calculating the LRIC and common cost allocation at the category level (option (ii) above). To do this, BT intends to remove the ".c" and ".l" sub-cost categories and create a single cost category with a single CVR. BT argues that this will ensure that the ratio between LRIC, FAC and DSAC (LRIC<FAC<DSAC) will be maintained, which it considers to be important.

10.32 The outcome of BT's proposals is to change the levels of LRIC for components and services, with some services (e.g. many Ethernet services) seeing an increase in their LRICs while other services (e.g. many PPC services) having their LRICs reduced. As a result of the change in LRIC levels, the allocation of FCCs between components and services will also change (in a similar manner). As noted in at 11.28 of the Ethernet Draft Determinations, the DSAC figures against which we would assess whether BT has overcharged for the PPC services in dispute may decrease, potentially increasing the extent to which BT may be deemed to have overcharged for those services. There would be a corresponding, yet significantly more substantial, increase in the DSAC figures across Ethernet services (which are the subject of the related Ethernet Disputes). BT calculated that an additional £417 million of costs should be spread across the DSACs for Ethernet services and that £229 million should be removed from the DSACs of PPC services over the period 2006/07 to 2009/10.

10.33 The impact of BT's proposed adjustments to PPC DSAC figures are set out in the Tables below. Table 10.1 sets out the published DSACs in BT's RFS for the years covered by these Disputes, Table 10.2 sets out the revised DSACs proposed by BT for the same services in the same years and Table 10.3 shows the percentage difference between the published unit DSACs and the revised unit DSACs.

[127] Slides provided at meeting dated 4 August, page 5.
[128] BT's 11 August response, question 2a.

Table 10.1: BT's published unit DSACs

PPC service	2006/07	2007/08	2008/09
140/155Mbit/s link	9,023	29,878	24,586
140/155Mbit/s distribution	2,205	1,195	1,101
140/155Mbit/s local end	17,286	18,974	15,900
140/155Mbit/s connection	n/a	2,105	2,202
34/45Mbit/s trunk	903	471	474

Source: The data for 2006/07 comes from the document entitled "Additional information in relation to BT's Current Cost Financial Statements for 2008" published alongside the 2007/08 RFS. The data for 2007/08 relates to the restated figures in the 2008/09 RFS. In both 2006/07 and 2007/08 the restatements related to changes to volume and revenue information. The figures for 2008/09 are per the original RFS in this year. n/a = not available

Table 10.2: BT's proposed unit DSACs

PPC service	2006/07	2007/08	2008/09
140/155Mbit/s link	9,024	29,878	24,586
140/155Mbit/s distribution	1,804	1,111	1,024
140/155Mbit/s local end	23,001	21,304	16,857
140/155Mbit/s connection	n/a	2,105	2,202
34/45Mbit/s trunk	773	439	443

Source: BT submission of 22 June 2011

Table 10.3: Change between published unit DSACs and revised unit DSACs

PPC service	2006/07	2007/08	2008/09
140/155Mbit/s link	0%	0%	0%
140/155Mbit/s distribution	(18%)	(7%)	(7%)
140/155Mbit/s local end	33%	12%	6%
140/155Mbit/s connection	n/a	0%	0%
34/45Mbit/s trunk	(14%)	(7%)	(6%)

Source: BT submission of 22 June 2011

Ofcom's views

Introduction

10.34 In considering which set of DSAC data is appropriate as the basis for the resolution of these Disputes we take the following approach:

10.34.1 we first explain why our view is that our starting point in these Disputes should be the information published in BT's RFS, which are published annually after charges have been levied;[129]

[129] We note that the RFS may subsequently be re-stated.

10.34.2 we then go on to explain our rationale for using DSAC as a benchmark for assessing cost orientation;

10.34.3 we then consider whether, given the circumstances of these Disputes, it would be appropriate for us to use data other than BT's published DSACs; and

10.34.4 next, we set out the adjustments we consider it necessary to make to the RFS data that we propose to rely on.

Our starting point for considering DSACs in these Disputes

10.35 BT publishes its regulatory accounting data according to its financial reporting obligations, and to demonstrate its compliance with its cost orientation (and other) obligations. There are a number of appropriate ways of implementing the high level concept of DSAC set out in the NCC Guidelines (as we discuss further below). BT has considerable discretion over which of these approaches it adopts and therefore how it meets its reporting obligations set by Ofcom (see Section 8). Therefore, BT's existing approach to calculating DSACs could be "appropriate", but there could also be other approaches that may also be "appropriate" with no one approach being uniquely the "most appropriate".

10.36 The RFS, and the data underlying them, have formed the basis of BT's pricing decisions and numerous regulatory decisions by Ofcom and other bodies such as the CAT and Competition Commission ("CC"). For example, the revisions generate DSACs that differ from those used by Ofcom to resolve the Final Determinations and decisions made in respect of the changes to the starting charges in the 2009 LLCC.

10.37 While BT's data may be used for a range of purposes, it is important that Ofcom and CPs are able to rely on them to assess whether BT complied with its obligations at the relevant time (even if the assessment does not in fact take place until a later date). Our starting point is therefore that we should be able to rely on the data contained in BT's published RFS. This position appears to be consistent with that set out by the CAT in its PPC Judgment, where it stated:

> "…*we would expect the figures in [the RFS] to stand without great investigation, re-checking or adjustment by OFCOM. That, after all, is one of the purposes of regulatory financial statements: to ensure that the appropriate data is published to enable compliance with SMP conditions to be monitored*."[130]

10.38 Given the discretion afforded to BT in relation to the specific approach it adopts to calculating DSACs, Ofcom's approach to BT's proposed revisions of historic published data could have important implications for BT's incentives to provide appropriate and accurate information in the future. In our view, allowing BT to change its methodology retrospectively when the existing methodology is not subject to errors or obviously inappropriate creates poor incentives, particularly when those changes are significantly to BT's advantage.

[130] PPC Judgment, paragraph 161.

10.39 We therefore propose to conclude that we should only deviate from using BT's published DSAC data as a basis for resolving these Disputes if the methodology used to calculate that data is obviously inappropriate, or if there are mathematical, input or software errors in the implementation of the methodology. In the following sub-sections we consider what constitutes an "obviously inappropriate" methodology and whether the methodology used to calculate BT's published DSACs was obviously inappropriate or there were errors in its implementation.

Our rationale for using DSAC as a benchmark for assessing cost orientation

10.40 The decision as to whether a specific costing approach is inappropriate or not is necessarily linked to the analytical issue or policy objective that the cost measure is being used to address. Therefore, in order to consider whether the approach to calculating DSACs that BT adopted for its published RFS is obviously inappropriate we need to consider the policy objective DSAC is used to address and whether BT's chosen approach is consistent with that objective. If the approach is evidently inconsistent with the objective, then this would support a conclusion that it was obviously inappropriate. In the remainder of this sub-section we consider the policy objectives that cost orientation and the use of DSAC are employed to address. In the following sub-section we go on to consider whether BT's existing approach is "obviously inappropriate" given this policy objective.

10.41 Multiple product firms such as BT are characterised by considerable common costs that are shared across a broad range of services. These common costs arise primarily as a result of the network nature of the business. For example, BT's duct network or optical cables are a key input to many of its different services.

10.42 These common costs need to be recovered from the services that share them for the firm to fully cover its costs. Regulators can, and indeed Oftel historically did, control the pattern of common cost recovery across individual services, for example by ensuring that charges were based on cost measures such as FAC. However, such an inflexible approach is unlikely to be economically efficient as the pattern of common cost recovery does not necessarily reflect the nature of market demand and, therefore, does not minimise the potential for economic distortions that can arise as a result of common cost recovery.

10.43 A regulated firm is typically much better placed to understand the nature of demand for its products than the regulator. As a result, it can be more economically efficient to allow the firm to decide how it should recover its common costs. By allowing it to reflect the underlying market demand elasticities in this process, the regulator can allow the firm to act in a way that minimises the impact on demand from the common cost mark-up. For example, consider a firm that sells two products which share a common cost. One product ("product A") has perfectly inelastic (market) demand with respect to price, while the other product ("product B") is considerably more price elastic. Under such circumstances it would normally be economically efficient for the firm to recover all the common costs from product A as the mark-up on incremental cost for product A will not have any impact on consumption patterns.

10.44 However, where firms such as BT enjoy SMP in the relevant markets, it would not be appropriate for this flexibility to be boundless. While pricing flexibility can be used to improve economic efficiency, it can also be used in an anti-competitive or otherwise unreasonable manner. For example, rather than pricing to improve the efficiency of common cost recovery, the firm could manipulate its prices to ensure that any potential market entry is suppressed through relatively low prices, while recovering its costs through services where entry is much less likely. In such markets the use of competition law alone may not be sufficient to prevent such undesirable pricing behaviour by the firm with SMP.

10.45 Cost orientation, and therefore the use of DSAC as a pricing ceiling (and DLRIC as a pricing floor), is designed to strike a balance between these two conflicting considerations. Specifically, the use of DSAC as a ceiling for individual charges provides BT with an appropriately bounded degree of pricing flexibility over how it recovers common costs across the services that share those common costs.

10.46 The pricing flexibility provided for by the use of DSAC arises from the fact that in calculating DSAC, the SAC for a broad increment is distributed over the services within the increment. There are a number of potentially reasonable approaches to the detail of how DSACs are calculated that adhere to this basic principle. BT has discretion over which of the approaches it uses.

10.47 Each of these different approaches involves the distribution of the same SAC for the broad increment but may well result in a different distribution to individual components (and therefore services). However, independent of the precise allocation of DSAC to individual components, by distributing the SAC of the broad increment to the components within the increment, the pricing flexibility afforded to BT across the increment as a whole is greater than that embodied by FAC (which in effect limits BT to a single price for each charge) but remains appropriately bounded.

Our consideration of BT's views on the correct DSAC data to use in the context of these Disputes

10.48 We consider that the starting point for our assessment is that we should use the DSACs published by BT at the time (subject to the adjustments discussed later in this section). However, we go on to consider each of BT's arguments in relation to why we should not use its published DSAC figures.

Why do we observe DSAC below FAC for some services in BT's RFS?

10.49 As we explained in Annex 11 of the Final Determinations, at a high-level DSACs are calculated on the basis of distributing the SAC of a broad increment across the services within that increment. As such, certain FCCs that would be allocated to all the services provided by the firm under a FAC methodology are allocated to a smaller set of services under a DSAC methodology. On this basis, we would typically expect that the DSAC for an individual service would be greater than the FAC for that service. However, as we explain below, although we would typically expect DSAC to exceed FAC for individual services, this relationship may not hold in all cases, given that BT uses different cost models to derive each of DSAC and FAC.

10.50 We accept that if a DSAC is below FAC then this is unusual. However, rather than being a function of an error or an inappropriate DSAC methodology *per se*, the observed cases of DSAC being below FAC would seem to be the consequence of the two cost measures being calculated on a different basis using two largely separate models. The DSAC figures (alongside the DLRIC figures) are calculated by BT in a different way from its FAC results and for the specific purpose of cost orientation. Indeed, it is useful to note that there are circumstances not affected by the sub-cost category issue raised by BT where DSAC is still below FAC.[131] However, in these cases BT decided:

> "*…not to make any changes to the DSAC of the categories as*:
>
> (i) *The impact of these was much less material; and*
>
> (ii) *Any change for these categories would need to be structural in nature which could lead to inconsistencies in the model*.[132]

10.51 BT's FAC values are calculated using an Activity-Based Costing ("ABC") methodology.[133] In contrast the DSAC estimates are calculated using BT's LRIC model outputs. If, for example, BT had derived both FAC and DSAC on the basis of a consistent set of models, we would expect DSACs always to be greater than or equal to FAC.

10.52 In the case of BT, the fact that in a very limited number of instances the combination of BT's specific implementation of DSAC and the difference in the approaches to calculating DSAC and FAC means that the typical relationship breaks down, reflects that DSAC and FAC are calculated on a different basis using different models. It does not necessarily imply that the DSAC figures are incorrect or inappropriate, given the policy objective in using DSAC. As discussed above, the DSAC figures are consistent with the policy objective of providing bounded pricing flexibility.

10.53 Notwithstanding that we consider BT's published DSAC figures to be consistent with the policy objective they are designed to address, in order to ensure that the DSAC test is not implemented in a mechanistic manner, we take account of the level of charges relative to FAC in addition to comparing revenues with DSAC as part of the DSAC test (see Section 8). Our methodology is therefore able to take into account that DSACs may be below FACs, where appropriate.

Calculating LRIC and DSAC at different levels of granularity

10.54 In the case of split cost categories, as we have explained above, LRICs are calculated at a different level of granularity to common costs. BT considers that this means that:

> "...*the FCC will not be allocated to components in proportion to their LRICs*".[134]

10.55 BT further argues that:

> "...*for the appropriate calculation of DSAC, it is essential that the LRIC and FCC are calculated at the same level of cost disaggregation*".[135]

[131] Slides provided by BT at meeting dated 4 August, page 5.
[132] Slides provided by BT at meeting dated 4 August, page 5.
[133] I.e. costs are allocated on the basis of a series of accounting rules.
[134] BT's 11 August response, paragraph 1b.
[135] Slides provided at meeting dated 4 August, slide 2.

10.56 We disagree with BT's argument that, because LRICs and DSACs are calculated at different levels of granularity, the FCCs will not be allocated to components in proportion to their LRICs. As we explain in paragraph 10.9 above, BT's LRIC model effectively combines the LRICs for sub-categories before it distributes FCCs to components at the cost category level. The allocation of FCCs for split cost categories is exactly the same as for other cost categories that are not split and results in an allocation which is in proportion to the component LRICs at the cost category level.

10.57 As we also explain above, there appears to be a reasonable economic rationale for why BT has adopted its existing approach to calculating LRICs and FCCs where there are split cost categories. Its approach reflects BT's characterisation of the existence of two cost drivers for such cost categories (and in that context represents a simplification compared to modelling a three-dimensional CVR). Furthermore, as we also explain above, there also appears to be a reasonable economic rationale for why the cost sub-categories are effectively combined before the FCCs are allocated to calculate DSACs (i.e. because the FCCs are only meaningful at the category level). On this basis, in the case of cost categories with two cost drivers, we do not agree with BT's argument that the approach is incorrect unless both the LRIC calculation and DSAC calculation are performed at the same level of granularity.

There are no mathematical or software errors in relation to BT's published DSACs

10.58 We have reviewed in detail the outputs of BT's LRIC model and DSAC outputs in 2006/07 to identify whether BT's allocation of FCCs to components at the cost category level was subject to mathematical or spreadsheet error. BT also provided us with a worked example of how its existing LRIC model calculates DSAC[136] which was consistent with its own accounting documentation and the approach embodied in the detailed DSAC output spreadsheets provided to us by BT. Reflecting BT's arguments in relation to the alleged anomaly, our review has focussed on the allocation of FCCs in calculating DSACs; it has not involved reviewing the calculation of the LRICs and FCCs within the LRIC model. We have not identified any mathematical or spreadsheet errors as a result of this process.

10.59 In addition we asked BT to confirm whether it believed that the alleged anomalies arose from a calculation error. It confirmed to us that this was not the case, rather that the alleged anomalies arose from the calculation method not the calculations themselves:

> "*We do not consider that there is a mathematical or software error in the LRIC model. However, we consider that the calculation method used to determine DSAC figures for cost categories that have been split into two after being imported from ASPIRE was inappropriate and gave rise to anomalous results*."[137]

10.60 We therefore consider that we and BT are in agreement on this point and, as it is not in dispute between the Parties, we have not considered it further.

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[136] BT's worked example of 14 July 2011.
[137] BT's 11 August response, paragraph 1a.

Consistency of BT's published DSACs with Ofcom guidance

10.61 BT claims that the way the current LRIC model works is not consistent with Ofcom's view of how DSACs should be calculated. BT has not elucidated in detail in what way it is inconsistent, but states that:

> "*The LRIC model does not allocate FCCs to components in proportion to LRICs as described in the 1997 and 2001 Guidelines and in Geoffrey Myers' witness statement* [in in BT's appeal of the Final Determinations]."[138]

10.62 As we have explained in paragraph 10.56 above, in our view the LRIC model does allocate FCCs to components in proportion to LRICs, and we therefore disagree with BT in this respect.

10.63 Notwithstanding the point above, the 1997 and 2001 NCC Guidelines provide only a high level description of DSACs and how they should be calculated (and they do so with reference to one service, Inland Conveyance). At a high level, they set out the concept of DSAC (for a Core component) as based on the SAC for the Core increment which has been distributed between the components within that broad increment. They do not seek to provide guidance on the detail of how the SAC should be distributed and, as such, are silent on the use of cost categories and split cost categories. Rather, BT is afforded discretion over how the broad concept is implemented. Moreover, the NCC Guidelines state that a description of the detailed methodology can be found in BT's accounting documentation (this includes the R&P, which we discuss below).[139]

10.64 Similarly, Geoffrey Myers' witness statement in the PPC appeal was intended to provide a high level explanation to the CAT of how BT's DSACs are calculated. This was in order to explain the concept of DSAC and why it was relevant to the PPC Disputes. It did not provide a detailed explanation of how BT's LRIC model works and did not comment on the issues associated with split cost categories.

10.65 BT's model distributes the SAC of the Core increment on a granular basis using multiple cost categories. This granular approach is not inconsistent with the 1997 and 2001 NCC Guidelines or Geoffrey Myers' witness statement, as it is one reasonable implementation of the high level DSAC approach described in those documents. Therefore we do not consider that the model or its outputs are inconsistent with the guidelines or the witness statement.

Consistency of BT's published DSACs with BT's published methodology

10.66 BT's explanation as to how its LRIC model is inconsistent with its accounting documents is that it considers that, in the LRIC model, FCCs are not allocated in line with LRICs.[140]

[138] BT's 11 August response, paragraph 1c.
[139] 2001 NCC Guidelines, paragraph B.3.
[140] See paragraph 10.54 and BT's 11 August response, paragraph 1b.

10.67 We therefore consider below whether the DSACs using split cost categories are calculated in line with BT's methodology as stated in its accounting documents. However, we note that although BT has argued that the way its model works is inconsistent with its published methodology, it has not provided references to the specific paragraphs with which it is inconsistent.

10.68 The R&P provides a simplified explanation of the way in which the LRIC model operates. The LRIC model has sub-components and has multiple levels of common costs (i.e. beyond just the broad increments).[141] BT notes that:

> "*the R&P does not contain detail about how FCCs should be allocated for those cost categories which are split in two*".[142]

10.69 The R&P does not detail exactly step by step how DSACs should be calculated but does provide a fairly detailed explanation of the approach. We now consider whether there are any inconsistencies between the way the model works and the explanation in the R&P.

10.70 There are two issues that relate to split cost categories:

10.70.1 the calculation of LRICs and FCCs for split categories (i.e. the application of CVRs); and

10.70.2 how FCCs are allocated where there are split cost categories.

10.71 First, the R&P contains a summary of the approach taken when a cost category has two cost drivers,[143] explaining that although there is a three dimensional cost function for such cost categories, for the sake of simplicity two CVRs are created from this overall cost function:

> "*In these cases the cost categories are split into two and denoted by a ".l" and ".c" suffix (Lines and Calls). Separate cost volume relationships are defined for the lines and calls drivers*."[144]

10.72 We have verified that BT's LRIC modelling uses two separate CVRs for the ".c" and ".l" sub-categories. We therefore do not observe any inconsistency between the description of the modelling of the sub-categories and the modelling itself.

10.73 Second, the allocation of FCCs is discussed in BT's R&P when it describes how DLRICs ("Distributed LRICs") and DSACs should be calculated:

> "*First, the LRIC of Core is calculated by treating Core as a single increment. Then the LRICs of the network components comprising Core are calculated. The Intra-Core Fixed Common Costs are calculated as the difference between the LRIC of Core and the sum of*

[141] For example there are common costs associated with "Inland Private Circuits" that are common to just the components in this group.
[142] BT's 11 August response, paragraph 1b.
[143] See appendix 2 (pages 47 to 52) of LRIC R&P http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2009/LongRunIncrementalCostModel.pdf
[144] See Section 2.3 of R&P.

the LRICs of the components within Core. The Intra-Core FCCs are then distributed to the components within Core on a Cost Category by Cost Category basis using an equal proportional mark-up. This method attributes the FCC to the relevant components in proportion to the amounts of the Cost Category included within the LRICs of each component. Finally the LRIC of each component is added to the distribution of the Intra Core FCC to give the resultant DLRICs."[145] (emphasis added)

"*The Stand Alone Cost of the Core is calculated as a single figure and this control total is then apportioned to the underlying components. The SAC of Core will include not only elements of the Intra-Wholesale Network FCC but also those parts of the Wholesale Network –R&O FCC which straddle Core … The distribution of the Fixed Common Costs which are shared between Core and other increments are apportioned over the Core components using equal proportional mark-ups to derive DSACs. This method attributes FCC to the components in proportion to the amounts of the Cost Category included within the LRIC of each component*."[146] (emphasis added)

10.74 Although the R&P therefore explains that FCCs are allocated on a cost category by cost category basis, it does not describe how FCCs should be allocated when there are split cost categories. However, as we explain above, although BT's modelling generates LRICs for the individual sub-categories, because separate FCCs cannot be identified for the two sub-categories on a causal basis, the distribution of FCCs for sub-cost categories is carried out at the aggregate cost category level. We therefore do not observe an inconsistency between BT's modelling approach and that explained in its R&P documents.

10.75 In summary, we have reviewed BT's R&P document in conjunction with the detailed outputs of its DSAC calculations and have not been able to identify any inconsistencies in either the calculation of the LRICs/FCCs for the split cost categories or how the FCCs are distributed to those categories.

Proposed conclusions on which DSAC data to use to resolve these Disputes

10.76 We consider that unless there are errors in BT's RFS, or the methodology used in preparing the RFS was obviously inappropriate, Ofcom should rely on the published RFS for the purposes of determining these historic Disputes. While we have made adjustments to BT's published DSACs later in this section[147], these adjustments have been made to correct for volume errors and to ensure that revenues are appropriately matched to costs. In contrast, we have not made adjustments to incorporate BT's revised methodology for calculating DSACs because BT has not demonstrated that its existing approach to calculating DSACs contains an error or is obviously inappropriate. Our approach to BT's proposed revisions of historic published data could have important implications for BT's incentives to provide appropriate and accurate information in its RFS.

[145] See Section 2.5.2 of the R&P.
[146] See Section 2.5.3.1 of the R&P.
[147] Paragraphs 10.148 to 10.144 .

10.77 BT's revised DSACs not only change DSACs for the services relevant to these Disputes but also for a range of other services. In addition, for some of these other services BT's published cost data has formed the basis of regulatory decisions. Allowing BT to change its methodology retrospectively when the existing methodology is not obviously inappropriate (even if there may be other appropriate methodologies) or subject to errors, risks creating an incentive for BT to change its methodology whenever a change may be to BT's advantage.

10.78 We acknowledge that it is not typical for DSACs to be less than FAC for individual services. Indeed, DSACs are greater than FAC for all the service and year combinations considered in these draft determinations. However, the two measures diverge because they use different allocation methodologies (DSAC is a LRIC-based approach, while FAC is based on an "Activity Based Costing" (ABC) approach) and operate at different levels of granularity. These differences arise from the detailed methodologies that BT has chosen to adopt for each of FAC and DSAC. It can lead to the situation where DSAC is below FAC (i.e. see paragraph 11.76 of the Ethernet Draft Determinations), although this situation does not arise for any of the services under consideration in this dispute.

10.79 We do not consider that the isolated instances of DSAC being below FAC undermine the policy objective that the use of DSAC seeks to address, i.e. to allow BT a degree of pricing flexibility about how it recovers common costs across a range of services (which share those costs), while providing limits to avoid unreasonably high (or low) prices for services in markets in which BT has SMP to the detriment of consumers or competition. Such pricing flexibility is provided by the gap between DSAC and DLRIC, which is significant for the services in dispute. As a consequence, DSAC still fulfils the policy objective of providing BT with an appropriately bounded degree of pricing flexibility over the services that share common costs.

10.80 We therefore do not believe that BT's representations have demonstrated that its existing methodology is obviously inappropriate, and there are no mathematical, input or software errors in its implementation. The methodology generates DSACs consistent with the policy objective that they are designed to address and does so in a way that appears to have a reasonable economic justification. We have not found any evidence that BT's existing approach is inconsistent with BT's published LRIC methodology, the NCC Guidelines or Geoffrey Myers' witness statement in BT's appeal of the Final Determinations.

10.81 Having considered BT's arguments, we therefore propose to rely on BT's published DSACs as the starting point for our assessment of whether BT's charges were consistent with its cost orientation obligations.[148]

Approach taken in the Final Determinations

10.82 Our approach in the Final Determinations was first to examine the data in BT's RFS, upon which the Disputing CPs had based their submission. We found in some years we could not rely on the RFS data because:

[148] For 2009/10, this means that we rely on the DSACs published in BT's 2009/10 RFS, and not the restated DSACs published in BT's 2010/11 RFS.

10.82.1 In June 2008, BT advised us that it intended to restate certain PPC cost and revenue data in the 2006/07 RFS. The reason for this was that BT had overstated the volumes of internal PPCs sold and the revenue attributable to those services. BT corrected its methodology when reporting it's 2007/08 RFS and published restated data for 2006/07 in September 2008. However, the published data contained errors, as BT had failed to update the unit costs for the PPC services. BT subsequently corrected this and published the unit cost information in April 2009.

10.82.2 Regarding the overstatement of volumes and revenues above, this was also relevant to earlier years. BT did not publish restated financial statements for 2004/05 and 2005/06, though it confirmed that some of the PPC data contained in these statements had also been inappropriately prepared.

10.83 We therefore used our powers under section 191 of the Act to obtain specified data to enable us to assess the overcharge allegations.[149]

10.84 We then adjusted the BT data to ensure that it was appropriate for carrying out an assessment of overcharging for the services in dispute.

The PPC Judgment

10.85 In the PPC Judgment, the CAT held that one of the purposes of the RFS is to ensure that the appropriate data is published to enable compliance with SMP conditions to be monitored. However, the CAT also recognised that there might be justification for Ofcom to make adjustments to the data:

> "…*in ordinary circumstances (where there is no error in BT's audited regulatory financial statements), we would expect the figures in these statements to stand without great investigation, re-checking or adjustment by Ofcom. That, after all, is one of the purposes of regulatory financial statements: to ensure that the appropriate data is published to enable compliance with SMP conditions to be monitored*".[150]

10.86 However, the CAT noted that in the case of the Final Determinations, Ofcom's adjustments to the RFS:

> "*may, perhaps, be justified because BT's originally published regulatory financial statements could not be relied upon*".[151]

Approach to establishing the correct dataset in these Disputes

10.87 Our proposed approach to establishing the correct dataset for resolving these Disputes is the same as the one we adopted in the Final Determinations. As we explain below, we have started with the data published in BT's RFS, and obtained

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[149] Final Determinations, paragraphs 6.3 to 6.7.
[150] PPC Judgment, paragraph 161.
[151] PPC Judgment, paragraphs 161.

additional data from BT through formal information requests, which together we refer to as “the BT base data”.[152] We propose to make a number of revenue and costs adjustments to the BT base data, which are discussed at paragraphs 10.93 to 10.144 below. We finally adjust BT’s published DSACs for the services in dispute for the purposes of assessing overcharging.

10.88 The remainder of this section is structured as follows:

10.88.1 paragraphs 10.89 to 10.92 describe the BT base data;

10.88.2 paragraphs 10.93 to 10.144 explain the revenue and cost adjustments we propose to make to the BT base data;

10.88.3 paragraphs 10.145 to 10.147 summarise the impact of these adjustments on the BT base data;

10.88.4 paragraphs 10.148 to 10.154 explain the adjustments we have made to BT’s reported DSACs and set out the results of the DSAC test for each of the disputed services, comparing external revenues and external DSAC;

10.88.5 paragraphs 10.155 to 10.156 we conclude on the dataset for our analysis; and

10.88.6 paragraphs 10.157 to 10.160 we consider the impact of undertaking the DSAC test using BT’s revised DSACs rather than its published DSACs.

The relevant base data for our comparisons

10.89 For the purposes of the overcharge assessment for 140/155Mbit/s PPC terminating segment services and 34/45Mbit/s PPC trunk services, we have started with the same BT base data we used for the Final Determinations. Table A12.2 in the Final Determinations set out the total revenue, FAC and DSAC for each PPC market as provided to us by BT in response to our formal information requests. This data reflected our conclusions on the relevant dataset and had also been adjusted to remove services such as Siteconnect that are not within the scope of these Disputes.[153]

10.90 BT has resubmitted its section 191 Notice responses in relation to 2007/08 and 2008/09. As a result of this resubmission, the BT base data that we propose to use has three differences from that used in the Final Determinations. The first relates to an adjustment that was made by the CC in its Determination of 30 June 2010 following C&W’s appeal of the 2009 LLCC Statement, to reflect information from BT regarding under-allocation in 2007/08 for Siteconnect of Sales, General and Administration (SG&A) costs.[154] The effect of this understatement was an over-

[152] Paragraph 10.89 and 10.92.
[153] Some of the out of scope services, such as Siteconnect, have their revenues and costs reported within the disputed services. As these services are out of scope, the revenues and costs associated with them are excluded from our assessment.
[154] http://www.competition-commission.org.uk/appeals/communications_act/final_determination_excised_version_for_publication.pdf

allocation of costs for services in the TI basket.[155] The CC determined that an adjustment of £3.2m should have been made to the TI basket in 2007/08 to reflect this error.[156] This adjustment has been included in the 2007/08 data provided to us by BT and is reflected in Table 10.4.This has a small impact on 34/45Mbit/s PPC trunk services in 2007/08.

10.91 The second difference reflects a correction that BT has made to the data associated with 140/155Mbit/s PPC distribution services and 140/155Mbit/s PPC main link services in 2007/08 and 2008/09. BT informed us that some internal circuits that had been categorised as internal 140/155Mbit/s PPC distribution and main link circuits should actually have been categorised as internal circuits associated with the "Wholesale Residual" market.[157] BT has corrected this error in its 2010/11 RFS (which includes a restatement of 2009/10) but the error also relates to 2007/08 and 2008/09. BT has provided us with data which corrects for this volume error in relation to 140/155Mbit/s PPC distribution and main link services and this is reflected in Table 10.4.[158]

10.92 The final difference reflects the removal of a small amount of costs from 140/155Mbit/s PPC main link services in 2008/09 which relate to Ethernet Backhaul Direct (EBD) rental services (which fall in the AISBO) market. In 2008/09 EBD rental services were not separately reported in the RFS and the revenues and costs were included within existing RFS services. Some of the costs of EBD rentals in 2008/09 were included within PPC main link services, including 140/155Mbit/s PPC main link services. BT has provided us with a dataset which removes an estimate of the costs associated with EBD rental services from 140/155Mbit/s PPC main link services and this is reflected in Table 10.4.[159]

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[155] The Traditional Interface ("TI") basket relates to TI terminating and trunk segments and includes, among other services, 140/155Mbit/s PPC terminating segment and 34/45Mbit/s PPC trunk services.
[156] Competition Commission Determination of 30 June 2010, paragraph 6.52.
[157] Letter from Neena Rupani (BT) to Teresa Krajewska (Ofcom), 13 September 2011.
[158] Letter from Neena Rupani (BT) to Louise Marriage (Ofcom), 20 October 2011.
[159] Letter from Neena Rupani (BT) to Louise Marriage (Ofcom), 20 October 2011. The effect of the removal of costs associated with EBD rentals is less than 0.5%.

Table 10.4: Restated and/or revised financial data provided by BT in response to Ofcom's section 191 Notices, £m

PPC service	2004/05	2005/06	2006/07	2007/08	2008/09
140/155Mbit/s link					
Total Revenue	17.8	33.8	31.1	20.1	23.3
Total FAC	28.7	27.5	18.5	31.0	32.9
Total DSAC	41.0	39.7	26.4	58.4	58.5
140/155Mbit/s distribution					
Total Revenue	23.5	46.8	35.6	31.6	30.5
Total FAC	36.1	45.4	26.3	16.6	14.0
Total DSAC	71.8	81.3	63.7	31.1	27.7
140/155Mbit/s local end					
Total Revenue	18.0	28.6	24.1	20.5	18.0
Total FAC	46.8	53.0	28.5	24.6	16.8
Total DSAC	64.0	68.3	34.0	31.8	23.3
140/155Mbit/s connection					
Total Revenue	0.1	0.2	0.1	0.1	0.1
Total FAC	n/a	n/a	n/a	0.0	0.1
Total DSAC	n/a	n/a	n/a	0.1	0.1
34/45Mbit/s trunk					
Total Revenue	14.2	37.8	43.1	41.1	41.9
Total FAC	13.1	18.1	33.8	22.7	20.8
Total DSAC	29.6	33.9	70.4	39.6	35.9

Source data compiled from BT's responses to the section 191 Notices received during the period leading to the Final Determinations and within the period leading to these Disputes. 140/155Mbit/s PPC connection services were not published in the RFS in 2004/05, 2005/6 and 2006/07 and BT were unable to provide FAC or DSAC data relating to these years in its section 191 Notice response.

Adjustments we propose to make to the BT base data

Introduction

10.93 We summarise below the seven adjustments we made to BT's base data in the Final Determinations which we believe are also relevant for our assessment of 140/155Mbit/s PPC terminating segment and 34/45Mbit/s PPC trunk services. We then describe three additional adjustments which we believe are necessary for determining these Disputes. Finally, we consider adjustments to BT's published DSACs to reflect our FAC adjustments and describe further adjustments to distinguish between internal and external customers.

10.94 Having reviewed the data published in the RFS and provided by BT in response to our requests for information, we believe that, as in the PPC Disputes, there are some areas where it is necessary to make adjustments to BT's PPC data to ensure that it can be relied upon for determining the Disputes.

10.95 We have identified two types of adjustment that we need to make to BT's data:

10.95.1 the first corrects volume errors and associated issues in the RFS data; and

10.95.2 the second replicates a series of cost adjustments that were identified in the 2009 LLCC Statement,[160] to the extent that they are applicable to this historic dispute.

10.96 The first set of adjustments corrects for what we would consider straightforward errors in the RFS data. In particular they correct for misstatements of volumes and the associated impacts on revenues and costs. It is necessary to correct for these errors in order to ensure that the data is appropriate for determining the Disputes.

10.97 The second set of adjustments aims to ensure that the revenues we are assessing are compared against the appropriate costs. It is not always possible to directly compare the revenues and costs reported in BT's RFS because the data for a service may include revenues and costs associated with a different service, or relevant revenues and costs may be reported elsewhere. This means that the costs of a service may not always be matched against the revenues to which they relate. The 2009 LLCC Statement identified some particular areas where this mismatching of costs and revenues had occurred and recommended some adjustments to BT's RFS to enable a better comparison between revenues and costs to be made. In making adjustments when resolving the PPC Disputes we sought, where appropriate, to ensure consistency with the adjustments made in the 2009 LLCC Statement and we are proposing to take a similar approach when resolving these Disputes.

10.98 For the purposes of resolving these Disputes we have modelled all corrections associated with volume errors as individual standalone changes to the base data. The adjustments in line with the 2009 LLCC Statement are based on the original RFS data but have been modified to take account of the volume corrections. For example, if a volume correction reduced the originally published FAC for a service by 10% then our adjustments in line with the 2009 LLCC Statement will also be reduced by 10% for that service.

10.99 Each year, Ofcom reviews BT's detailed financial reporting requirements with BT in light of regulatory developments during the year. Ofcom consults on any changes or updates to be adopted in the forthcoming RFS for that year, in advance of BT preparing the year end RFS. With respect to the preparation of future RFS, we are drawing BT's attention to the corrections and adjustments identified below to determine if and how BT should update the basis for preparing the relevant financial data. In addition, Ofcom has recently published a "Call for Inputs" seeking views from stakeholders on BT's regulatory financial reporting requirements more generally with a view to publishing a consultation document in spring 2012.[161]

10.100 We initially assume that unit costs are the same for internal and external sales. This means that we can consider internal and external costs together and adjust total costs for the disputed services. We consider factors specific to external costs in paragraphs 10.153 to 10.154.

[160] The adjustments are explained in detail in Section 5 (paragraphs 5.42 to 5.76) and Annex 6 of the 2009 LLCC Statement.
[161] Review of cost orientation and regulatory financial reporting in telecoms - Call for inputs: http://stakeholders.ofcom.org.uk/binaries/consultations/cost-orientation-telecoms/summary/condoc.pdf

10.101 In the paragraphs below we discuss the adjustments as follows:

10.101.1 in paragraphs 10.102 to 10.123 below, we first consider the seven adjustments that we made in the Final Determinations; and

10.101.2 in paragraphs 10.124 to 10.144 we consider three additional adjustments not made in the Final Determinations.

Adjustments made in the Final Determinations

10.102 In the Final Determinations, the seven adjustments we made to the BT base data were as follows:

10.102.1 removal of third party customer local end equipment and infrastructure costs;

10.102.2 change to the estimate of the costs of financing working capital, related to debtors, so as to reflect the payment terms for the Disputing CPs that are purchasing PPCs;

10.102.3 inclusion of the revenues for resilience circuit and protected path services;

10.102.4 reallocation of certain core distribution costs between trunk and terminating segments for 2004/05 and 2005/06;

10.102.5 removal of direct costs of 21CN provision;

10.102.6 removal of costs associated with ancillary services; and

10.102.7 removal of costs associated with third party customer local end equipment and infrastructure selling costs.

10.103 We propose to make the same adjustments to resolve these Disputes in relation to 140/155Mbit/s PPC terminating segment services and 34/45Mbit/s PPC trunk services.

10.104 In order to estimate some of these adjustments, we need data at a more granular level than BT's published accounts. For some adjustments we have therefore used information from BT's AFS. These provide information by service, together with a limited breakdown of costs, assets and liabilities.[162]

10.105 In using data from the AFS, we have made comparable changes (as compared to the published financial statements) to those that BT made when providing us with the BT base data. This involved making the same proportionate changes to the AFS data as were made by BT to the RFS data before they provided it to us under formal powers.

<u>1. Third party customer local end equipment and infrastructure costs</u>

10.106 BT's costs for PPC local end rental services include the costs associated with the equipment, fibre and copper used to provide the physical link between the local

[162] BT does not publish the AFS but provides them to Ofcom on a confidential basis.

serving exchange and the third party customer premises. BT, however, recovers part of these costs through its PPC equipment and infrastructure connection charges. As part of the 2009 LLCC Statement BT provided an estimate of the proportion of local end costs that were associated with equipment and infrastructure connection charges.[163] We have estimated the costs associated with equipment and infrastructure charges based on these proportions and removed them from the PPC local end rental costs.

10.107 We believe that this adjustment is required to avoid potential over-recovery of the costs through PPC local end rental charges.

10.108 In the Final Determinations we did not make this adjustment in 2008/09 due to lack of data and also because the adjustment would not have made a difference to our conclusions on the services that were subject to the Final Determinations.[164] When assessing potential overcharges for 140/155Mbit/s PPC terminating segment services, we have included this adjustment in 2008/09.

2. Payment terms

10.109 This adjustment changes the estimate of the costs of financing working capital, related to debtors, so as to reflect the payment terms for the Disputing CPs that are purchasing PPCs.

10.110 In its RFS BT estimates its working capital related to its debtors for all its services based on a number of days (being the time period between when the costs are incurred and the receipt of the revenue). Prior to 2007/08 this was 59 days whereas from 2007/08 onwards BT has used 43 days in its reporting.

10.111 In the Final Determinations we decided to replace the estimates based on 59 days and 43 days with 46 days for connection services and 16 days for rental services. This reflected the actual payment terms offered to customers and BT's billing cycle.[165]

3. Resilience circuit volumes and revenues

10.112 The volumes and revenues for resilience and protected path services are identified separately in BT's RFS for 2006/07, 2007/08 and 2008/09.[166] However, the costs are included within the existing circuit costs. In the Final Determinations we concluded that it would be appropriate to consider resilience circuit volumes and revenues in our analysis of overcharging.[167] We did this by adding the resilience revenue (that had been reported separately) to the other circuits revenues and assessing the combined resilience and other circuits results in aggregate.

[163] 2009 LLCC Statement, Table A6.2, Adjustment 1.
[164] Final Determinations, paragraph 6.126(i).
[165] Final Determinations, paragraphs 6.76 to 6.82.
[166] BT told us (email from Tom James (BT) to Louise Marriage (Ofcom), 26 July 2011 that in 2004/05 and 2005/06 the volumes, revenues and costs related to resilience and protected path circuits were included in the data for the PPC services that they relate to.
[167] Final Determinations, paragraphs 6.83 to 6.90.

10.113 For TISBO services BT provided us with a breakdown of resilience circuit volumes in each year and a breakdown of resilience circuit revenues in 2007/08 and 2008/09. However, in its response to the 5 July 2011 section 191 Notice, BT informed us that in 2007/08 and 2008/09 the resilience circuit volumes for 140/155Mbit/s PPC local end and connection services appeared twice in the RFS – once under the reported service volumes and once within the separately reported resilience circuit volumes.[168] We have corrected for this error in the RFS by removing volumes that have been double counted and also taken into account any revenue impact. In addition we have estimated resilience circuit revenues for 140/155Mbit/s TISBO services in 2006/07 by assuming that the resilience revenues reported in the RFS were split by bandwidth and service pro-rata to the breakdown of resilience revenues provided by BT for 2007/08 and 2008/09.

10.114 For wholesale trunk services the RFS separately identifies the associated resilience circuit volumes and revenues in 2006/07, 2007/08 and 2008/09. In response to Ofcom's 5 July 2011 section 191 Notice, BT provided us with a breakdown of resilience volumes in each year and a breakdown of resilience circuit revenues between different trunk services in 2007/08 and 2008/09.[169] We have estimated resilience circuit revenues for 34/45Mbit/s PPC trunk in 2006/07 by assuming that the resilience revenues reported in the RFS were split by bandwidth pro-rata to the breakdown of resilience revenues provided by BT for 2007/08 and 2008/09.

10.115 For both TISBO and trunk services we have estimated resilience revenues in 2006/07 by assuming that the resilience revenues reported in the RFS were split by bandwidth and service pro-rata to the breakdown of resilience revenues provided by BT for 2007/08 and 2008/09. If BT is able to provide a breakdown of resilience circuit revenues by bandwidth in 2006/07 for TISBO and trunk services consistent with the RFS data then we will take this into account in making our final determinations.

4. Trunk/distribution rebalancing

10.116 During an investigation into BT's prices for PPC trunk services in 2005, we identified concerns relating to the way that core distribution costs were split between PPC wholesale trunk segments and PPC terminating segments.[170] BT subsequently revised its in 2007 to address these concerns and allocation of costs reflected this in the 2006/07 and 2007/08 RFS. However, BT did not restate the data for years prior to 2006/07, despite these years also affected by the accounting problems identified.

10.117 Given that the 2004/05 and 2005/06 data is based on an approach that both Ofcom and BT appear to have agreed was inappropriate, we believe that it is appropriate to make an adjustment to the data for those two years.

10.118 In making the adjustment in the Final Determinations, we therefore based our reallocation of costs on the 2007/08 data, applying the ratio of TISBO to trunk costs in 2007/08 to the two earlier years 2004/05 and 2005/06. We have followed the same approach in resolving these Disputes.

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[168] Email from Tom James (BT) to Louise Marriage (Ofcom), 26 July 2011.
[169] Section 191 Notice sent to BT on 5 July 2011.
[170] *Own initiative investigation against BT Wholesale about PPC Trunk Services*: http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/closed-cases/all-closed-cases/cw_841/

5. 21CN costs

10.119 The capital and operating costs incurred by BT in relation to its 21CN network between 2005/06 and 2008/09 are currently attributed to existing services, including PPCs. BT has not, however, used its 21CN network to provide PPCs during the Relevant Period. We do not therefore consider that these costs should be recovered through PPC charges.

10.120 The costs attributed to the 21CN network fall into two categories, namely direct costs and indirect costs. In the context of the December 2008 consultation document (the "2008 LLCC consultation"), BT argued that the indirect costs would have been incurred even in the absence of 21CN, and that PPCs should therefore make a contribution to their recovery.[171] Ofcom accepted this argument in developing its LLCC consultation proposals and we decided to follow the same approach in the Final Determinations.[172] We have therefore eliminated direct 21CN costs but allowed indirect 21CN costs to remain and be recovered via PPC revenues.

6. Ancillary services (excess construction charges)

10.121 BT's RFS report separately the revenues associated with excess construction charges ("ECCs"). However, the costs of ECCs are included within the base data for PPC services. Since ECCs are not within the scope of the Disputes we have estimated the costs associated with ECCs and removed this element from the base data.

10.122 In the Final Determinations we estimated ancillary service costs by assuming that they were equal to ancillary service revenues. The 2009/10 RFS however published ancillary service costs for the first time which enabled a margin calculation to be made. In estimating ancillary service costs in these Disputes we have therefore assumed that BT made the same margin in prior years rather than assuming costs equal to revenues.

7. Third party customer local end equipment and infrastructure selling costs

10.123 BT incurs selling costs associated with third party customer local end equipment and infrastructure which we assume are reflected in the local end rental cost base, as per other costs associated with this service. Since third party customer equipment and infrastructure services are not relevant to the Disputes, we have removed these selling costs from the local end rental costs and moved them to be matched against the revenue from PPC equipment and infrastructure connection charges.

Additional adjustments to those made in the Final Determinations

10.124 We are proposing to make three adjustments to the BT base data which we did not make for the Final Determinations.

[171] *Leased Lines Charge Controls*, Consultation, 8 December 2008 http://stakeholders.ofcom.org.uk/consultations/llcc/?a=0

[172] Final Determinations, paragraphs 6.97 to 6.106.

10.125 Two of these additional adjustments relate to POH while a third is required as a consequence of the CC Determination following C&W's appeal of the 2009 LLCC Statement (see footnote 154), which was issued after the Final Determinations, and relates to 21CN.

Two POH adjustments

10.126 CPs interconnect to BT's network at places called POH. Additional equipment is necessary at the POH for which BT is entitled to recover costs.[173] BT recovers some of the PPC POH costs from CPs through POH connection and POH rental charges. BT also levies an additional charge on all external circuits delivered over a POH, to recover costs not recovered through the other two charges (the "additional POH costs").[174] Since BT does not need to interconnect with itself, this equipment and the related costs is only needed for external sales.

10.127 We propose to make two adjustments relating to POH. The first removes POH costs from the local end cost base which are recovered via POH rental and connection charges. The second adjusts external local end costs to reflect the fact that external local end prices are uplifted to recover additional POH costs.

First POH adjustment: to remove POH costs recovered via POH rental and connection charges

10.128 As explained in paragraph 3.15, BT recovers additional POH costs (i.e. those POH costs not recovered via specific POH rental and connection charges) via an uplift to external local end prices. While there is a difference between internal and external unit local end prices, only a single average unit local end DSAC is reported in the RFS.

10.129 In the 2009 LLCC Statement we identified that:

> "*the reported costs for local end rental services also include most of the costs for point of handover links. Point of handover links relate to the technical area market rather than third party local end rentals*".[175]

10.130 Since these costs are recovered via POH charges we should remove these costs from the local end cost base.

10.131 BT has confirmed to us that there are certain capital and depreciation costs relating to POH that are included within the local end cost base that are recovered via POH rental and connection charges.[176] BT has provided an estimate of these costs for the period 2004/05 to 2008/09 that are included within the cost base of the 140/155Mbit/s PPC local end services. We have therefore eliminated these costs in assessing the claims of overcharging.

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[173] If BT installs the equipment, BT is entitled to recover costs, including those for maintenance.
[174] Following the Cable & Wireless appeal to the CAT of the 2 July 2009 LLCC Statement remedies and the subsequent remittal back to Ofcom, the recovery of these additional POH costs was the subject of Ofcom's *LLCC PPC Points of Handover Pricing Review Consultation* dated 26 January 2011. http://stakeholders.ofcom.org.uk/binaries/consultations/points-handover-pricing/summary/main.pdf
[175] http://stakeholders.ofcom.org.uk/binaries/consultations/llcc/statement/llccannex.pdf, page 37.
[176] BT response to Q5 of our Section 191 Notice dated 5 July 2011.

10.132 We did not consider this adjustment in the Final Determinations, but we have subsequently estimated the potential effect on 64kbit/s, 2Mbit/s and 34/45Mbit/s PPC local end services based on the data we have available for 140/155Mbit/s PPC local end services and do not believe it would have affected our conclusions on these services.

Second POH adjustment: adjustment to external local end costs to reflect the fact that additional POH costs are recovered via an uplift to external local end prices

10.133 In its letter of 27 May 2011, BT argued that in order for the comparison between external local end price and DSAC to be like for like, the DSAC must allow for the external local end price uplift which aims to recover additional POH costs, i.e. external unit DSAC should be increased to reflect the fact that POH costs relate to external and not internal customers.

10.134 In the Final Determinations we stated that we agreed in principle with the need to adjust for the different treatment of POH between internal and external prices and costs.[177] We did not make any adjustment in the end because the local end services that we were considering in the Final Determinations (which excluded 140/155Mbit/s PPC local end services) did not exhibit signs of overcharging. Therefore there was no need to make a further adjustment to increase costs, which would have made a finding of overcharging less likely.[178]

10.135 We intend, however, to make the adjustment in relation to 140/155Mbit/s PPC local end services because, in certain years, it exhibits signs of overcharging, i.e. revenues greater than DSAC. Consequently, this adjustment could impact on our assessment of overcharging.

10.136 In order to make this adjustment we require an estimate of the additional POH costs that are recovered via the uplift to external local end prices. We therefore asked BT to provide details of the POH costs that were recovered via the uplift on 140/155Mbit/s PPC local end services. BT told us that this information was not available.[179] We then asked BT how these costs might be estimated.[180] In its response, BT proposed a methodology following the approach set out in its letter to Ofcom 27 May 2011, which was to estimate these costs based on the price uplift to external local end prices.[181]

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[177] Final Determinations paragraph 6.126(ii).
[178] Final Determinations, entry under "7. local end price adjustment" in Table 6.6.
[179] Letter from Neena Rupani (BT) to Teresa Krajewska (Ofcom), 29 June 2011: "*BT's regulatory accounts do not hold information at this level of detail, making it impossible to provide the information requested for the services identified in the table. This is in part because up until 2009/10, the cost of point of handover was included within the Local End component and the costs recovered through an uplift to the price of the external Local End services*".
[180] Section 191 Notice, 5 July 2011.
[181] Letter from Neena Rupani (BT) to Teresa Krajewska (Ofcom), 29 June 2011: "*Until the 2008 Leased Lines Charge Control, the approach taken in estimating the costs of Point of Handover ("PoH") has been to use a 30% uplift and apply this to external local ends. (In other words, the price of external local ends has been 30% higher than the price of internal local ends.) This price differential is based on the embedded cost of the Point of Handover which is required for external*

10.137 We have rejected BT's approach because its estimate of POH costs recovered via the local end price uplift is itself driven by the price uplift and is therefore somewhat circular in nature. Given our purpose here to assess BT's charges against its costs, the estimate of additional POH costs should be based on those underlying POH costs and not on the price uplift.

10.138 We have therefore considered an alternative methodology for estimating the POH costs which were recovered via the uplift on external local end service prices.

10.139 We propose to use data from the bottom up model published by Ofcom on 22 June 2011 as part of the second of two consultations entitled *LLCC PPC Points of Handover pricing review*.[182] This consultation specifically considered the additional POH charges which were previously recovered via uplift to the external local end service charges.

10.140 Using cost data from this model we have estimated that the FAC relating to additional POH costs in 2009/10 was approximately £3m.[183] In 2009/10 BT's RFS shows the total revenue from additional POH charges to be £13.3m, implying that additional POH costs were approximately 23% of the revenues designed to recover them in 2009/10.[184]

10.141 In order to estimate additional POH costs in 2004/05 to 2008/09 for the 140/155Mbit/s PPC local end service, we have multiplied the POH revenue generated by the external price uplift in each year by 23%. Table 10.5 shows our estimates of these POH costs.

Table 10.5: Estimate of additional POH costs recovered via the uplift on external local end prices for 140/155 Mbit/s, £m

	2004/05	2005/06	2006/07	2007/08	2008/09
POH revenue from the local end uplift	0.05	0.09	0.16	0.30	0.37
Estimate of costs (23% of revenues)	0.01	0.02	0.04	0.07	0.08

Source: Ofcom, based on BT's RFS and Ofcom bottom up model (see paragraphs 10.139 – 10.140)

10.142 The impact of this adjustment is to de-average the overall (average of internal and external) local end unit FAC cost, so that external unit FAC is greater than internal unit FAC. This reflects the fact that some POH costs are recovered from external customers but none from internal customers. Finally, we apply the absolute amount

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local ends only. This cost of the point of handover can therefore be estimated by adding a 30% increment to the external local end volume when calculating the unit cost".

[182] *LLCC PPC Points of Handover pricing review*: http://stakeholders.ofcom.org.uk/binaries/consultations/revision-points-handover-pricing/summary/condoc.pdf .

[183] Using the bottom up model we were able to estimate that the FAC costs associated with POH in 2010/11 were approximately £3m. We have further assumed that these FAC costs of £3m had not changed significantly between 2009/10 and 2010/11 given that local end volumes are comparable in these years.

[184] This is calculated as the revenue generated from the local end uplifts from the 64Kbit/s, 2Mbit/s, 34/45Mbit/s and 140/155Mbit/s PPC TISBO markets plus the revenue shown for these services under the Technical Areas (point of handover) market.

(difference in £m between total external FAC calculated using average unit FAC and the total external FAC calculated using our estimate of external POH costs) of this adjustment to DSAC in paragraphs 10.145 to 10.147 below.

3. Further adjustment to 21CN costs

10.143 In respect of the 21CN adjustment made in the 2009 LLCC Statement, which we mirrored in the Final Determinations, the CC found that "*a reduction in MCE as a result of the 21CN adjustment should have been followed by an adjustment to the overheads that were allocated on the basis of MCE".*[185] The CC determined that the adjustment for 21CN should have been £3.5m for the TI basket in 2007/08.[186]

10.144 BT has provided us with estimates for 2005/06 to 2008/09 of the corporate overheads which were allocated to the TI basket via 21CN. We have used this data to make an adjustment to 21CN overheads to reflect the CC's decision.

Results and impact of the adjustments made to the BT base data

10.145 The impact on total revenues of including revenues related to resilience circuit and protected path circuits in our assessment is shown in Table 10.6:

Table 10.6: Impact of resilience circuit adjustment on total revenue (percentage increase on unadjusted total revenue)

PPC Service	2004/05	2005/06	2006/07	2007/08	2008/09
140/155Mbit/s link	-	-	9%	11%	9%
140/155Mbit/s distribution	-	-	13%	12%	12%
140/155Mbit/s local end	-	-	18%	9%	29%
140/155Mbit/s connection	-	-	57%	95%	29%
34/45Mbit/s trunk	-	-	8%	6%	8%

Source: Ofcom, based on information provided by BT

10.146 The total impact of the individual cost adjustments, as a percentage change relative to FAC, is set out in Table 10.7. The equivalent changes in FAC in £m for 140/155Mbit/s and 34/45Mbit/s PPC services are set out in Table 10.8. Negative percentages indicate a decrease in FAC as a result of the adjustment.

[185] Competition Commission Determination of 30 June 2010, paragraph 4.130.
[186] Competition Commission Determination of 30 June 2010, paragraph 6.52. The TI basket includes TI terminating and trunk segments.

Table 10.7: Summary of the impact of the adjustments made to the BT base data FAC in the period 2004/05 or 2008/09

PPC service	2004/05	2005/06	2006/07	2007/08	2008/09
140/155Mbit/s link	(2%)	(5%)	(8%)	(19%)	(28%)
140/155Mbit/s distribution	(24%)	(32%)	(7%)	(2%)	(2%)
140/155Mbit/s local end	(48%)	(39%)	(44%)	(47%)	(46%)
140/155Mbit/s connection	n/a	n/a	n/a	-	-
34/45Mbit/s trunk	103%	123%	(6%)	(2%)	(2%)

Source: Ofcom, based on based on information provided by BT

Table 10.8: Absolute change in total FAC following adjustments, £m

PPC service	2004/05	2005/06	2006/07	2007/08	2008/09
140/155Mbit/s link	(0.6)	(1.3)	(1.5)	(5.8)	(9.2)
140/155Mbit/s distribution	(8.7)	(14.7)	(2.0)	(0.3)	(0.3)
140/155Mbit/s local end	(22.6)	(20.6)	(12.4)	(11.5)	(7.7)
140/155Mbit/s connection	0.0	0.0	0.0	0.0	0.0
34/45Mbit/s trunk	13.5	22.3	(2.0)	(0.4)	(0.4)

Source: Ofcom, based on information provided by BT

10.147 Tables 10.7 and 10.8 do not include the second POH adjustment discussed above in paragraphs 10.133 to 10.142. This is because this POH adjustment only affects external FAC and not total FAC. We discuss this under the next heading.

Adjusting BT's DSACs

10.148 We now consider two further sets of adjustments:

10.148.1 adjustments to total DSAC in the light of changes to total FAC. Because our cost adjustments affect FAC, we do this to assess how changes in FAC translate to changes in DSAC; and

10.148.2 two adjustments to de-average total DSAC to reflect factors specific to external DSACs.

Adjustments to total DSAC

10.149 As discussed in Section 8, in assessing whether BT has overcharged the Disputing CPs for PPCs, our proposed approach is to identify whether BT's charges for the disputed services were above their DSACs. At paragraph 10.81 we concluded that in assessing the overcharging claims, the appropriate DSACs to use are those reported in BT's RFS, subject to appropriate adjustments.

10.150 Consequently, we need to identify how the adjustments we have made to BT's FAC data, as set out in Table 10.8, translate into adjustments to BT's DSAC data. The process for doing this was discussed in detail in the Final Determinations.[187]

10.151 We concluded that it was appropriate to adjust DSAC in line with the absolute adjustment made to FAC for the following key reasons:[188]

10.151.1 trying to assess the impact that an adjustment to FAC will have on the DSAC is extremely complex, but it would not be proportionate to require BT to re-run its LRIC model;

10.151.2 our approach fell well within the bounds of the reasonable range of adjustments that we had identified; and

10.151.3 the Disputing CPs had not provided compelling evidence to cause us to change the approach we had set out in the Draft Determinations.[189]

10.152 We propose to adopt the same approach in resolving the Disputes for 140/155Mbit/s and 34/45Mbit/s PPC services. We have adjusted the DSACs provided by BT as set out in Table 10.1 by the absolute adjustment made to FAC (as per Table 10.8 above). In the next paragraphs, we discuss the final two adjustments, which affect only the external DSACs. Therefore, we apply these as a last stage, once the total (or average internal/ external) DSAC has been adjusted.

De-averaging DSACs and adjustments specific to external DSAC

10.153 The DSAC test requires a comparison of external revenue to external DSAC. The published DSAC is an average of the costs of providing PPC services to internal and external customers. An estimate of external DSAC is calculated by multiplying the total DSAC as published in BT's RFS, by the proportion of total volumes that are external volumes.

10.154 There are however two further adjustments that we have made to this external DSAC to better reflect the underlying costs of providing PPC services to external customers:

10.154.1 the first is to adjust the external DSAC for additional POH costs. This adjustment was explained in paragraphs 10.133 to 10.142 above. Using our estimates of costs from Table 10.5 we have de-averaged the total unit FAC so that the external FAC is greater than the internal unit FAC, reflecting the fact that additional POH costs only relate to external customers. We have adjusted external DSAC by applying the absolute change in external FAC.

10.154.2 the second adjustment relates to PPC services purchased in 2004/05 and is one that we also made in the Final Determinations. PPC costs were

[187] Final Determinations, paragraphs 6.131 to 6.179.
[188] Final Determinations, paragraph 6.173.
[189] *Draft Determination to resolve disputes between each of Cable & Wireless, THUS, Global Crossing, Verizon, Virgin Media and COLT and BT regarding BT's charges for partial private circuits*, 27 April 2009, http://stakeholders.ofcom.org.uk/consultations/draft_deter_ppc/

significantly different (lower) for internal customers in 2004/05 than for external customers, as a result of lower Sales, General and Administration (SG&A) costs.[190] This difference in costs was expressly recognised by the regulation applicable at the time.[191] In the Final Determinations we therefore estimated separate DSACs for internal and external circuits based on the difference in SG&A costs. We are proposing to adopt the same approach to resolving the Disputes for 140/155/Mbit/s PPC terminating segment services and 34/45Mbit/s PPC trunk services.

10.155 The adjusted external revenues, FACs and DSACs for the disputed services are set out in Table 10.9 below.

10.156 The data for 2008/09 represents a full year while the Disputing CPs are only disputing charges for part of that year i.e. from 1 April 2008 to 30 September 2008. We will take this into account in when we assess whether BT has overcharged the Disputing CPs for PPCs in Section 11.

[190] See paragraphs 6.175-6.178 of the Final Determinations.
[191] See paragraphs 6.28-6.49 of the Final Determinations.

Table 10.9: Adjusted external revenue, FAC and DSAC data for each disputed service in the period 2004/05 to 2008/09, £m

PPC service	2004/05	2005/06	2006/07	2007/08	2008/09
140/155Mbit/s link					
External revenue	0.1	0.3	0.7	1.0	1.2
External FAC	0.2	0.2	0.3	1.1	1.1
External DSAC	0.2	0.3	0.4	2.3	2.4
140/155Mbit/s distribution					
External revenue	0.3	0.6	0.9	1.4	1.6
External FAC	0.4	0.4	0.5	0.6	0.6
External DSAC	1.0	0.8	1.2	1.2	1.3
140/155Mbit/s local end					
External revenue	0.2	0.4	1.0	1.2	1.7
External FAC	0.3	0.4	0.4	0.6	0.6
External DSAC	0.4	0.5	0.5	0.9	1.0
140/155Mbit/s connection					
External revenue	0.0	0.0	0.1	0.1	0.1
External FAC	n/a	n/a	n/a	0.0	0.0
External DSAC	n/a	n/a	n/a	0.1	0.1
34/45Mbit/s trunk					
External revenue	1.5	5.6	7.6	9.8	10.5
External FAC	3.9	6.4	4.8	5.1	4.7
External DSAC	6.2	8.9	10.4	8.9	8.3

Source: Ofcom, based on BT's RFS

BT's revised DSACs

10.157 Although we do not consider it appropriate to use BT's revised DSACs, we have considered the likely effects of undertaking the DSAC test using BT's revised DSACs. We have done this to allow the Parties to see the impact of BT's revised DSACs on the DSAC test.

10.158 We have not assessed whether any of the adjustments we make to the data would need to be revised if we were to use BT's revised DSACs, so this high-level assessment should be seen as indicative of the scale of the impact, rather than a final view of the consolidated set of data we would use if we considered it appropriate to use BT's revised DSACs.

10.159 The data in Tables 10.10 and 10.11 below show only the results of the DSAC test, and do not take into account the other considerations outlined in Section 8. If we were to use BT's revised DSACs, we would also need to consider whether any other factors were relevant to our assessment of whether BT had overcharged.

10.160 The tables below should therefore be considered only as illustrative of the scale of the impact that using BT's revised DSACs would be likely to have.

Table 10.10: DSAC test using DSAC's published in BT's RFS and including Ofcom's adjustments, £m

PPC service	2004/05	2005/06	2006/07	2007/08	2008/09	All years
140/155Mbit/s link	-	-	0.3	-	-	0.3
140/155Mbit/s distribution	-	-	-	0.2	0.2	0.3
140/155Mbit/s local end	-	-	0.4	0.2	0.4	1.1
140/155Mbit/s connection	n/a	n/a	n/a	0.0	0.0	0.0
34/45Mbit/s trunk	-	-	-	0.9	1.1	2.0

Table 10.11: DSAC test using BT's revised DSAC's and including Ofcom's adjustments, £m

PPC service	2004/05	2005/06	2006/07	2007/08	2008/09	All years
140/155Mbit/s link	-	-	0.3	-	-	0.3
140/155Mbit/s distribution	-	-	-	0.3	0.2	0.5
140/155Mbit/s local end	-	-	0.2	0.1	0.3	0.6
140/155Mbit/s connection	n/a	n/a	n/a	0.0	0.0	0.0
34/45Mbit/s trunk	-	-	-	1.5	1.4	2.9

**Note: 2008/09 has been pro-rated to reflect the fact that only 6 months of the year are in dispute, i.e. 1 April 2008 to 30 September 2008*

Conclusions and next steps

10.161 We have concluded that in assessing the overcharging claims, the appropriate DSACs to use are those reported in BT's RFS, subject to the adjustments that we have described above.

Section 11

Ofcom's assessment of whether BT's charges were cost orientated

Introduction

11.1 In this Section we consider whether BT's charges for the services in dispute were cost orientated and therefore whether BT has overcharged its customers.

11.2 In line with the methodology we set out in Section 8, we propose to carry out the following assessments in relation to each charge in dispute:

11.2.1 compare the relevant charges with their respective DSAC to see whether we have concerns about their compliance with Conditions GG3.1 and H3.1 (i.e. we carry out the DSAC test referred to at paragraph 8.22); and

11.2.2 consider what other factors could indicate that any charges exceeding DSACs were nonetheless cost orientated and then conclude as to whether overcharging has occurred.

11.3 Where we consider that these assessments indicate that BT's charges were not cost orientated, we then go on to calculate the amount by which BT has overcharged its external customers.

The DSAC test

Comparison of external revenues with DSAC

11.4 Table 11.1 compares BT's 34/45Mbit/s PPC trunk and 140/155Mbit/s PPC terminating segment services external revenues with the external DSACs for those services. The measures of revenue and DSAC used in this comparison are based on BT's restated and revised data as adjusted by Ofcom (see Section 10). The revenues are presented as a percentage of their DSAC, with 100% reflecting a charge that is set at its DSAC. Any figure above 100% indicates that the revenues are above DSAC.[192]

[192] As explained in Section 10, there are some differences between the adjustments we have made to the regulatory financial information provided by BT for the purposes of resolving these disputes and the adjustments we made in the Final Determinations. These differences largely reflect new information not available at the time of the final determinations, new adjustments arising out of the CC's determination of 30 June 2010 and amendments to previous adjustments following further information received from BT. Consequently, the percentages in Table 11.1 (and in subsequent tables) differ from those presented in the Final Determinations.

Table 11.1: Comparison of BT's external PPC revenues with our estimate of the external DSACs

PPC service	2004/05	2005/06	2006/07	2007/08	2008/09
140/155Mbit/s TISBO					
Connection	n/a	n/a	n/a	**138%**	**108%**
Main link	46%	88%	**174%**	43%	52%
Distribution	26%	70%	71%	**115%**	**125%**
Local end	57%	75%	**186%**	**127%**	**173%**
Trunk					
34/45Mbit/s	23%	63%	73%	**110%**	**127%**

Source: Ofcom – based on data supplied by BT. n/a = data not published in the RFS.

11.5 As can be seen from Table 11.1, there were a number of services in dispute where external revenues exceeded external DSAC. Specifically these were:

11.5.1 140/155Mbit/s PPC connection and distribution services in the last two financial years (2007/08 and 2008/09);

11.5.2 140/155Mbit/s PPC main link services in 2006/07;

11.5.3 140/155Mbit/s PPC local end services in 2006/07, 2007/08 and 2008/09; and

11.5.4 34/45Mbit/s PPC trunk services in the last two financial years (i.e. 2007/08 and 2008/09).

Ensuring that the DSAC test is not implemented in a mechanistic way

BT's external revenues compared to FAC

11.6 Table 11.2 compares BT's 34/45Mbit/s PPC trunk and 140/155Mbit/s PPC terminating segment service external revenues with the external FACs for those services. The measures of revenue and FAC upon which this comparison is conducted are based on BT's data as adjusted by Ofcom. The revenues are reflected as a percentage of their FAC, with 100% reflecting a charge that is set at its FAC. Any figure above 100% indicates that the revenues exceeded FAC. Values in bold represent those service and year combinations where revenues exceed DSAC (i.e. those in Table 11.1 with values above 100%). We note that BT was unable to provide DSAC (or any other cost benchmark) information for connection services between 2004/05 and 2006/07 (hence the "n/a" entries in Table 11.2).[193]

[193] Connection services were not reported in the 2004/05, 2005/06 or 2006/07 RFS.

Table 11.2: Comparison of BT's external PPC revenues with our estimate of the external FACs

PPC service	2004/05	2005/06	2006/07	2007/08	2008/09
140/155Mbit/s TISBO					
Connection	n/a	n/a	n/a	**224%**	**159%**
Main link	64%	129%	**255%**	90%	109
Distribution	57%	152%	181%	**216%**	**250%**
Local end	92%	108%	**244%**	**190%**	**282%**
Trunk					
34/45Mbit/s	37%	88%	158%	**192%**	**221%**

Source: Ofcom – based on data supplied by BT

11.7 As the results in Table 11.2 demonstrate, external revenues exceeded FAC for the majority of service and year combinations being considered in this Draft Determination. Aside from the first financial year, 34/45Mbits PPC trunk services in 2005/06 and 140/155Mbit/s PPC main link services in 2007/08, all service and year combinations revenues exceeded FAC.

11.8 Reflecting the consistency with which BT's revenues exceeded FAC, Table 11.2 shows that all the cases where revenues exceeded DSAC (those entries in Table 11.2 in bold), they also exceeded FAC, and by a considerable margin often by more than 200%. Taken in isolation, this evidence would therefore support a finding of overcharging for the services in question.

BT's rates of return on capital employed

11.9 Table 11.3 sets out the CCA FAC rates of return on (mean) capital employed that BT earned each year on external sales of the PPC services of interest to these Disputes. The rates of return are calculated on the basis of BT's data as adjusted by Ofcom (see Section 10). BT was unable to provide mean capital employed data for connection services for the period covered by the disputes.[194] We are therefore unable to report rates of return for these services. Entries in bold are for those service and year combinations where revenues exceed DSAC.

[194] Connection services were not reported in the 2004/05, 2005/06 or 2006/07 RFS. While connection services were reported in the RFS in 2007/08 and 2008/09 BT's Section 191 data for these years says that the associated MCE was negligible.

Table 11.3: Rates of return earned by BT on external sales of PPC services

PPC service	2004/05	2005/06	2006/07	2007/08	2008/09
140/155Mbit/s TISBO					
Connection	n/a	n/a	n/a	n/a	n/a
Main link	(5%)	34%	**118%**	7%	14%
Distribution	(3%)	39%	52%	**60%**	**67%**
Local end	9%	19%	**115%**	**65%**	**142%**
Trunk					
34/45Mbit/s	(11%)	6%	50%	**52%**	**65%**

Source: Ofcom – based on data supplied by BT. n/a = data not available

11.10 The results in Table 11.3 show that, for those service and year combinations identified in Table 11.1 as having earned revenues in excess of DSAC, the rates of return on mean capital employed were at least 52%, rising to as high as 142%. This compares with BT's average WACC across the period of around 12%.[195] The rates of return were all therefore very significantly in excess of BT's WACC at the time. Again, taken in isolation, this evidence would support a finding of overcharging for the services in question.

Magnitude and duration by which charges exceeded DSAC

11.11 As we explained in Section 8, we consider it appropriate to take into account the magnitude and duration that charges exceeded DSAC as part of our assessment of overcharging. This is consistent with the approach taken by the CAT in the PPC Judgment.

11.12 In this section we therefore consider the circumstances surrounding BT's charges in order to inform our assessment of whether those charges gave rise to overcharging.

34/45Mbit/s PPC trunk services

11.13 As is demonstrated in Table 11.1, BT's external revenues for 34/45Mbit/s PPC trunk services exceeded DSAC for the final two financial years of the Relevant Period. BT's 34/45Mbit/s PPC trunk charges were therefore not persistently above DSAC for the majority of the period. As explained in paragraph 8.34, under such a situation, consideration of the specific circumstances surrounding BT's charges is warranted before concluding on whether overcharging has occurred.

11.14 Based on our adjusted financial data BT's external revenues exceeded DSAC by 10% and 27% in 2007/08 and 2008/09 respectively. Therefore, the extent to which charges exceeded DSAC grew over the two year period. Even on BT's unadjusted base data revenues exceeded DSAC in both years (by 4% and 17% respectively) and followed the same increasing trend.

11.15 Using BT's unadjusted base data, its external charges for 34/45Mbit/s PPC trunk services were in excess of DSAC in 2005/06 as well as 2007/08 and 2008/09. However, as we explain in paragraphs 10.116 to 10.118 BT's allocation of certain

[195] This is a time-weighted WACC that allows for the variations in BT's WACC over the period of the dispute.

core distribution costs between trunk and terminating segments was inappropriate prior to 2006/07. This resulted in trunk costs being understated. Ofcom identified concerns relating to this allocation issue in 2005 and BT implemented a revised methodology for the 2006/07 (and later) RFS. BT was therefore aware from 2005 that its RFS data was inappropriate in this respect for the first two financial years relevant to the Disputes. Reflecting this revised allocation methodology for 2004/05 and 2005/06 (i.e. the period before BT corrected its approach), is one of our most substantial adjustments to BT's cost data. Although on BT's unadjusted base data external revenues exceed DSAC for 2005/06, this is not the case on the basis of our appropriately adjusted data .

11.16 BT's Carrier Price List shows that charges for 34/45Mbit/s PPC trunk services were unchanged between 2006/07 and 2008/09 (i.e. £552 per km).[196] The primary driver of external revenues exceeding DSAC in 2007/08 and 2008/09 was therefore a significant reduction in unit DSAC compared to 2006/07, as shown in Table 11.4 below.

Table 11.4: BT's external revenues and DSAC for 34/45Mbit/s trunk services, as adjusted by Ofcom

PPC service	2004/05	2005/06	2006/07	2007/08	2008/09
34/45Mbit/s trunk					
Internal volume, km	204,325	65,932	72,581	62,959	62,780
External volume, km	32,455	12,381	12,984	18,533	18,985
Total volume, km	236,780	78,313	85,565	81,492	81,765
External unit revenue, £	44.92	453.75	587.66	527.94	552.16
External unit DSAC, £	191.24	716.90	799.70	481.88	434.95
External revenue as % of DSAC	23%	63%	73%	110%	127%

Note: In 2004/05 volumes were reported and provided to Ofcom by BT on a route-distance basis. Later years are reported and presented on a radial-distance basis and are therefore not directly comparable without the use of route to radial factors. As a consequence unit revenues and costs in 2004/05 are also not directly comparable in 2004/05 with later years.
Source: Ofcom – based on data supplied by BT

11.17 We understand that the change in unit DSACs between 2006/07 and 2007/08 was principally as a result of CCA adjustments associated with duct assets.[197] For the reasons explained in paragraph 11.15 above it is not possible to compare BT's DSAC estimates in 2006/07 with the earlier years due to the issues with BT's cost allocation in 2004/05 and 2005/06.

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[196] Note that there is a difference between the price for 34/45Mbit/s PPC trunk services that appears on the price list and the average revenues per unit reported in Table 11.1. Principally this is because the average revenue figure includes our adjustments to BT's revenues (e.g. to improve the matching of resilience revenues and costs).
[197] In its response (dated 7 October 2008) to Question 4 of our first section 191 Notice of 1 October 2008, BT explains that: "*The DSAC for the 34M/45Mbit/s trunk segment has decreased in 2007/08 as a result of a CCA adjustments in both 2006/07 and 2007/08 reported years. In 2006/07 there was a write down of duct assets where the asset life moved from 60 years to 40 years, conversely in 2007/08 there was a write up of duct assets based on the Piper revaluation.*"

11.18 As we explain in Section 9, BT has made a number of arguments that it considers Ofcom should take into account when considering the implications of these circumstances for whether or not its 34/45Mbit/s PPC trunk charges in 2007/08 and 2008/09 constituted overcharging. Specifically BT argues that:

11.18.1 Between October 2008 and September 2009 (i.e. a significant proportion of the 2008/09 financial year) BT had given Ofcom a commitment (in response to Ofcom's request) to keep all PPC charges unchanged in nominal terms. This commitment was put in place to reflect a gap between the end of the 2004 LLCC review and the start of the 2009 LLCC review.

11.18.2 As part of the 2009 LLCC review Ofcom did not require BT to make starting charge changes to the charges for 34/45Mbit/s PPC trunk (whereas it did for 2Mbit/s PPC trunk charges, for example). BT argues that this suggested that Ofcom did not have significant concerns with the level of 34/45Mbit/s PPC trunk charges. It argues that if Ofcom had considered them to be materially out of line with underlying costs of provision, it would have required changes.

11.18.3 BT acted to reduce prices (by 34%) in December 2009 having become aware that prices had exceeded DSAC for two years (i.e. 2007/08 and 2008/09) and that the gap between price and DSAC had widened in 2008/09.

11.18.4 We consider the relevance of BT's arguments below.

BT's pricing commitment

11.19 As we explain in Section 7 of our 2008 LLCC consultation for the 2009 LLCC Statement, the gap between the end of the 2004 LLCC Statement and start of the 2009 LLCC Statement meant that:

> *"...we sought to ensure sufficient protection during the interim period".*[198]

11.20 This was motivated by a view that:

> *"BT should not benefit as a result of the delay, and that other stakeholders are on average no worse are on average no worse off than they would have been had the delay not occurred."*[199]

11.21 As a consequence, BT offered to keep all TI terminating and trunk charges unchanged in nominal terms until the charge controls commenced.[200]

11.22 In paragraph 7.9 of the December 2008 consultation document we were clear that our expectations in relation to BT's pricing of TI terminating and trunk services were

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[198] *Leased Line Charge Control, A new Charge Control Framework for Wholesale Traditional Interface and Traditional Interface Products*, Consultation, December 2008 ("2008 LLCC Consultation") http://stakeholders.ofcom.org.uk/binaries/consultations/llcc/summary/leasedlines.pdf, at paragraph 7.6

[199] 2008 LLCC consultation, paragraph 7.6.

[200] 2008 LLCC consultation, paragraph 7.7

that "*prices will not be increased in nominal terms between 1 October 2008 and the introduction of the charge control*".

11.23 It was therefore clear that our concern in relation to its pricing for TI services was to ensure BT did not use the gap between charge controls to increase its charges to the detriment of its customers. It was however free to reduce prices where it chose to do so. Given our concern was ensuring protection to customers over the period, it is hard to see why BT considered any offer it made to us should have precluded it from adhering to its cost orientation obligations. We therefore do not consider BT's pricing commitments as part of the 2009 LLCC review as having any meaningful significance to these disputes.

2009 LLCC starting charge changes

11.24 As we explain below, BT should not derive comfort in relation to whether its charges are cost orientated from the changes made to starting charges in the 2009 LLCC Statement and in particular from the fact that we did not introduce a starting charge adjustment in relation to charges for 34/45Mbit/s PPC trunk services.

11.25 The revisions to the starting charges for the 2009 LLCC Statement stemmed from proposals made by BT (among others) to reduce its 2Mbit/s trunk service charges.

11.26 In the LLCC Statement, we expressly did not conclude that BT's proposals had addressed our concerns in relation to BT's PPC charges. Specifically, in paragraph 4.87 of the December 2008 consultation document we noted that:

> *"BT's proposed prices go some way to addressing the key issues identified by us, by bringing prices within the DLRIC/DSAC floors and ceilings. However there are also some differences between our analysis and BT's...we identified further services whose prices are outside our recalculated floors/ceiling" (emphasis added).*[201]

11.27 In addition, in paragraph 4.190 of the 2009 LLCC Statement we set out that it was not within the scope of the LLCC to require BT to bring the remaining services that we identified as outside the floors and ceilings back within them:

> *"We have concluded that it is not within the scope of these charge controls to require BT to bring the remainder of charges within appropriately measured DSAC and DLRIC. BT has an obligation to ensure that it complies with all its SMP obligations at all times and it is not within the scope of this Statement to examine BT's compliance. In setting these charge controls we therefore do not conclude on whether BT's charges are cost orientated or not."*[202]

11.28 In reviewing BT's proposal's for start charge adjustments, we were therefore explicit that:

[201] http://stakeholders.ofcom.org.uk/binaries/consultations/llcc/summary/leasedlines.pdf
[202] http://stakeholders.ofcom.org.uk/binaries/consultations/llcc/statement/llccstatement.pdf

11.28.1 BT has an obligation to ensure its own compliance with SMP obligations, including cost orientation, at all times;

11.28.2 BT should not infer any conclusions in relation to cost orientation from our decisions in the 2009 LLCC Statement; and

11.28.3 we considered there to be charges outside of the DLRIC/DSAC range that BT had not addressed in its proposals.

11.29 On this basis we do not consider BT to be justified to draw any comfort over whether or not its charges were cost orientated from the (separate) exercise to consider appropriate starting charges as part of the 2009 LLCC review.

BT acted to reduce prices when it became aware of a potential problem

11.30 BT argues that the timeline of events during the period of the disputes and the year after are relevant to our assessment of overcharging. Specifically, it argues that it acted to reduce prices (by 34%) in December 2009 having become aware that prices had exceeded DSAC for two years (2007/08 and 2008/09) and that the gap between price and DSAC had widened in 2008/09.

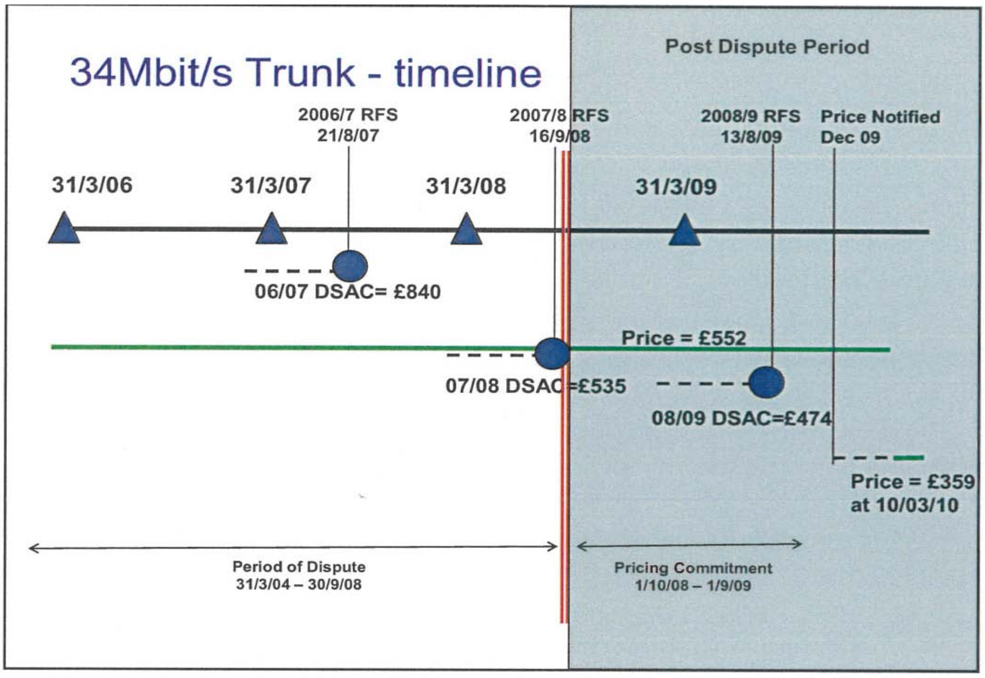
11.31 BT provided the timeline diagram below to demonstrate its arguments. The timeline includes:

11.31.1 the date at which each of the 2006/07, 2007/08 and 2008/09 RFS documents were published;

11.31.2 the price charged by BT over the period considered (i.e. £552 per kilometre); and

11.31.3 the DSAC (per kilometre) values for the 2006/07, 2007/08 and 2008/09 financial years as published in BT's RFS at the time (and therefore unadjusted by Ofcom).

Figure 11.1: BT's pricing timeline for 34/45Mbit/s PPC trunk services



Source: BT, Letter to Ofcom dated 27 May 2011

11.32 BT argues that the timeline demonstrates that:

> "...*BT would only have known that its price exceeded DSAC in September 2008, when the DSAC figure for 2007/08 became available. Even then, the difference was only marginal (3%), and this followed a previous year (2006/07) when BT's price was well below DSAC (by 34%). Given the dramatic fluctuation in DSAC from 2006/07 (£840) to 2007/08 (£535) (and from 2005/06 (£428) to 2006/07), and the fact that BT's £552 charge was only slightly above DSAC, it is not clear why – by Ofcom's own criteria – BT would have been expected to change its price at this point in time. This is supported by the fact that the average DSAC for these three years was £598, which is higher than BT's price.*
>
> *"BT would not then have known the 08/09 DSAC until August 2009 (nearly a year after the close of the dispute period), and we would note that at that point upon discovering that the gap between its price and DSAC had widened, BT took steps to rebalance its charges including reducing its 34/45Mbit/s trunk prices. In December 2009, BT notified a 34% reduction in 34/45Mbit/s trunk charges to £359 per km, which came in to effect from March 2010.*"[203]

11.33 As the CAT noted in the PPC Judgment, in considering BT's compliance with its cost orientation obligations we must be mindful of the fact that when setting its charges BT

[203] Letter from Neena Rupani (BT) to Teresa Krajewska (Ofcom), 27 May 2011.

does not have certainty with regards to what costs it will face over the coming year.[204] While we would expect a firm to have a good understanding of its cost base, we also accept that costs can, for various reasons, vary within year and between years. In some cases these changes cannot be reasonably foreseen and are therefore difficult to reflect in a timely manner in pricing decisions. In other cases these cost variations can be temporary and, as such, may not justify a deviation from the long term price path. This pricing complexity is in large part why our approach to assessing overcharging does not rely on a mechanistic application of the DSAC test.

11.34 As such, and as we explain in paragraphs 8.24 to 8.37, we welcome submissions from BT where it wishes us to take specific circumstances into account when assessing overcharging. However this must be accompanied by a specific and evidence-based explanation of those circumstances. For example, why BT could not reasonably have foreseen that unit DSAC in 2007/8 would fall by a sufficiently large amount to reduce it below BT's charge; and not increase in 2008/09 so that unit DSAC would remain above an unchanged price (indeed unit DSAC fell again in 2008/09). This is particularly relevant given that the higher level of costs in 2006/07 compared to latter years was associated with one-off CCA adjustments. We would expect this to include, as a minimum:

11.34.1 a detailed description of which cost category (or categories) were the main contributors to the change in unit costs;

11.34.2 what was the underlying reason for these cost changes; and

11.34.3 an explanation as to why, as a consequence, BT considered the changes, at least in large part, to be either not reasonably foreseeable or likely to be temporary in nature.

11.35 BT has not provided us with such an explanation in relation to its 34/45Mbit/s PPC trunk charges. Specifically it has not explained why it considered the reduction in DSAC between 2006/07 and 2007/08 was not reasonably foreseeable. Neither has it explained why it felt that the reduction in costs in 2007/08 was likely to be only temporary and therefore justified not acting to change prices as soon as it discovered that charges were in excess. Rather, it has only provided a description of the overall changes in unit DSACs and charges.

11.36 Therefore BT has not yet provided us with sufficient evidence upon which to satisfy ourselves that its charges in 2007/08 and 2008/09 did not constitute overcharging. In the absence of sufficient evidence from BT to the contrary, we propose to conclude that BT overcharged for its 34/45Mbit/s trunk service for these two years. However, if BT is able to provide such evidence in response to these Draft Determinations we will take it into consideration when reaching our conclusion in the final determinations of these disputes.

140/155Mbit/s PPC terminating segment distribution

11.37 As is demonstrated in Table 11.1 BT's external revenues for 140/155Mbit/s terminating segment distribution services exceeded DSAC for the final two of the financial years of the Relevant Period. As such, BT's charges were not persistently

[204] PPC Judgment, paragraph 299.

above DSAC for the majority of the period. The specific circumstances surrounding BT's charges therefore warrant consideration.

11.38 Based on our adjusted financial data BT's external revenues exceeded DSAC by 15% and 25% in 2007/08 and 2008/09 respectively. The extent to which charges exceeded DSAC therefore grew over the two year period, as we also observed for 34/45Mbit/s trunk services. Although our adjustments to BT's data increased the extent to which revenues exceeded DSAC, even on BT's unadjusted base data revenues exceeded DSAC in both years (by 2% and 11% respectively) and followed the same increasing trend.

11.39 As BT's charges were unchanged between 2006/07 and 2008/09 (£1215 per km), the primary driver of external revenues exceeding DSAC was therefore a significant reduction in unit DSAC. This is demonstrated in Table 11.5 below.[205]

Table 11.5: BT's external revenues and DSAC for 140/155Mbit/s PPC terminating segment distribution services, as adjusted by Ofcom

PPC Services	2004/05	2005/06	2006/07	2007/08	2008/09
140/155Mbit/s distribution					
Internal volume, km	83,932	37,236	30,969	27,665	26,510
External volume, km	1,253	452	637	1,140	1,286
Total volume, km	85,185	37,688	31,606	28,805	27,796
External unit revenue, £	201.48	1242.61	1392.29	1227.97	1227.20
External unit DSAC, £	770.05	1765.98	1954.14	1071.64	984.00
External revenue as % of DSAC	26%	70%	71%	115%	125%

Note: In 2004/05 volumes were reported and provided to Ofcom by BT on a route-distance basis. Later years are reported and presented on a radial-distance basis and are therefore not directly comparable without the use of route to radial factors. As a consequence unit revenues and costs in 2004/05 are also not directly comparable in 2004/05 with later years.
Source: Ofcom – based on data supplied by BT

11.40 BT has not provided us with an explanation of the reduction in unit DSAC between 2006/07 and 2007/08. However, our analysis of BT's detailed DSAC modelling outputs suggests that, again, this was primarily a consequence of a reduction in duct depreciation costs.

11.41 Therefore, as we observe for 34/45Mbit/s trunk services, BT's charges exceeded DSAC for the final two years of the period as a consequence of a substantial reduction in costs which it did not contemporaneously pass through to customers by way of price reductions.

11.42 In its 27 May 2011 letter, BT makes representations in relation to why it considers its 140/155Mbit/s terminating segment distribution charges in 2007/08 and 2008/09 did

[205] Note that there is a difference between the price for 140/155Mbit/s PPC terminating segment distribution services that appears on the price list and the average revenues per unit reported in Table 10.5. Principally this is because of: (1) the average revenue figure includes our adjustments to BT's revenues (e.g. to improve the matching of resilience revenues and costs); and (2) the inclusion by BT of revenues for enhanced maintenance in the average revenue figure.

not constitute overcharging. In particular, BT argues that the circumstances in relation to 140/155Mbit/s PPC terminating distribution services are "*almost identical to 34/45Mbit/s Trunk services*". As a consequence BT considers that:

> "*BT's prices in the dispute period are clearly reasonable when assessed against the DSAC information that would have been available at that time. Prices were amended after the end of the dispute period, once it was evident that Ofcom was focusing on DSACs and that reported DSACs were moving out of line with prices*".

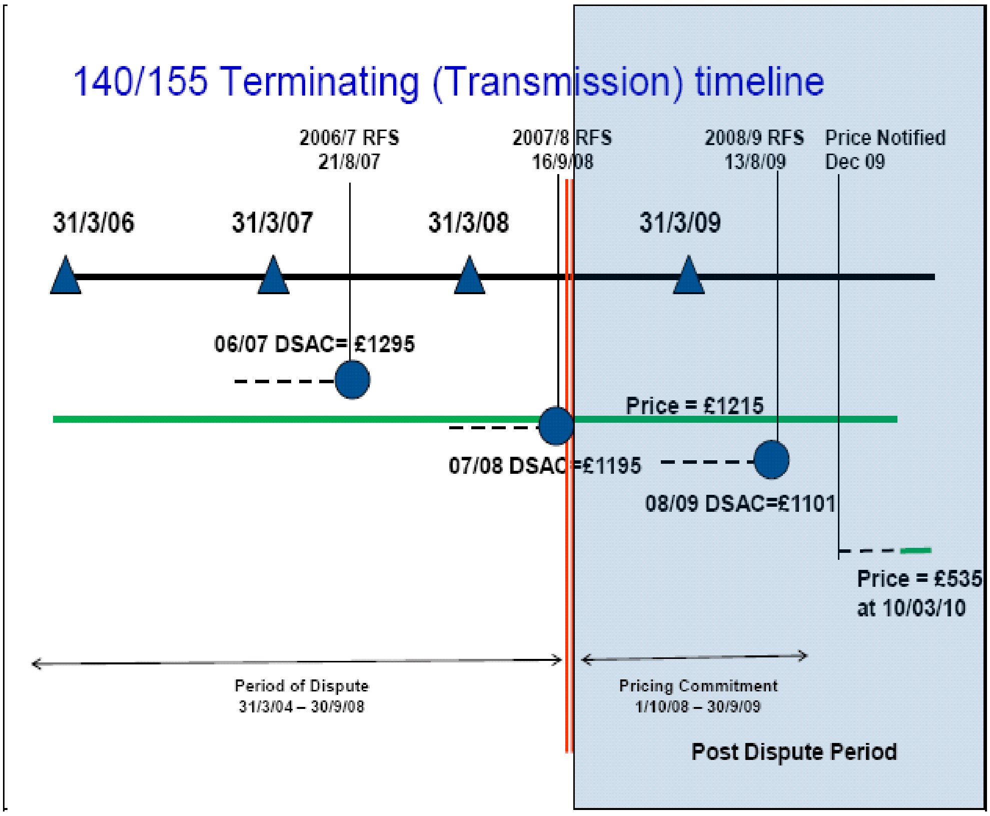
11.43 Consistent with its arguments in relation to 34/45Mbit/s trunk services, BT provides a timeline diagram to illustrate its arguments. We reproduce this diagram below. The timeline again includes:

11.43.1 the date at which each of the 2006/07, 2007/08 and 2008/09 RFS documents were published;

11.43.2 the price charged by BT over the period considered (i.e. £1215 per kilometre); and

11.43.3 the DSAC (per kilometre) values published in the RFS for the 2006/07, 2007/08 and 2008/09 financial years.

Figure 11.2: BT's pricing timeline for 140/155Mbit/s PPC terminating segment distribution services



Source: BT, Letter to Ofcom dated 27 May 2011

11.44 In its letter BT argues that the timeline shows that:

"*On 21 August 2007 BT published a DSAC of £2183 for 140/155 Mbit/s terminating transmission services in the 2006/7 Regulatory Financial Statements (RFS). At this time the price was 6% below the most recently available DSAC figure.*

"When setting prices for the 2008/9 financial year, BT would have had DSAC figures available to it of £1577 for 2005/6 decreasing to £1295 in 2006/7. Again, we cannot see how Ofcom would conclude that the price level of £1215 should have raised concerns at the time in relation to these figures. When the 2007/8 DSAC of £1199 was published in September 2008, the price was only 1.6% higher. The price of £1214 was also below the three year average DSAC of £1356.

"Following the publication of a DSAC of £1101 in August 2009 and after the publication of Ofcom's draft determination on the PPC dispute, BT notified a 51% reduction in 140/155Mbit/s terminating transmission charges to £535 per km effective from March 2010." [206]

11.45 We agree with BT that there appears to be a considerable overlap in the circumstances in relation to 140/155Mbit/s terminating segment distribution services and those in relation to 34/45Mbit/s trunk services.

11.46 As we noted in relation to our assessment of BT's 34/45Mbit/s trunk services, if BT wishes us to take specific circumstances surrounding a charge into account when assessing overcharging, it needs to provide us with an explanation of the specific reasons why it considered a cost reduction was either not reasonably foreseeable, or likely to be temporary in nature.

11.47 BT has not provided us with such an explanation. It has only provided a description of the overall changes in unit DSACs and charges. This is not sufficient for us to consider charges that have exceeded DSAC for two years to be nevertheless appropriate.

11.48 On this basis, BT has not yet provided us with sufficient evidence upon which to satisfy ourselves that its charges in 2007/08 and 2008/09 did not constitute overcharging. As a consequence, and in the absence of sufficient evidence to the contrary, we propose to conclude that BT was in breach of Condition GG3.1 for its 140/155Mbit/s terminating segment distribution service for these two years and that this breach gave rise to overcharging. However, if BT is able to provide such evidence in response to these Draft Determinations we will take it into consideration when reaching our conclusion in the final determinations of these disputes.

140/155Mbit/s PPC terminating segment main link

11.49 As is demonstrated in Table 11.1 BT's external revenues for 140/155Mbit/s terminating segment main link services exceeded DSAC for only one of the financial years of the Relevant Period – 2006/07. Consideration of the specific circumstances

[206] This quote is correct however, the relevant figure quoted in the first sentence of £2183 appears to be an error. It appears that the correct figure should be '£1295'.

surrounding BT's charges is therefore warranted before drawing conclusions on whether this constituted overcharging.[207]

11.50 Based on our adjusted financial data BT's external revenues exceeded DSAC by 74% in 2006/07. However, in both the previous financial year and the following financial year, external revenues were below DSAC, and generally significantly so.

11.51 Although our adjustments to BT's data have generally increased the extent to which revenues exceeded DSAC, even on BT's unadjusted base data revenues exceeded DSAC in 2006/07 and followed a similar pattern in the other years.[208]

11.52 As BT's charges were unchanged between 2005/06 and 2008/09 (£10,392 per link), the primary driver of external revenues exceeding DSAC was therefore changes in unit DSAC, as is shown in Table 11.6 below.[209]

Table 11.6: BT's external revenues and DSAC for 140/155Mbit/s PPC terminating segment main link services, as adjusted by Ofcom

PPC Services	2004/05	2005/06	2006/07	2007/08	2008/09
140/155Mbit/s main link					
Internal volume, links	1,726	3,123	3,062	1,991	2,257
External volume, links	10	27	52	92	114
Total volume, links	1,736	3,150	3,114	2,083	2,371
External unit revenue, £	11,304.81	10,737.10	13,929.08	10,917.72	10,888.72
External unit DSAC, £	24,834.82	12,190.99	7,996.02	25,296.57	20,772.26
External revenue as % of DSAC	46%	88%	174%	43%	52%

Source: Ofcom – based on data supplied by BT

11.53 BT's unit DSACs declined significantly between 2005/06 and 2006/07 from around £12k per link to around £8k per link, before then reverting back to a similar level as in 2004/05, around £25k and £21k in 2007/08 and 2008/09 respectively. There appear to be two main factors driving these movements:

11.53.1 first, our analysis of BT's detailed DSAC calculations suggests that between 2005/06 and 2006/07 unit DSAC fell by a third primarily (albeit not

[207] As we have noted above, BT's 27 May 2011 letter only made representations in respect of 34/45Mbit/s PPC trunk and 140/155Mbit/s PPC terminating segment distribution services. It did not provide any comments in relation to 140/155Mbit/s PPC terminating segment Main Link services.

[208] Due to the amendment of BT's approach to measuring volumes that formed the basis of its 2008 RFS restatement, the restated and revised data provided by BT (that forms what we refer to as the "BT unadjusted base data") differs from that published originally in BT's RFS for the years prior to the restatement. This difference affects 140/155Mbit/s PPC Main Link such that, on the basis of the published RFS data BT's revenues exceeded DSAC in 2005/06 as well as 2006/07.

[209] Note that there is a difference between the price for 140/155Mbit/s PPC terminating segment distribution services that appears on the price list and the average revenues per unit reported in Table 10.6. Principally this is because of: (1) the average revenue figure includes our adjustments to BT's revenues (e.g. to improve the matching of resilience revenues and costs); and (2) the inclusion by BT of revenues for enhanced maintenance in the average revenue figure.

only) as a consequence of reductions in SDH distribution asset depreciation.[210]

11.53.2 second, between 2006/07 and 2007/08 unit DSACs more than trebled principally as a result of the inclusion of cost components specifically associated with 21CN that had previously not been included in the main link service cost stack.[211]

11.54 As we have explained in the context of 34/45Mbit/s trunk and 140/155Mbit/s PPC terminating segment distribution services, these variations in unit DSACs are relevant to our assessment of whether BT's charge for 140/155Mbit/s PPC terminating segment main link services in 2006/07 (which exceeded DSAC) constituted overcharging.

11.55 It would seem reasonable to conclude that BT's charge for 140/155Mbit/s PPC terminating segment main link services in 2006/07 was cost orientated if for example BT was able to demonstrate to our satisfaction that:

11.55.1 there were specific reasons why the reduction in unit DSAC in 2006/07 was not reasonably foreseeable; and

11.55.2 given that BT did not change its prices in response to the charge being above DSAC for one year, there were specific reasons why it considered it reasonable to expect that unit DSACs in the years following 2006/07 would increase.

11.56 As we noted in relation to our assessments for the two services above, should BT wish us to take the specific circumstances surrounding a charge into account when assessing overcharging, it needs to provide us with an evidence based explanation of those specific circumstances. In the case of 140/155Mbit/s PPC terminating segment main link services, the onus is therefore on BT to provide us with the evidence identified in paragraph 11.55 above. But as we have explained above, BT has not provided any additional representations on its 140/155Mbit/s PPC terminating segment main link services beyond those considered in the Final Determinations and the PPC appeal.[212]

11.57 On this basis, BT has not yet provided us with sufficient evidence upon which to satisfy ourselves that its charges in 2006/07 did not constitute overcharging. As a consequence, and in the absence of sufficient evidence from BT to the contrary, we propose to conclude that BT was in breach of Condition GG3.1 for the 140/155Mbit/s PPC terminating segment main link service for this year and that this breach gave

[210] The lower level of SDH (synchronous digital hierarchy), distribution asset depreciation observed in 2006/07 appears to continue in 2007/08 and 2008/09. We do not have the detailed outputs from BT's DSAC modelling in 2004/05 and therefore are unable to establish whether the higher level of depreciation costs observed in 2005/06 constituted a spike in costs for that year or whether the reduction in 2006/07 and onwards marked a step reduction from a previously higher trend.
[211] Specifically costs associated with "MSAN connect dense" and "MSAN connect non-dense" in 2007/08 plus "Core/Metro connectivity" and "Edge Ethernet ports" in addition in 2008/09. We explain the adjustments we have made in relation to 21CN costs in paragraphs 10.119 to 10.120 and 10.143 to 10.144. The figures in Table 10.9 include these adjustments.
[212] See paragraph 9.19, for example.

rise to overcharging. However, if BT is able to provide such evidence in response to these Draft Determinations we will take it into consideration when reaching our conclusions in the final determination of these disputes.

140/155Mbit/s PPC terminating segment local end

11.58 As Table 11.1 shows, BT's external revenues for 140/155Mbit/s terminating segment local end services exceeded DSAC for the last three of the financial years of the Relevant Period. Specifically external revenues exceeded DSAC by 86% in 2006/07, 27% in 2007/08 and 73% in 2008/09.

11.59 BT's charges for local end was unchanged between 2005/06 and 2008/09 (i.e. £15,394 per local end). Therefore the primary driver of external revenues exceeding DSAC from 2006/07 onwards was a substantial reduction in unit DSACs between 2005/06 and 2006/07, as is shown in Table 11.7 below.

Table 11.7: BT's external revenues and DSAC for 140/155Mbit/s PPC terminating segment local end services, as adjusted by Ofcom

PPC Services	2004/05	2005/06	2006/07	2007/08	2008/09
140/155Mbit/s local ends					
Internal volume, local ends	1,516	2,310	2,213	1,864	1,649
External volume, local ends	14	24	51	82	103
Total volume, local ends	1,530	2,334	2,264	1,946	1,752
External unit revenue, £	16,746.45	15,905.47	18,994.73	14,231.15	16,782.78
External unit DSAC, £	29,349.33	21,235.44	10,226.05	11,220.21	9,680.66
External revenue as % of DSAC	57%	75%	186%	127%	173%

Source: Ofcom – based on data supplied by BT

11.60 While analysis of BT's detailed DSAC outputs suggests that a number of factors contributed to this significant fall in costs, consistent with what we observed for main link, a significant reduction in depreciation for SDH distribution assets appears to be the primary driver.

11.61 BT's charges were persistently and significantly above DSAC for the majority of the period. As we explain in paragraph 8.34 above, we would normally expect charges above the DSAC for this length of time to indicate that BT had failed to take action to alter its charges appropriately. On this basis we would normally expect to conclude that such charges constitute overcharging. This would be consistent with our analysis above of local end revenues compared to FAC and the rates of return on capital employed earned by BT on local end services.

11.62 In its letter of 27 May 2011, BT makes representations with respect to why it believes that its local end charges did not constitute overcharging. However, these representations related to BT's argument that our cost estimates for 140/155Mbit/s PPC local end in the Final Determinations failed to adequately reflect the higher POH costs that external customers face compared to internal sales. BT's argument in this respect is dealt with in paragraph 10.133 to 10.142 above and, to the extent that we agree with BT's point, it is reflected in our adjusted data.

11.63 Typically the adjustments that we have made to BT's accounting information result in changes to the amount by which revenues are either above or below DSAC. But they do not typically result in a change in the outcome of the DSAC test. However, in the case of 140/155Mbit/s PPC terminating segment local end services this is not the case: on BT's unadjusted base data external revenues are below DSAC in all five years of interest, whereas on the basis of Ofcom's adjusted data BT fails the DSAC test in the final three years.

11.64 As we explain in Section 10, we make adjustments to BT's accounting information to correct for volume errors and mismatching of data that would otherwise lead to a distorted and inappropriate dataset for resolving these disputes. In the case of local end services, our adjustments are relatively substantial. This reflects the nature of errors in BT's base data and how that data has been reported. Specifically, as we explain in more detail in Section 10 we make a number of adjustments to ensure that there is a correct matching of resilience circuit costs and revenues (which results in changes to BT's revenues), and that costs are not included in BT's cost stack where those costs are recovered from other charges.

11.65 Our main adjustments for local end seek to ensure an appropriate matching of costs and revenues and are based on information that would have been available to BT during the period of the disputes. Put simply, BT could reasonably have been expected to make these adjustments at the time of generating its accounting statements. It is therefore appropriate to base our assessment of overcharging on the adjusted data as opposed to BT's unadjusted data.

11.66 On the basis of the duration of the period for which BT's charges have exceeded DSAC (the final three financial years relevant to the disputes) and the significance of the amounts we propose to conclude that BT was in breach of Condition GG3.1 for its 140/155Mbit/s PPC terminating segment local end service between 1 April 2006 to 30 September 2008 and that this breach resulted in overcharging.

140/155Mbit/s PPC terminating segment connection

11.67 As Table 11.1 demonstrates, for the two years that BT provided sufficient data to undertake the DSAC test (i.e. 2007/08 and 2008/09), BT's charges fail it. Specifically, in 2007/08 its external charges are 38% above DSAC, while in 2008/09 they are 8% above DSAC. In addition, in both years BT's charges are also above FAC.[213]

11.68 The extent to which revenues exceeded DSAC reduced between the two years. This reduction was largely driven by a reduction in average unit revenues, as shown in Table 11.8 below. As we discuss further below, BT's charges for connection services did not change between 2007/08 and 2008/09. Therefore the change in average unit revenues reflects our adjustments to BT's revenues to ensure that they also reflect the revenues from resilience circuits.

[213] BT did not provide data on MCE for 140/155Mbit/s PPC terminating segment connections for any of the five years, therefore we are unable to estimate the rate of return earned on MCE for any of the years.

Table 11.8: BT's external revenues and DSAC for 140/155Mbit/s PPC terminating segment connection services, as adjusted by Ofcom

PPC Services	2004/05	2005/06	2006/07	2007/08	2008/09
140/155Mbit/s connection					
Internal volume, connections	63	119	47	8	3
External volume, connections	11	13	29	28	32
Total volume, connections	74	132	76	36	35
External unit revenue, £	1,934.94	1,837.70	2,843.10	2,902.57	2,381.09
External unit DSAC, £	n/a	n/a	n/a	2,104.51	2,202.45
External revenue as % of DSAC	n/a	n/a	n/a	138%	108%

Source: Ofcom – based on data supplied by BT

11.69 BT therefore failed the DSAC test for two consecutive years. BT did not make any representations in its 27 May 2011 letter to explain why a finding of overcharging would be inappropriate given the specific facts of the case.

11.70 As we observe with terminating segment local end services, Ofcom's adjustments to BT's unadjusted base data affect the outcome of the DSAC test for connections. Specifically, on the basis of BT's unadjusted data, external revenues in both 2007/08 and 2008/09 are below DSAC. However, Ofcom's adjustments in respect to connections relate to ensuring BT's accounting treatment of resilience circuits appropriately matches costs and revenues. Therefore, as BT's estimates of cost include those costs incurred by resilience circuits, we adjust its revenues to ensure that they also reflect the revenues from resilience circuits. It is the difference in these resilience circuit adjustments between 2007/08 and 2008/09, and not any underlying change in BT's costs, that primarily explain the difference in extent to which BT fails the DSAC test between the two years.

11.71 As we explained in the context of BT's local end charges, these resilience circuit adjustments are based on information that would have been available to BT at the time of setting its charges and generating its accounting statements. Therefore, in our view, and consistent with our view with respect to BT's local end charges, it is appropriate to base our assessment of overcharging on the adjusted data as opposed to BT's unadjusted data.

11.72 As we have noted above, we have considerably less financial information on BT's connection charges than for its other terminating segment service charges. Although we have revenue data for all five financial years relevant to the disputes, we only have cost (i.e. FAC and DSAC) data for the last two financial years (i.e. 2007/08 and 2008/09). 140Mbit/s connection services were not separately reported in the RFS in 2004/05, 2005/06 and 2006/07 and BT was unable to provide cost data for these services in these years in its responses to our section 191 requests.[214]

11.73 Due to this lack of information we are not able to undertake the DSAC test for the first three years relevant to the disputes on the basis of actual DSAC data provided by BT. However, given that BT's charges (as listed in BT's Carrier Price List) for these

[214] Emails from David Coulson (BT) to Andrew Boardman (Ofcom) dated 14 November 2008 (in respect of 2004/05 and 2005/06) and 29 June 2009 (in respect of 2006/07).

connection services did not change over the period, and that we have found overcharging in relation the latter two years, we need to consider whether overcharging could have also occurred in these first three years.

11.74 It is not appropriate for BT to benefit from its failure to provide us with sufficient data to consider whether it has complied with its regulatory obligations over the entire period of the disputes. As we have noted above, BT did not change its prices for connections over the period. Therefore, in the absence of reliable evidence from BT that costs were materially higher in the first three years of the Dispute, it seems reasonable to conclude that BT has overcharged the Disputing CPs for the entire Relevant Period. Furthermore, (and again in the absence of evidence suggesting otherwise) it seems reasonable to conclude that the rate of overcharging (i.e. proportion of revenues in excess of DSAC) would be broadly consistent with the average for the last two years of the period.

11.75 On this basis, for the first three years of the period we propose to assess the level of BT's overcharge for externally sold connection services by multiplying its external revenues for the services in each year by the average rate of overcharge observed in the final two years of the period. The overcharge for 2004/05 will then be prorated to reflect the fact that only nine months of the financial year were within the Relevant Period. On the basis of our explanation above, and in the absence of evidence from BT to satisfactorily demonstrate to the contrary, we therefore propose to conclude that BT's charges were not cost orientated for 140/155Mbit/s PPC terminating segment connection services for the period 24 June 2004 to 30 September 2008 and that this breach resulted in overcharging.

Summary of proposed overcharging conclusions

11.76 With regard to 34/45Mbit/s trunk and 140/155Mbit/s PPC terminating segment distribution services, BT provided additional representations on 27 May 2011 as to why, in the circumstances, its charges were cost orientated despite failing the DSAC test for the final two financial years relevant to the Disputes. However, in our view BT has not provided us with sufficient evidence to support its arguments. For the period 1 April 2007 to 30 September 2008, we propose to conclude that BT has overcharged in respect of these two services and that BT must repay the overcharged amount.

11.77 With regard to 140/155Mbit/s PPC terminating segment main link, local end and connection services, BT has not provided us with any representations justifying the appropriateness of its charges other than those representations that were considered to be either insufficiently relevant or as reliable in both the Final Determinations and the CAT's PPC Judgment.

11.78 We propose to find that BT has overcharged its customers, in respect of its:

11.78.1 140/155Mbit/s PPC terminating segment main link service for the period 1 April 2006 to 31 March 2007;

11.78.2 140/155Mbit/s PPC terminating segment local end service for the period 1 April 2006 to 30 September 2008; and

11.78.3 140/155Mbit/s PPC terminating segment connection service for the period 24 June 2004 to 30 September 2008.

11.79 We consider the level of this overcharging below.

Establishing the level of overcharge

11.80 As we explain in Section 7, we propose to apply the same methodology for calculating that we applied in the Final Determinations. That is, for each individual service, the overcharge equals the amount by which BT's external revenues exceed DSAC in each year that we conclude there is overcharging. For any overcharging in 2004/05 or 2008/09 we have prorated the overcharge to reflect the proportion of the financial year that is within the Relevant Period.

11.81 However, as noted in paragraph 11.75 above, in the case of the 140/155Mbit/s terminating segment connection service, we have had to adopt a different methodology for the period 24 June 2004 to 31 March 2007. Here we propose to quantify the overcharge by multiplying BT's external revenues for the services in each year by the average overcharge observed in the final two years of the period.

11.82 We summarise the levels of overcharging in Table 11.9 below. We calculate the level of overcharging with respect to all of BT's external customers.

11.83 On this basis, our provisional view of overcharging in each year is set out in Table 11.9 below. The amounts relate to all of BT's external customers, not just the Disputing CPs.

Table 11.9: The degree of overcharging to BT's external customers, £, as adjusted by Ofcom

PPC service	2004/05	2005/06	2006/07	2007/08	2008/09	Total
140/155Mbit/s TISBO						
Connection	3,700	5,500	19,000	22,300	2,900	**53,400**
Main link	-	-	308,500	-	-	**308,500**
Distribution	-	-	-	178,200	156,400	**334,600**
Local end	-	-	447,200	246,900	365,800	**1,059,900**
Trunk	-	-	-	-	-	
34/45Mbit/s	-	-	-	853,600	1,112,600	**1,966,200**
Total	3,700	5,500	774,700	1,301,000	1,637,700	**3,722,600**

Note: amounts rounded to nearest £100. Totals have been calculated by adding up the rounded figures. 2004/05 and 2008/09 proposed overcharges pro-rated to the Relevant Period.
Source: Ofcom – based on data supplied by BT

Section 12

Repayments

Structure of assessment

12.1 In this section we go on to consider whether we should exercise our discretion to require BT to make a repayment to the Disputing CPs, by way of an adjustment of an overpayment, and if so, what the level of any such repayment should be.

12.2 Where Ofcom has made a determination of the proper amount of a charge in respect of which amounts have been paid by one of the Parties to the other, section 190(2)(d) of the Act gives us the power to give a direction, enforceable by the party to whom the sums are to be paid, requiring the payment of sums by way of an adjustment of an underpayment or an overpayment.

12.3 In deciding whether it is appropriate to make such a direction, we have been guided by our duties and Community obligations under sections 3, 4 and 4A of the Act (as amended). We have also taken account of guidance provided by the CAT.

12.4 We have split our analysis of the question of repayments into two parts:

12.4.1 first, we consider whether we should require payment by BT to the Disputing CPs; and

12.4.2 second, we go on to consider what the level of any repayment should be.

Ofcom's approach to overpayment

12.5 In applying section 190(2)(d) of the Act, we consider that BT should not unfairly retain any overcharge, as this could provide a disincentive for it to comply with its regulatory obligations. We believe that the incentives and regulatory signals that determinations in disputes of this nature send to BT (and other CPs) as to how we will interpret regulatory obligations and assess future conduct are of real importance.

12.6 We consider that our position is supported by the PPC Judgment, in which the CAT noted that

> "*such discretion as OFCOM has under section 190(2)(d) is a 'hard' discretion confined to requiring Ofcom to follow through on the conclusions it has drawn pursuant to the Dispute Resolution Process*."

12.7 The CAT further held that:

> "*Had BT carefully sought to apply Condition H3.1 [GG3.1], but failed, then we consider that that should have been taken into account, and the amount BT would have to pay reduced. But that is not so in this case. This is a case where BT has comprehensively misconstrued*

the obligation on it, and overcharged as a result. Any shift away from the restitutionary approach that we have described would, so we conclude, be unjustifiable.[215]

…Ofcom was acting consistently with a number of cases stating that where a person is given powers to levy charges, if that person charges excessively, then the excess is recoverable at the instance of the person who has overpaid."[216]

12.8 As set out in Section 9 we do not consider that BT has demonstrated to us that it carefully sought to apply Conditions GG3.1 and H3.1 in its charging for the services in dispute; and therefore the amounts we require BT to repay should not be reduced to reflect any efforts to comply with its obligation. We therefore propose to apply the same approach to the level of repayments in these Disputes as we applied in the Final Determinations, which is to base the level of repayments on the difference between the level of the charge and DSAC.

12.9 Given Ofcom's conclusion in the Final Determinations that there had been overcharging by BT in that certain of its prices were not cost orientated, the CAT found that it was plain that the Altnets had overpaid in respect of those services and that BT had had the benefit of such overpayments. The CAT held that repayment was simply

> *"putting the parties in the position they would have been in had Condition H3.1 been complied with. Failure to do so would undoubtedly signal that compliance with SMP conditions is not rigorously policed and that – we consider – is an inappropriate signal to send."*[217]

12.10 The CAT described its approach as restitutionary.[218]

12.11 The CAT went on to reject BT's characterisation of Ofcom's direction as the imposition of a penalty:

> "*OFCOM's direction… was not intended (and did not) penalise BT, but sought to rectify some (but probably not all) of the adverse effects of BT's failure to comply with Condition H3.1*."

12.12 The CAT considered that in so acting, Ofcom:

> *"was acting consistently with a number of cases stating that where a person is given the power to levy charges, if that person charges excessively, then the excess is recoverable at the instance of the person who has overpaid*".[219]

12.13 In the Final Determinations we also assessed what the impact of repaying the overcharged revenue to its external customers would be on BT's rate of return for

[215] PPC Judgment, paragraph 338(2).
[216] PPC Judgment, paragraph 338(3).
[217] PPC Judgment, paragraph 338(2).
[218] PPC Judgment, paragraph 338(2).
[219] PPC Judgment, paragraph 338(3).

PPCs over the period of overcharging to 30 September 2008.[220] In the PPC Judgment, the CAT commented that it had some misgivings about this approach.[221] We have therefore not carried out a similar assessment of the impact of any repayments on BT's rate of return in these Disputes.

12.14 We therefore propose that, given the evidence of overcharging that we have identified and in light of the guidance provided by the CAT, we should direct that BT pay to the Disputing CPs sums by way of adjustment of those overpayments.

Calculating the level of individual repayment

12.15 Having identified that BT has overcharged the Disputing CPs and that it is appropriate to require BT to refund these overpayments, we now identify the amount that BT should repay each Disputing CP.

12.16 We propose to use the same approach to quantifying the level of repayment for each Disputing CP that we adopted in the Final Determinations.[222] To calculate repayments to each Disputing CP for each year, we propose to use BT billing data for each service in dispute to calculate the relative share of total external spend that is attributable to each of the Disputing CPs.

12.17 On the basis of this proposed methodology, we set out in Table 12.1 below the total refunds for each of the Disputing CPs in each year (rounded to the nearest £100). In Table 12.1 we show the total repayments split by Disputing CP, service and year.

Table 12.1: Summary of repayments due to the Disputing CPs in £, split by year

Refund (£m)	THUS	C&W	Global	Virgin	Verizon	COLT	**Total**
2004/05	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2005/06	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2006/07	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2007/08	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2008/09	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	**3,064,700**

Note: values rounded to the nearest £100. Totals have been calculated by adding up the rounded figures. Source: Ofcom – based on data supplied by BT

[220] PPC Final Determinations, paragraph 9.30.
[221] PPC Judgment, paragraph 338(5).
[222] PPC Final Determinations, paragraphs 8.70 *et seq*.

Table 12.2: Repayments due to the Disputing CPs in £, split by service

Refund (£m)	THUS	C&W	Global	Virgin	Verizon	COLT	**Total**
2004/05							
Connection	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2005/06							
Connection	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2006/07							
Connection	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Main link	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Local End	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2007/08							
Connection	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Distribution	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Local End	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Trunk	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2008/09							
Connection	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Distribution	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Local End	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Trunk	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	**3,064,700**

Note: values rounded to the nearest £100. Totals have been calculated by adding up the rounded figures.
Source: Ofcom – based on data supplied by BT

Interest on repayments

12.18 As discussed in the Final Determinations, the Disputing CPs asked us to require BT to pay interest on any overpayments.[223]

12.19 In considering whether to require BT to pay interest on any overpayments we have had regard to the terms and conditions on which the Disputing CPs purchase PPCs from BT – the *BT Standard PPC Handover Agreement* ("the Agreement").[224] Paragraph 9.7 of the Agreement states that:

> *"If any charge (or the means of calculating that charge) for a BT service or facility has retrospective effect (for whatever reason) then BT shall, as soon as reasonably practicable following publication in the Carrier Price List, adjust and recalculate the charges in respect of such service or facility using the new charge and calculate the interest for any sum overpaid or underpaid at the Oftel Interest Rate*."

[223] See paragraph 8.83 onwards of the Final Determinations.
[224]The BT Standard PPC Handover Agreement is available on request from BT. https://www.btwholesale.com/pages/static/Products/Data_and_IP_Connectivity/Partial_Private_Circuits/pricingandcontract.htm

12.20 The “Oftel Interest Rate” is defined in Annex D to the Agreement as:

> *“...three eighths of one per cent (3/8%) above the London Inter Bank Offered Rate being the rate per annum of the offered quotation for sterling deposits for delivery on the due date for payment for a period of three months as displayed on page 3750 on the Telerate Service (or any other page that may replace page 3750 on that service) at or about 11 am London time on the due date of payment provided that if such a rate is not so displayed London Inter Bank Offered Rate shall mean the rate quoted by National Westminster Bank PLC to leading banks in the London interbank market at or about 11 am London time on the due date of payment for the offering of sterling deposits of a comparable amount for a period of three months. Such interest shall be calculated on a daily basis*.”

12.21 The Agreement clearly envisages a situation such as that arising in these Disputes occurring (i.e. charges for PPC services having a retrospective effect) and sets out that where this occurs, BT should recalculate the charges using the new charges and calculate interest using the Oftel Interest Rate.

12.22 We therefore consider on the facts of these Disputes that it is appropriate and proportionate for Ofcom to exercise its powers under section 190(2)(d) of the Act to require BT to repay the amounts identified in Table12.2 and accordingly propose to require BT to repay these overpayments with interest at the Oftel Interest Rate.

Ofcom’s statutory obligations and regulatory principles

12.23 We have considered our general duties in section 3 of the Act and the six “Community requirements” set out in section 4 of the Act, which give effect, among other things, to the requirements of Article 8 of the Framework Directive.

12.24 We consider that our Draft Determinations are consistent with these duties and we would highlight in particular the following statutory obligations and regulatory principles as relevant to our proposed decision to require BT to make repayments by way of adjustment of overpayments in these Disputes.

12.25 Accepting the Disputes for resolution fits with Ofcom’s regulatory principle to intervene where there is a specific regulatory duty to do so.

12.26 Ofcom considers that to require BT to make repayments to the Disputing CPs by way of adjustment of overpayments supports its obligation to further the interests of consumers, where appropriate by promoting competition, as it encourages BT to comply with its SMP obligations (the purpose of which is to promote competition). It promotes competition more generally by enabling other providers to compete with BT in the provision of retail leased lines to businesses. Promoting competition in this case leads to benefits for businesses in the form of increased choice, downward pressure on retail prices and improved quality of service.

12.27 Requiring BT to make repayments for the Relevant Period as set out in Table 9.1, supports Ofcom’s principal duty at section 3(1)(b) of the Act, as well as its duty under section 4 of the Act to promote competition in communications markets in accordance with the Framework Directive.

12.28 In addition, Ofcom considers that requiring BT to make repayments to the Disputing CPs by way of adjustment of overpayments supports its obligation at section 3(2)(b) of the Act to secure the availability of a wide range of communications services, as well as its duty under section 4 of the Act to encourage the provision of network access (here, PPC services) for the purposes of securing efficiency and sustainable competition, for the benefit of consumers.

12.29 Finally, Ofcom considers that its proposal to require BT to make repayments to the Disputing CPs by way of adjustment of the overpayments is in line with Ofcom's duty and regulatory principles to ensure that its regulatory activities are transparent, accountable, evidence-based, proportionate, consistent and targeted.

12.30 Ofcom considers that this document clearly sets out BT's and the Disputing CPs' arguments and Ofcom's reasoning that leads to this proposed conclusion, thereby supporting Ofcom's duty and regulatory principle to ensure that its decision making process is evidence-based, proportionate and consistent. BT and the Disputing CPs will have an opportunity to comment on Ofcom's proposals, supporting Ofcom's duty to ensure that its regulatory activities are transparent, accountable evidence-based and consistent. Ofcom considers that its determinations are proportionate, in that they strike a fair balance between the Parties to the Disputes, and targeted in that they are limited to the matters in dispute and binding on the Parties.

Summary of our proposed resolution of the disputes

12.31 Based on the analysis set out in Section 10 and Section 11, Ofcom proposes to determine that:

12.31.1 BT has overcharged for the services which are the subject of these Disputes;

12.31.2 BT has overcharged the Disputing CPs a total of £3,064,700 during the Relevant Period; and

12.31.3 BT should refund the Disputing CPs the amounts overpaid:

a) C&W: £[✂]

b) THUS: £[✂]

c) Global Crossing: £[✂]

d) Virgin: £[✂]

e) Verizon: £[✂]

f) COLT: £[✂]

Next steps

12.32 Stakeholders are invited to comment on Ofcom's proposed resolution of these disputes by **5 pm on 5 April 2012.**

Annex 1

Responding to these draft determinations

How to respond

A1.1 Ofcom invites written views and comments on the issues raised in this document, to be made **by 5pm on 5 April 2012**.

A1.2 Ofcom strongly prefers to receive responses using the online web form at http://stakeholders.ofcom.org.uk/consultations/ethernet_services/ 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 2), to indicate whether or not there are confidentiality issues. This response coversheet is incorporated into the online web form questionnaire.

A1.3 For larger responses - particularly those with supporting charts, tables or other data - please email lucas.ford@ofcom.org.uk attaching your response in Microsoft Word format, together with a response coversheet.

A1.4 Responses may alternatively be posted or faxed to the address below, marked with the title of the draft determination.

Lucas Ford
4th Floor
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 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 draft determination, or need advice on the appropriate form of response, please contact Lucas Ford on 020 7981 3682.

Confidentiality

A1.8 We believe it is important for everyone interested in an issue to see the views expressed by 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 period for comment, Ofcom intends to publish final Determinations.

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

Annex 2

Response cover sheet

A2.1 In the interests of transparency and good regulatory practice, we will publish all responses in full on our website, www.ofcom.org.uk.

A2.2 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.

A2.3 Publishing responses before the period for comment closes 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 period for comment has ended.

A2.4 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/.

A2.5 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

BASIC DETAILS

Title of the draft determination:

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	☐	Name/contact details/job title	☐
Whole response	☐	Organisation	☐
Part of the response	☐	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 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 period for comment has ended, please tick here. ☐

Name   Signed (if hard copy)

Annex 3

Draft Determination to resolve the dispute between BT and Cable & Wireless

Determination under sections 188 and 190 of the Communications Act 2003 ("2003 Act") for resolving a dispute between Cable & Wireless Worldwide plc ("CWW") and British Telecommunications Plc ("BT") concerning BT's charges for partial private circuits ("PPCs").

WHEREAS—

(A) Section 188(2) of the 2003 Act provides that, where Ofcom has decided pursuant to section 186(2) of the 2003 Act that it is appropriate for it to handle a dispute, Ofcom must consider the dispute and make a determination for resolving it. The determination that Ofcom makes for resolving the dispute must be notified to the parties in accordance with section 188(7) of the 2003 Act, together with a full statement of the reasons on which the determination is based. Ofcom must publish so much of its determination as (having regard, in particular, to the need to preserve commercial confidentiality) it considers appropriate to publish for bringing it to the attention of the members of the public, including to the extent that Ofcom considers pursuant to section 393(2)(a) of the 2003 Act that any such disclosure is made for the purpose of facilitating the carrying out by Ofcom of any of its functions;

(B) Section 190 of the 2003 Act sets out the scope of Ofcom's powers on resolving a dispute which may include, in accordance with section 190(2) of the 2003 Act;

a) making a declaration setting out the rights and obligations of the parties to the dispute;

b) giving a direction fixing the terms or conditions of transactions between the parties to the dispute;

c) giving a direction imposing an obligation, enforceable by the parties to the dispute, to enter into a transaction between themselves on the terms and conditions fixed by Ofcom; and

d) for the purpose of giving effect to a determination by Ofcom of the proper amount of a charge in respect of which amounts have been paid by one of the parties to the dispute to the other, giving a direction, enforceable by the party to whom sums are to be paid, requiring the payment of sums by way of adjustment of an underpayment or overpayment;

(C) On 24 June 2004, Ofcom published a statement called *Review of the retail leased lines, symmetric broadband origination and wholesale trunk segments markets*[225] (the "2004 LLMR Statement") which found that British Telecommunications plc ("BT") held significant market power ("SMP") in a number of markets, including those for:

[225] http://www.ofcom.org.uk/consult/condocs/llmr/statement/state_note.pdf

a) the provision of traditional interface symmetric broadband origination ("TISBO") with a bandwidth capacity up to and including eight megabits per second within the United Kingdom but not including the Hull Area;

b) the provision of TISBO with a bandwidth capacity above eight megabits per second and up to and including one hundred and fifty five megabits per second within the United Kingdom but not including the Hull Area; and

c) the provision of wholesale trunk segments at all bandwidths within the United Kingdom;

(D) In the 2004 LLMR Statement, Ofcom imposed a series of SMP conditions on BT in these markets under section 45 of the Act, including a basis of charges obligation which requires:

> "*[x]3.1 Unless Ofcom directs otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.*
>
> *[x]3.2 For the avoidance of any doubt, where the charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is for a service which is subject to a charge control under [the charge control condition], the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that such a charge satisfies the requirement of Condition [x]3.1.*
>
> *[x]3.3 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition*";

(E) On 25 June 2008, Cable & Wireless (UK) ("C&W"), THUS Group plc ("THUS"),[226] Global Crossing, Verizon and Virgin Media jointly referred disputes with BT to Ofcom for dispute resolution requesting a determination that:

a) BT has overcharged them for PPCs provided to them from 24 June 2004 to 30 September 2008 (which depends on whether or not BT's charges for the underlying trunk and terminating elements of those PPCs were cost orientated during that time); and

b) if so, by how much they have been overcharged; and

c) should therefore be reimbursed;

(F) Having considered the submissions of all the parties to the disputes referred by C&W , THUS, Global Crossing, Verizon and Virgin Media, Ofcom set the scope of the issues in dispute to be resolved as follows-

---

[226] In 2008 C&W completed the purchase of THUS Group plc.

"*The finalised scope is therefore to determine whether, in the period from 24 June 2004 to 30 September 2008:*

i. BT has or will have overcharged the Parties for PPCs (based on whether or not BT's charges for the underlying trunk and terminating elements of those PPCs were, during that time, reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed) and, if so;

ii. by how much the Parties will have been overcharged; and

iii. whether and by how much BT should reimburse the Parties.";

(G) On 8 December 2008, Ofcom published the conclusions of its second review of the markets for retail leased lines, wholesale symmetric broadband origination and wholesale trunk segments in the 2008 Business Connectivity Market Review Statement (the "2008 BCMR Statement").[227] Ofcom found in the 2008 BCMR Statement that BT had significant market power in a number of markets, including those for:

a) the provision of TISBO with a bandwidth capacity up to and including eight megabits per second within the United Kingston but not including the Hull Area;

b) the provision of TISBO with a bandwidth capacity above eight megabits per second and up to and including forty five megabits per second within the United Kingston but not including the Hull Area and the Central and East London Area;

c) the provision of TISBO with a bandwidth capacity above forty five megabits per second and up to and including one hundred and fifty five megabits per second within the United Kingston but not including the Hull Area and the Central and East London Area; and

d) the provision of wholesale trunk segments at all bandwidths within the United Kingdom;

(H) The 2008 BCMR Statement imposed SMP conditions on BT in these markets, including a basis of charges condition, which imposes a cost orientation obligation on BT:

"[x]3.1 Unless Ofcom directs otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.

[x]3.2 For the avoidance of any doubt, where the charge offered, payable or proposed for Network Access covered by [the requirement to provide

[227] http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr08/summary/bcmr08.pdf

network access on reasonable request] is for a service which is subject to a charge control under [the charge control condition], the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that such a charge satisfies the requirement of Condition [x]3.1.

[x]3.3 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition.";

(I) On 14 October 2009 Ofcom published determinations to resolve the disputes referred to it on 25 June 2008 in relation to most of the PPC services, determining that BT had overcharged the other parties to the dispute approximately £42 million for 2Mbit/s PPC trunk services over the Relevant Period and that BT should refund this overcharge with interest. Ofcom stated that it was not at that time able to resolve the disputes in relation to BT's charges for 140/155MBit/s PPC terminating segment services and for 34/45Mbit/s PPC trunk services. Ofcom stated that it would issue separate determinations for these PPC services having first obtained and assessed further data from BT;

(J) In order to resolve this dispute, Ofcom has considered (among other things) the information provided by the parties and Ofcom has further acted in accordance with its general duties set out in section 3 and the Community requirements set out in sections 4 and 4A of the 2003 Act;

(K) A fuller explanation of the background to the dispute and Ofcom's reasons for making this Determination is set out in the explanatory statement accompanying this Determination; and

NOW, THEREFORE, OFCOM MAKES, FOR THE REASONS SET OUT IN THE ACCOMPANYING EXPLANATORY STATEMENT, THE FOLLOWING DETERMINATION FOR RESOLVING THE DISPUTE:

I Declaration of rights and obligations

1. Between 24 June 2004 to 30 September 2008 BT has overcharged CWW (C&W and THUS) for the provision of:

    a) 34/45Mbit/s PPC trunk services;

    b) 140/155Mbit/s PPC terminating segment connection services;

    c) 140/155Mbit/s PPC terminating segment main link services;

    d) 140/155Mbit/s PPC terminating segment distribution services; and

    e) 140/155Mbit/s PPC terminating segment local end services.

2. The level of that overcharge is determined at £[✂] (£[✂] of overcharge to C&W and £[✂] of overcharge to THUS).

3. Ofcom gives a direction to BT to pay to CWW, by way of adjustment of an overpayment for:

    a) 34/45Mbit/s PPC trunk services;

    b) 140/155Mbit/s PPC terminating segment connection services;

c) 140/155Mbit/s PPC terminating segment main link services;

d) 140/155Mbit/s PPC terminating segment distribution services; and

e) 140/155Mbit/s PPC terminating segment local end services;

in the period 24 June 2004 to 30 September 2008, the sum of £[✂] plus interest calculated at the rate specified in the Agreements.

II Binding nature and effective date

4. This Determination is binding on BT and CWW in accordance with section 190(8) of the 2003 Act.

5. This Determination shall take effect on the day it is published.

III Interpretation

6. For the purpose of interpreting this Determination—

   a) except as otherwise defined in this Determination, words or expressions used in this Determination (and in the recitals hereto) shall have the same meaning as they have in the 2003 Act;

   b) headings and titles shall be disregarded; and

   c) the Interpretation Act 1978 shall apply as if this Determination were an Act of Parliament.

7. In this Determination—

   a) “2003 Act” means the Communications Act 2003 (c.21);

   b) “Agreements” means the BT Standard PPC Handover Agreement that CWW and any of its subsidiaries or holding companies has entered into with BT;

   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, as defined by section 1159 of the Companies Act 2006;

   d) “C&W” means Cable & Wireless (UK) whose registered company number is 01541957, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, as defined by section 1159 of the Companies Act 2006;

   e) “CWW” means Cable & Wireless Worldwide plc whose registered company number is 7029206, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, as defined by section 1159 of the Companies Act 2006 including Cable & Wireless (UK) whose registered company number is 1541957;

   f) “Ofcom” means the Office of Communications;

g) “THUS” means THUS Group plc. In 2008 CWW completed the purchase of THUS Group plc.

Neil Buckley
Director of Investigations

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

9 February 2012

Annex 4

Draft Determination to resolve the dispute between BT and Global Crossing

Determination under sections 188 and 190 of the Communications Act 2003 ("2003 Act") for resolving a dispute between Global Crossing (UK) Telecommunications Limited ("Global Crossing") and British Telecommunications Plc ("BT") concerning BT's charges for partial private circuits.

WHEREAS—

(A) Section 188(2) of the 2003 Act provides that, where Ofcom has decided pursuant to section 186(2) of the 2003 Act that it is appropriate for it to handle a dispute, Ofcom must consider the dispute and make a determination for resolving it. The determination that Ofcom makes for resolving the dispute must be notified to the parties in accordance with section 188(7) of the 2003 Act, together with a full statement of the reasons on which the determination is based. Ofcom must publish so much of its determination as (having regard, in particular, to the need to preserve commercial confidentiality) it considers appropriate to publish for bringing it to the attention of the members of the public, including to the extent that Ofcom considers pursuant to section 393(2)(a) of the 2003 Act that any such disclosure is made for the purpose of facilitating the carrying out by Ofcom of any of its functions;

(B) Section 190 of the 2003 Act sets out the scope of Ofcom's powers on resolving a dispute which may include, in accordance with section 190(2) of the 2003 Act;

a) making a declaration setting out the rights and obligations of the parties to the dispute;

b) giving a direction fixing the terms or conditions of transactions between the parties to the dispute;

c) giving a direction imposing an obligation, enforceable by the parties to the dispute, to enter into a transaction between themselves on the terms and conditions fixed by Ofcom; and

d) for the purpose of giving effect to a determination by Ofcom of the proper amount of a charge in respect of which amounts have been paid by one of the parties to the dispute to the other, giving a direction, enforceable by the party to whom sums are to be paid, requiring the payment of sums by way of adjustment of an underpayment or overpayment;

(C) On 24 June 2004, Ofcom published a statement called *Review of the retail leased lines, symmetric broadband origination and wholesale trunk segments markets*[228] (the "2004 LLMR Statement") which found that British Telecommunications plc ("BT") held significant market power in a number of markets, including those for:

[228] http://www.ofcom.org.uk/consult/condocs/llmr/statement/state_note.pdf

a) the provision of TISBO with a bandwidth capacity up to and including eight megabits per second within the United Kingdom but not including the Hull Area;

b) the provision of TISBO with a bandwidth capacity above eight megabits per second and up to and including one hundred and fifty five megabits per second within the United Kingdom but not including the Hull Area; and

c) the provision of wholesale trunk segments at all bandwidths within the United Kingdom;

(D) In the 2004 LLMR Statement, Ofcom imposed a series of SMP conditions on BT in these markets under section 45 of the Act, including a basis of charges obligation which requires:

> "*[x]3.1 Unless Ofcom directs otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.*
>
> *[x]3.2 For the avoidance of any doubt, where the charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is for a service which is subject to a charge control under [the charge control condition], the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that such a charge satisfies the requirement of Condition [x]3.1.*
>
> *[x]3.3 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition*";

(E) On 25 June 2008, Cable & Wireless (UK), THUS plc,[229] Global Crossing, Verizon and Virgin Media jointly referred disputes with BT to Ofcom for dispute resolution requesting a determination that:

a) BT has overcharged them for PPCs provided to them from 24 June 2004 to 30 September 2008 (which depends on whether or not BT's charges for the underlying trunk and terminating elements of those PPCs were cost orientated during that time); and

b) if so, by how much they have been overcharged; and

c) should therefore be reimbursed;

(F) Having considered the submissions of all the parties to the disputes referred by Cable & Wireless (UK), THUS, Global Crossing, Verizon and Virgin Media, Ofcom set the scope of the issues in dispute to be resolved as follows-

[229] In 2008 C&W completed the purchase of THUS Group plc.

"*The finalised scope is therefore to determine whether, in the period from 24 June 2004 to 30 September 2008:*

i. BT has or will have overcharged the Parties for PPCs (based on whether or not BT's charges for the underlying trunk and terminating elements of those PPCs were, during that time, reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed) and, if so;

ii. by how much the Parties will have been overcharged; and

iii. whether and by how much BT should reimburse the Parties.";

(G) On 8 December 2008, Ofcom published the conclusions of its second review of the markets for retail leased lines, wholesale symmetric broadband origination and wholesale trunk segments in the 2008 Business Connectivity Market Review Statement (the "2008 BCMR Statement").[230] Ofcom found in the 2008 BCMR Statement that BT had significant market power in a number of markets, including those for:

a) the provision of TISBO with a bandwidth capacity up to and including eight megabits per second within the United Kingston but not including the Hull Area;

b) the provision of TISBO origination with a bandwidth capacity above eight megabits per second and up to and including forty five megabits per second within the United Kingston but not including the Hull Area and the Central and East London Area;

c) the provision of TISBO with a bandwidth capacity above forty five megabits per second and up to and including one hundred and fifty five megabits per second within the United Kingston but not including the Hull Area and the Central and East London Area; and

d) the provision of wholesale trunk segments at all bandwidths within the United Kingdom;

(H) The 2008 BCMR Statement imposed SMP conditions on BT in these markets, including a basis of charges condition, which imposes a cost orientation obligation on BT:

"[x]3.1 Unless Ofcom directs otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.

[x]3.2 For the avoidance of any doubt, where the charge offered, payable or proposed for Network Access covered by [the requirement to provide

[230] http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr08/summary/bcmr08.pdf

network access on reasonable request] is for a service which is subject to a charge control under [the charge control condition], the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that such a charge satisfies the requirement of Condition [x]3.1.

[x]3.3 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition";

(I) On 14 October 2009 Ofcom published determinations to resolve the disputes referred to it on 25 June 2008 in relation to most of the PPC services, determining that BT had overcharged the other parties to the dispute approximately £42 million for 2Mbit/s PPC trunk services over the Relevant Period and that BT should refund this overcharge with interest. Ofcom stated that it was not at that time able to resolve the disputes in relation to BT's charges for 140/155MBit/s PPC terminating segment services and for 34/45Mbit/s PPC trunk services. Ofcom stated that it would issue separate determinations for these PPC services having first obtained and assessed further data from BT;

(J) In order to resolve this dispute, Ofcom has considered (among other things) the information provided by the parties and Ofcom has further acted in accordance with its general duties set out in section 3 and the Community requirements set out in section 4 and 4A of the 2003 Act;

(K) A fuller explanation of the background to the dispute and Ofcom's reasons for making this Determination is set out in the explanatory statement accompanying this Determination; and

NOW, THEREFORE, OFCOM MAKES, FOR THE REASONS SET OUT IN THE ACCOMPANYING EXPLANATORY STATEMENT, THE FOLLOWING DETERMINATION FOR RESOLVING THE DISPUTE:

I Declaration of rights and obligations

1. Between 24 June 2004 to 30 September 2008 BT has overcharged Global Crossing for:

   a) 34/45Mbit/s PPC trunk services;

   b) 140/155Mbit/s PPC terminating segment connection services;

   c) 140/155Mbit/s PPC terminating segment main link services;

   d) 140/155Mbit/s PPC terminating segment distribution services; and

   e) 140/155Mbit/s PPC terminating segment local end services.

2. The level of that overcharge is determined at £[✂].

3. Ofcom gives a direction to BT to pay to Global Crossing, by way of adjustment of an overpayment for:

   a) 34/45Mbit/s PPC trunk services;

   b) 140/155Mbit/s PPC terminating segment connection services;

   c) 140/155Mbit/s PPC terminating segment main link services;

d) 140/155Mbit/s PPC terminating segment distribution services; and

e) 140/155Mbit/s PPC terminating segment local end services;

in the period 24 June 2004 to 30 September 2008, the sum of £[✂] plus interest calculated at the rate specified in the Agreements.

II Binding nature and effective date

4. This Determination is binding on BT and Global Crossing in accordance with section 190(8) of the 2003 Act.

5. This Determination shall take effect on the day it is published.

III Interpretation

6. For the purpose of interpreting this Determination—

   a) except as otherwise defined in this Determination, words or expressions used in this Determination (and in the recitals hereto) shall have the same meaning as they have been ascribed in, under or for the purposes of the 2004 LLMR Statement;

   b) headings and titles shall be disregarded; and

   c) the Interpretation Act 1978 shall apply as if this Determination were an Act of Parliament.

7. In this Determination—

   a) "2003 Act" means the Communications Act 2003 (c.21);

   b) "Agreement" means the BT Standard PPC Handover Agreement that Global Crossing has entered into with BT;

   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, as defined by section 1159 of the Companies Act 2006;

   d) "Global Crossing" means Global Crossing (UK) Telecommunications Limited whose registered company number is 02495998, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, as defined by section 1159 of the Companies Act 2006;

e) “Ofcom” means the Office of Communications.

Neil Buckley
Director of Investigations

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

9 February 2012

Annex 5

Draft Determination to resolve the dispute between BT and Verizon

Determination under sections 188 and 190 of the Communications Act 2003 ("2003 Act") for resolving a dispute between Verizon UK Limited ("Verizon") and British Telecommunications Plc ("BT") concerning BT's charges for partial private circuits.

WHEREAS—

(A) Section 188(2) of the 2003 Act provides that, where Ofcom has decided pursuant to section 186(2) of the 2003 Act that it is appropriate for it to handle a dispute, Ofcom must consider the dispute and make a determination for resolving it. The determination that Ofcom makes for resolving the dispute must be notified to the parties in accordance with section 188(7) of the 2003 Act, together with a full statement of the reasons on which the determination is based. Ofcom must publish so much of its determination as (having regard, in particular, to the need to preserve commercial confidentiality) it considers appropriate to publish for bringing it to the attention of the members of the public, including to the extent that Ofcom considers pursuant to section 393(2)(a) of the 2003 Act that any such disclosure is made for the purpose of facilitating the carrying out by Ofcom of any of its functions;

(B) Section 190 of the 2003 Act sets out the scope of Ofcom's powers on resolving a dispute which may include, in accordance with section 190(2) of the 2003 Act;

a) making a declaration setting out the rights and obligations of the parties to the dispute;

b) giving a direction fixing the terms or conditions of transactions between the parties to the dispute;

c) giving a direction imposing an obligation, enforceable by the parties to the dispute, to enter into a transaction between themselves on the terms and conditions fixed by Ofcom; and

d) for the purpose of giving effect to a determination by Ofcom of the proper amount of a charge in respect of which amounts have been paid by one of the parties to the dispute to the other, giving a direction, enforceable by the party to whom sums are to be paid, requiring the payment of sums by way of adjustment of an underpayment or overpayment;

(C) On 24 June 2004, Ofcom published a statement called *Review of the retail leased lines, symmetric broadband origination and wholesale trunk segments markets*[231] (the "2004 LLMR Statement") which found that British Telecommunications plc ("BT") held significant market power ("SMP") in a number of markets, including those for:

[231] http://www.ofcom.org.uk/consult/condocs/llmr/statement/state_note.pdf

a) the provision of traditional interface symmetric broadband origination (“TISBO”) with a bandwidth capacity up to and including eight megabits per second within the United Kingdom but not including the Hull Area;

b) the provision of TISBO with a bandwidth capacity above eight megabits per second and up to and including one hundred and fifty five megabits per second within the United Kingdom but not including the Hull Area; and

c) the provision of wholesale trunk segments at all bandwidths within the United Kingdom;

(D) In the 2004 LLMR Statement, Ofcom imposed a series of SMP conditions on BT in these markets under section 45 of the Act, including a basis of charges obligation which requires:

> “*[x]3.1 Unless Ofcom directs otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.*
>
> *[x]3.2 For the avoidance of any doubt, where the charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is for a service which is subject to a charge control under [the charge control condition], the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that such a charge satisfies the requirement of Condition [x]3.1.*
>
> *[x]3.3 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition*”;

(E) On 25 June 2008, Cable & Wireless (UK), THUS Group plc,[232] Global Crossing, Verizon and Virgin Media jointly referred disputes with BT to Ofcom for dispute resolution requesting a determination that:

a) BT has overcharged them for PPCs provided to them from 24 June 2004 30 September 2008 (which depends on whether or not BT’s charges for the underlying trunk and terminating elements of those PPCs were cost orientated during that time); and

b) if so, by how much they have been overcharged; and

c) should therefore be reimbursed;

(F) Having considered the submissions of all the parties to the disputes referred by Cable & Wireless (UK), THUS, Global Crossing, Verizon and Virgin Media, Ofcom set the scope of the issues in dispute to be resolved as follows-

[232] In 2008 C&W completed the purchase of THUS Group plc.

"*The finalised scope is therefore to determine whether, in the period from 24 June 2004 to 30 September 2008:*

i. BT has or will have overcharged the Parties for PPCs (based on whether or not BT's charges for the underlying trunk and terminating elements of those PPCs were, during that time, reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed) and, if so;

ii. by how much the Parties will have been overcharged; and

iii. whether and by how much BT should reimburse the Parties.";

(G) On 8 December 2008, Ofcom published the conclusions of its second review of the markets for retail leased lines, wholesale symmetric broadband origination and wholesale trunk segments in the 2008 Business Connectivity Market Review Statement (the "2008 BCMR Statement").[233] Ofcom found in the 2008 BCMR Statement that BT had significant market power in a number of markets, including those for:

a) the provision of TISBO with a bandwidth capacity up to and including eight megabits per second within the United Kingston but not including the Hull Area;

b) the provision of TISBO with a bandwidth capacity above eight megabits per second and up to and including forty five megabits per second within the United Kingston but not including the Hull Area and the Central and East London Area;

c) the provision of TISBO with a bandwidth capacity above forty five megabits per second and up to and including one hundred and fifty five megabits per second within the United Kingston but not including the Hull Area and the Central and East London Area; and

d) the provision of wholesale trunk segments at all bandwidths within the United Kingdom;

(H) The 2008 BCMR Statement imposed SMP conditions on BT in these markets, including a basis of charges condition, which imposes a cost orientation obligation on BT:

"[x]3.1 Unless Ofcom directs otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.

[x]3.2 For the avoidance of any doubt, where the charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is for a service which is subject to a charge control under [the charge control condition], the Dominant Provider

[233] http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr08/summary/bcmr08.pdf.

shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that such a charge satisfies the requirement of Condition [x]3.1.

[x]3.3 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition.”;

(I) On 14 October 2009 Ofcom published determinations to resolve the disputes referred to it on 25 June 2008 in relation to most of the PPC services, determining that BT had overcharged the other parties to the dispute approximately £42 million for 2Mbit/s PPC trunk services over the Relevant Period and that BT should refund this overcharge with interest. Ofcom stated that it was not at that time able to resolve the disputes in relation to BT’s charges for 140/155MBit/s PPC terminating segment services and for 34/45Mbit/s PPC trunk services. Ofcom stated that it would issue separate determinations for these PPC services having first obtained and assessed further data from BT;

(J) In order to resolve this dispute, Ofcom has considered (among other things) the information provided by the parties and Ofcom has further acted in accordance with its general duties set out in section 3 and the Community requirements set out in section 4 and 4A of the 2003 Act;

(K) A fuller explanation of the background to the dispute and Ofcom’s reasons for making this Determination is set out in the explanatory statement accompanying this Determination; and

NOW, THEREFORE, OFCOM MAKES, FOR THE REASONS SET OUT IN THE ACCOMPANYING EXPLANATORY STATEMENT, THE FOLLOWING DETERMINATION FOR RESOLVING THE DISPUTE:

I Declaration of rights and obligations

1. Between 24 June 2004 to 30 September 2008 BT has overcharged Verizon for the provision of:

   a) 34/45Mbit/s PPC trunk services;

   b) 140/155Mbit/s PPC terminating segment connection services;

   c) 140/155Mbit/s PPC terminating segment main link services;

   d) 140/155Mbit/s PPC terminating segment distribution services; and

   e) 140/155Mbit/s PPC terminating segment local end services.

2. The level of that overcharge is determined at £[✂] Ofcom gives a direction to BT to pay to Verizon, by way of adjustment of an overpayment for:

   a) 34/45Mbit/s PPC trunk services;

   b) 140/155Mbit/s PPC terminating segment connection services;

   c) 140/155Mbit/s PPC terminating segment main link services;

   d) 140/155Mbit/s PPC terminating segment distribution services; and

   e) 140/155Mbit/s PPC terminating segment local end services.

in the period 24 June 2004 to 30 September 2008, the sum of £[✂] plus interest calculated at the rate specified in the Agreements.

II Binding nature and effective date

3. This Determination is binding on BT and Verizon in accordance with section 190(8) of the 2003 Act.

4. This Determination shall take effect on the day it is published.

III Interpretation

5. For the purpose of interpreting this Determination—

   a) except as otherwise defined in this Determination, words or expressions used in this Determination (and in the recitals hereto) shall have the same meaning as they have in the 2003 Act;

   b) headings and titles shall be disregarded; and

   c) the Interpretation Act 1978 shall apply as if this Determination were an Act of Parliament.

6. In this Determination—

   a) "2003 Act" means the Communications Act 2003 (c.21);

   b) "Agreements" means the BT Standard PPC Handover Agreement that Verizon has entered into with BT;

   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, as defined by section 1159 of the Companies Act 2006;

   d) "Verizon" means Verizon UK Limited whose registered company number is 02776038, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, as defined by section 1159 of the Companies Act 2006;

   e) "Ofcom" means the Office of Communications;

Neil Buckley
Director of Investigations

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

9 February 2012

Annex 6

Draft Determination to resolve the dispute between BT and Virgin Media

Determination under sections 188 and 190 of the Communications Act 2003 ("2003 Act") for resolving a dispute between Virgin Media Limited ("Virgin") and British Telecommunications Plc ("BT") concerning BT's charges for partial private circuits.

WHEREAS—

(A) Section 188(2) of the 2003 Act provides that, where Ofcom has decided pursuant to section 186(2) of the 2003 Act that it is appropriate for it to handle a dispute, Ofcom must consider the dispute and make a determination for resolving it. The determination that Ofcom makes for resolving the dispute must be notified to the parties in accordance with section 188(7) of the 2003 Act, together with a full statement of the reasons on which the determination is based. Ofcom must publish so much of its determination as (having regard, in particular, to the need to preserve commercial confidentiality) it considers appropriate to publish for bringing it to the attention of the members of the public, including to the extent that Ofcom considers pursuant to section 393(2)(a) of the 2003 Act that any such disclosure is made for the purpose of facilitating the carrying out by Ofcom of any of its functions;

(B) Section 190 of the 2003 Act sets out the scope of Ofcom's powers on resolving a dispute which may include, in accordance with section 190(2) of the 2003 Act;

a) making a declaration setting out the rights and obligations of the parties to the dispute;

b) giving a direction fixing the terms or conditions of transactions between the parties to the dispute;

c) giving a direction imposing an obligation, enforceable by the parties to the dispute, to enter into a transaction between themselves on the terms and conditions fixed by Ofcom; and

d) for the purpose of giving effect to a determination by Ofcom of the proper amount of a charge in respect of which amounts have been paid by one of the parties to the dispute to the other, giving a direction, enforceable by the party to whom sums are to be paid, requiring the payment of sums by way of adjustment of an underpayment or overpayment;

(C) On 24 June 2004, Ofcom published a statement called *Review of the retail leased lines, symmetric broadband origination and wholesale trunk segments markets*[234] (the "2004 LLMR Statement") which found that British Telecommunications plc ("BT") held significant market power ("SMP") in a number of markets, including those for:

[234] http://www.ofcom.org.uk/consult/condocs/llmr/statement/state_note.pdf.

a) the provision of traditional interface symmetric broadband origination ("TISBO") with a bandwidth capacity up to and including eight megabits per second within the United Kingdom but not including the Hull Area;

b) the provision of TISBO with a bandwidth capacity above eight megabits per second and up to and including one hundred and fifty five megabits per second within the United Kingdom but not including the Hull Area; and

c) the provision of wholesale trunk segments at all bandwidths within the United Kingdom;

(D) In the 2004 LLMR Statement, Ofcom imposed a series of SMP conditions on BT in these markets under section 45 of the Act, including a basis of charges obligation which requires:

> "*[x]3.1 Unless Ofcom directs otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.*
>
> *[x]3.2 For the avoidance of any doubt, where the charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is for a service which is subject to a charge control under [the charge control condition], the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that such a charge satisfies the requirement of Condition [x]3.1.*
>
> *[x]3.3 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition.*";

(E) On 25 June 2008, Cable & Wireless (UK), THUS Group plc,[235] Global Crossing, Verizon and Virgin Media jointly referred disputes with BT to Ofcom for dispute resolution requesting a determination that:

a) BT has overcharged them for PPCs provided to them from 24 June 2004 to 30 September 2008 (which depends on whether or not BT's charges for the underlying trunk and terminating elements of those PPCs were cost orientated during that time); and

b) if so, by how much they have been overcharged; and

c) should therefore be reimbursed;

(F) Having considered the submissions of all the parties to the disputes referred by Cable & Wireless (UK), THUS, Global Crossing, Verizon and Virgin Media, Ofcom set the scope of the issues in dispute to be resolved as follows-

[235] In 2008 C&W completed the purchase of THUS Group plc.

> "*The finalised scope is therefore to determine whether, in the period from 24 June 2004 to 30 September 2008:*
>
> *i. BT has or will have overcharged the Parties for PPCs (based on whether or not BT's charges for the underlying trunk and terminating elements of those PPCs were, during that time, reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed) and, if so;*
>
> *ii. by how much the Parties will have been overcharged; and*
>
> *iii. whether and by how much BT should reimburse the Parties.";*

(G) On 8 December 2008, Ofcom published the conclusions of its second review of the markets for retail leased lines, wholesale symmetric broadband origination and wholesale trunk segments in the 2008 Business Connectivity Market Review Statement (the "2008 BCMR Statement").[236] Ofcom found in the 2008 BCMR Statement that BT had significant market power in a number of markets, including those for:

a) the provision of TISBO with a bandwidth capacity up to and including eight megabits per second within the United Kingston but not including the Hull Area;

b) the provision of TISBO with a bandwidth capacity above eight megabits per second and up to and including forty five megabits per second within the United Kingston but not including the Hull Area and the Central and East London Area;

c) the provision of TISBO with a bandwidth capacity above forty five megabits per second and up to and including one hundred and fifty five megabits per second within the United Kingston but not including the Hull Area and the Central and East London Area; and

d) the provision of wholesale trunk segments at all bandwidths within the United Kingdom;

(H) The 2008 BCMR Statement imposed SMP conditions on BT in these markets, including a basis of charges condition, which imposes a cost orientation obligation on BT:

> *"[x]3.1 Unless Ofcom directs otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.*
>
> *[x]3.2 For the avoidance of any doubt, where the charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is for a service which is subject to a*

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[236] http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr08/summary/bcmr08.pdf.

charge control under [the charge control condition], the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that such a charge satisfies the requirement of Condition [x]3.1.

[x]3.3 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition.";

(I) On 14 October 2009 Ofcom published determinations to resolve the disputes referred to it on 25 June 2008 in relation to most of the PPC services, determining that BT had overcharged the other parties to the dispute approximately £42 million for 2Mbit/s PPC trunk services over the Relevant Period and that BT should refund this overcharge with interest. Ofcom stated that it was not at that time able to resolve the disputes in relation to BT's charges for 140/155MBit/s PPC terminating segment services and for 34/45Mbit/s PPC trunk services. Ofcom stated that it would issue separate determinations for these PPC services having first obtained and assessed further data from BT;

(J) In order to resolve this dispute, Ofcom has considered (among other things) the information provided by the parties and Ofcom has further acted in accordance with its general duties set out in section 3 and the Community requirements set out in section 4 and 4A of the 2003 Act;

(K) A fuller explanation of the background to the dispute and Ofcom's reasons for making this Determination is set out in the explanatory statement accompanying this Determination; and

NOW, THEREFORE, OFCOM MAKES, FOR THE REASONS SET OUT IN THE ACCOMPANYING EXPLANATORY STATEMENT, THE FOLLOWING DETERMINATION FOR RESOLVING THE DISPUTE:

I Declaration of rights and obligations

1. Between 24 June 2004 to 30 September 2008 BT has overcharged Virgin for the provision of:

   a) 34/45Mbit/s PPC trunk services;

   b) 140/155Mbit/s PPC terminating segment connection services;

   c) 140/155Mbit/s PPC terminating segment main link services;

   d) 140/155Mbit/s PPC terminating segment distribution services; and

   e) 140/155Mbit/s PPC terminating segment local end services.

2. The level of that overcharge is determined at £[✂] Ofcom gives a direction to BT to pay to Virgin, by way of adjustment of an overpayment for:

   a) 34/45Mbit/s PPC trunk services;

   b) 140/155Mbit/s PPC terminating segment connection services;

   c) 140/155Mbit/s PPC terminating segment main link services;

   d) 140/155Mbit/s PPC terminating segment distribution services; and

e) 140/155Mbit/s PPC terminating segment local end services.

in the period 24 June 2004 to 30 September 2008, the sum of £[✂] plus interest calculated at the rate specified in the Agreements.

II Binding nature and effective date

3. This Determination is binding on BT and Virgin in accordance with section 190(8) of the 2003 Act.

4. This Determination shall take effect on the day it is published.

III Interpretation

5. For the purpose of interpreting this Determination—

   a) except as otherwise defined in this Determination, words or expressions used in this Determination (and in the recitals hereto) shall have the same meaning as they have in the 2003 Act;

   b) headings and titles shall be disregarded; and

   c) the Interpretation Act 1978 shall apply as if this Determination were an Act of Parliament.

7. In this Determination—

   a) "2003 Act" means the Communications Act 2003 (c.21);

   b) "Agreements" means the BT Standard PPC Handover Agreement that Virgin has entered into with BT;

   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, as defined by section 1159 of the Companies Act 2006;

   d) "Virgin" means Virgin Media Limited whose registered company number is 2591237, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, as defined by section 1159 of the Companies Act 2006;

   e) "Ofcom" means the Office of Communications;

Neil Buckley
Director of Investigations

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

9 February 2012Annex 7

Draft Determination to resolve the dispute between BT and COLT Telecommunications

Determination under sections 188 and 190 of the Communications Act 2003 ("2003 Act") for resolving a dispute between Colt Technology Services Group Ltd ("COLT") and British Telecommunications Plc ("BT") concerning BT's charges for partial private circuits.

WHEREAS—

(A) Section 188(2) of the 2003 Act provides that, where Ofcom has decided pursuant to section 186(2) of the 2003 Act that it is appropriate for it to handle a dispute, Ofcom must consider the dispute and make a determination for resolving it. The determination that Ofcom makes for resolving the dispute must be notified to the parties in accordance with section 188(7) of the 2003 Act, together with a full statement of the reasons on which the determination is based. Ofcom must publish so much of its determination as (having regard, in particular, to the need to preserve commercial confidentiality) it considers appropriate to publish for bringing it to the attention of the members of the public, including to the extent that Ofcom considers pursuant to section 393(2)(a) of the 2003 Act that any such disclosure is made for the purpose of facilitating the carrying out by Ofcom of any of its functions;

(B) Section 190 of the 2003 Act sets out the scope of Ofcom's powers on resolving a dispute which may include, in accordance with section 190(2) of the 2003 Act;

a) making a declaration setting out the rights and obligations of the parties to the dispute;

b) giving a direction fixing the terms or conditions of transactions between the parties to the dispute;

c) giving a direction imposing an obligation, enforceable by the parties to the dispute, to enter into a transaction between themselves on the terms and conditions fixed by Ofcom; and

d) for the purpose of giving effect to a determination by Ofcom of the proper amount of a charge in respect of which amounts have been paid by one of the parties to the dispute to the other, giving a direction, enforceable by the party to whom sums are to be paid, requiring the payment of sums by way of adjustment of an underpayment or overpayment;

(C) On 24 June 2004, Ofcom published a statement called *Review of the retail leased lines, symmetric broadband origination and wholesale trunk segments markets*[237] (the "2004 LLMR Statement") which found that British Telecommunications plc ("BT") held significant market power ("SMP") in a number of markets, including those for:

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[237] http://www.ofcom.org.uk/consult/condocs/llmr/statement/state_note.pdf

a) the provision of traditional interface symmetric broadband origination ("TISBO") with a bandwidth capacity up to and including eight megabits per second within the United Kingdom but not including the Hull Area;

b) the provision of TISBO with a bandwidth capacity above eight megabits per second and up to and including one hundred and fifty five megabits per second within the United Kingdom but not including the Hull Area; and

c) the provision of wholesale trunk segments at all bandwidths within the United Kingdom;

(D) In the 2004 LLMR Statement, Ofcom imposed a series of SMP conditions on BT in these markets under section 45 of the Act, including a basis of charges obligation which requires:

> "*[x]3.1 Unless Ofcom directs otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.*
>
> *[x]3.2 For the avoidance of any doubt, where the charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is for a service which is subject to a charge control under [the charge control condition], the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that such a charge satisfies the requirement of Condition [x]3.1.*
>
> *[x]3.3 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition.*";

(E) On 25 June 2008, Cable & Wireless (UK), THUS Group plc,[238] Global Crossing, Verizon and Virgin Media jointly referred disputes with BT to Ofcom for dispute resolution requesting a determination that:

a) BT has overcharged them for PPCs provided to them from 24 June 2004 to 30 September 2008 (which depends on whether or not BT's charges for the underlying trunk and terminating elements of those PPCs were cost orientated during that time); and

b) if so, by how much they have been overcharged; and

c) should therefore be reimbursed;

(F) Separately, on 20 October 2008, COLT also referred a dispute with BT to Ofcom for dispute resolution requesting a determination that BT has overcharged them for partial private circuits provided to them from 24 June 2004 to 30 September 2008 (which depends on whether or not BT's charges for the underlying trunk and terminating elements of those

[238] In 2008 C&W completed the purchase of THUS Group plc.

PPCs were cost orientated during that time) and, if so, by how much they have been overcharged and should therefore be reimbursed. In its submission, COLT stated that it had no specific evidence or unique issues in its dispute with BT that would warrant any different treatment of its case to that of the other operators that had submitted similar disputes on 25 June 2008.

(G) Having considered the submissions of COLT, Ofcom set the scope of the issues in dispute to be resolved as follows-

> "*The finalised scope is therefore to determine whether, in the period from 24 June 2004 to 30 September 2008:*
>
> *i. BT has or will have overcharged COLT for PPCs (based on whether or not BT's charges for the underlying trunk and terminating elements of those PPCs were, during that time, reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed) and, if so;*
>
> *ii. by how much COLT will have been overcharged; and*
>
> *iii. whether and by how much BT should reimburse COLT.";*

(H) On 8 December 2008, Ofcom published the conclusions of its second review of the markets for retail leased lines, wholesale symmetric broadband origination and wholesale trunk segments in the 2008 Business Connectivity Market Review Statement (the "2008 BCMR Statement").[239] Ofcom found in the 2008 BCMR Statement that BT had significant market power in a number of markets, including those for:

a) the provision of TISBO with a bandwidth capacity up to and including eight megabits per second within the United Kingston but not including the Hull Area;

b) the provision of TISBO with a bandwidth capacity above eight megabits per second and up to and including forty five megabits per second within the United Kingston but not including the Hull Area and the Central and East London Area;

c) the provision of TISBO with a bandwidth capacity above forty five megabits per second and up to and including one hundred and fifty five megabits per second within the United Kingston but not including the Hull Area and the Central and East London Area; and

d) the provision of wholesale trunk segments at all bandwidths within the United Kingdom;

(I) The 2008 BCMR Statement imposed SMP conditions on BT in these markets, including a basis of charges condition, which imposes a cost orientation obligation on BT:

> *"[x]3.1 Unless Ofcom directs otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction*

[239] See http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr08/summary/bcmr08.pdf.

of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.

[x]3.2 For the avoidance of any doubt, where the charge offered, payable or proposed for Network Access covered by [the requirement to provide network access on reasonable request] is for a service which is subject to a charge control under [the charge control condition], the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that such a charge satisfies the requirement of Condition [x]3.1.

[x]3.3 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition.";

(J) On 14 October 2009 Ofcom published determinations to resolve the disputes referred to it on 25 June 2008 in relation to most of the PPC services, determining that BT had overcharged the other parties to the dispute approximately £42 million for 2Mbit/s PPC trunk services over the Relevant Period and that BT should refund this overcharge with interest. Ofcom stated that it was not at that time able to resolve the disputes in relation to BT's charges for 140/155MBit/s PPC terminating segment services and for 34/45Mbit/s PPC trunk services. Ofcom stated that it would issue separate determinations for these PPC services having first obtained and assessed further data from BT;

(K) In order to resolve this dispute, Ofcom has considered (among other things) the information provided by the parties and Ofcom has further acted in accordance with its general duties set out in section 3 and the Community requirements set out in section 4 and 4A of the 2003 Act;

(L) A fuller explanation of the background to the dispute and Ofcom's reasons for making this Determination is set out in the explanatory statement accompanying this Determination; and

NOW, THEREFORE, OFCOM MAKES, FOR THE REASONS SET OUT IN THE ACCOMPANYING EXPLANATORY STATEMENT, THE FOLLOWING DETERMINATION FOR RESOLVING THE DISPUTE:

I Declaration of rights and obligations

1. Between 24 June 2004 to 30 September 2008 BT has overcharged COLT for the provision of:

   a) 34/45Mbit/s PPC trunk services;

   b) 140/155Mbit/s PPC terminating segment connection services;

   c) 140/155Mbit/s PPC terminating segment main link services;

   d) 140/155Mbit/s PPC terminating segment distribution services; and

   e) 140/155Mbit/s PPC terminating segment local end services.

2. The level of that overcharge is determined at £[✂] Ofcom gives a direction to BT to pay to COLT, by way of adjustment of an overpayment for:

   a) 34/45Mbit/s PPC trunk services;

   b) 140/155Mbit/s PPC terminating segment connection services;

   c) 140/155Mbit/s PPC terminating segment main link services;

   d) 140/155Mbit/s PPC terminating segment distribution services; and

   e) 140/155Mbit/s PPC terminating segment local end services.

   in the period 24 June 2004 to 30 September 2008, the sum of £[✂] plus interest calculated at the rate specified in the Agreements.

II Binding nature and effective date

3. This Determination is binding on BT and COLT in accordance with section 190(8) of the 2003 Act.

4. This Determination shall take effect on the day it is published.

III Interpretation

5. For the purpose of interpreting this Determination—

   a) except as otherwise defined in this Determination, words or expressions used in this Determination (and in the recitals hereto) shall have the same meaning as they have in the 2003 Act;

   b) headings and titles shall be disregarded; and

   c) the Interpretation Act 1978 shall apply as if this Determination were an Act of Parliament.

6. In this Determination—

   a) “2003 Act” means the Communications Act 2003 (c.21);

   b) “Agreements” means the BT Standard PPC Handover Agreement that COLT has entered into with BT;

   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, as defined by section 1159 of the Companies Act 2006;

   d) “COLT” means COLT Telecommunications whose registered company number is 03232904, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, as defined by section 1159 of the Companies Act 2006;

e) “Ofcom” means the Office of Communications;

Neil Buckley
Director of Investigations

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

9 February 2012

Annex 8

Relevant cost standards for Ofcom's analysis

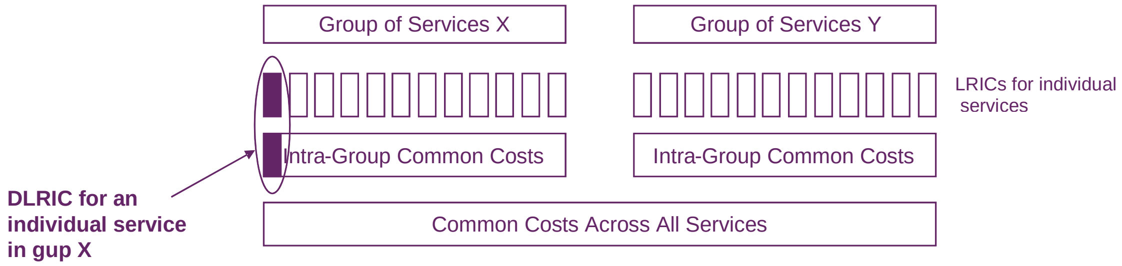
As set out at paragraph 1.11, the cost orientation obligations imposed on BT in the PPC markets require BT to secure that:

> "*each and every charge offered, payable or proposed for Network Access covered by Conditions GG3.1/H3.1 is reasonably derived from the costs of provision <u>based on a forward looking long run incremental cost approach</u> and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed*" (emphasis added).

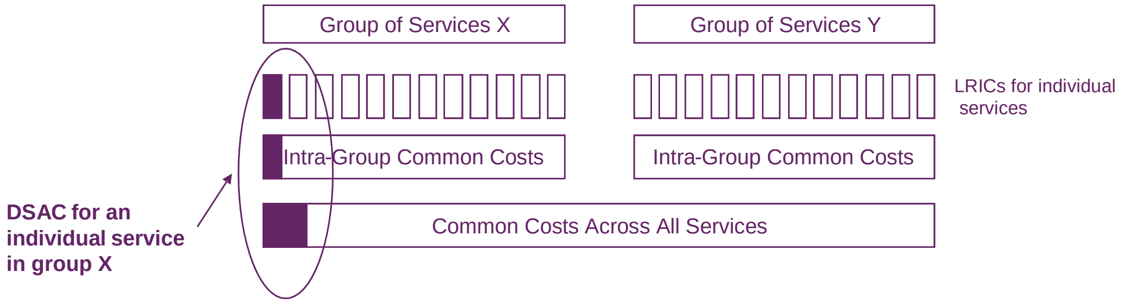
This obligation requires PPC charges to be LRIC-based and to provide for the recovery of an appropriate share of common costs. The key cost measures relevant to these Disputes and the common terminology used are summarised in the table below.

Incremental cost is the cost of producing a specified additional product, service or increment of output over a specified time period. In many cases, the relevant increment may be the entire output of a particular service or group of services. The incremental costs of a service are then those costs which are directly caused by the provision of that service in addition to the other services which the firm also produces. Another way of expressing this is that the incremental costs of a service are the difference between the total costs in a situation where the service is provided and the costs in another situation where the service is not provided. **Long Run Incremental Cost ("LRIC")** is the incremental cost over the long run, i.e. the period over which all costs can, if necessary, be varied. **Common costs** are those costs which arise from the provision of a group of services but which are not incremental to the provision of any individual service. Common costs may be identified in the following way: if the incremental costs of each service are removed from the total cost of providing all services, what are left are the common costs (i.e. those costs which are shared). Where there are no common costs, incremental cost and SAC are the same. Where there are common costs, the SAC of a service is the sum of the incremental cost of the service plus all of the costs which are common between that service and other services. **Stand-alone cost ("SAC")** the cost of providing that particular service on its own, i.e. on a stand-alone basis. **Distributed Long Run Incremental Cost ("DLRIC")** is a cost measure related to the LRIC of a component. Within BT's network groups of components are combined together to form what is known as a "broad increment". Two of these "broad increments" are the core network and the access network. The DLRIC of a component is equal to the LRIC of a component plus a share of the costs that are common between the components within the "broad increment", these costs are known as "intra-group" common costs. The common costs are shared between the components by distributing them on an equi-proportionate mark up basis. The sum of the DLRICs of all the components in the core is equal to the

LRIC of the core itself. This is represented in the diagram below:



Distributed stand-alone cost (“DSAC”) is a cost measure related to the LRIC of a component. As described above, there are components within the “broad increment” of the core. As an example the DSAC of a core component is calculated by distributing the SAC of the core between all the components that lie within the core. Each core component therefore takes a share of the intra-group common costs, and the costs that are common to the provision of all services. The sum of the core components DSACs is equal to the SAC of the core. This is demonstrated in the diagram below:



Fully allocated cost (“FAC”) is an accounting approach under which all the costs of the company are distributed between its various products and services.

Fixed and variable costs when considering which costs are fixed and which are variable the time period is key. In the short-run some costs (particularly capital costs) are fixed. The shorter the time period considered, the more costs are likely to be fixed. In the long-run, all costs are (by definition) considered variable.

Current Cost Accounting (“CCA”) is an accounting convention, where assets are valued and depreciated according to their current replacement cost while maintaining the operating or financial capital of the business entity.

Weighted average cost of capital (“WACC”) a company's WACC measures therate of return that a firm needs to earn in order to reward its investors. It is an average representing the expected return on all of its securities, including both equity and debt.

Annex 9

Glossary

21st Century Network ("21CN") BT's network programme which aims to provide a new simplified and higher capacity UK core network to manage the growing volumes of digital media traffic being consumed by end users.
Additional Financial Statements ("AFS") Financial statements which BT produces in addition to the RFS, provided to Ofcom on a confidential basis. They give a breakdown of the published accounts information by individual service.
Alternative interface symmetric broadband origination ("AISBO") A form of symmetric broadband origination service providing symmetric capacity between two sites, generally using an Ethernet IEEE 802.3 interface
Bandwidth The physical characteristic of a telecommunications system that indicates the speed at which information can be transferred. In analogue systems, it is measured in cycles per second (Hertz) and in digital systems in bits per second (Bit/s).
Common Costs See Annex 8.
Communications Provider ("CP") A person who provides an Electronic Communications Network or provides and Electronic Communications Service (as defined by section 32 of the Communications Act 2003).
Cost Volume Relationships ("CVR") LRICs are derived using a CVR. A CVR is a curve which describes how costs change as the volume of the cost driver changes. The costs associated with an increment can be of several types: • Variable with respect to the increment being measured; • Fixed but increment specific; and • Fixed but spanning several increments.
Current Cost Accounting ("CCA") See Annex 8.
Distributed Long-Run Incremental Cost ("DLRIC") See Annex 8.
Distributed stand-alone Cost ("DSAC") See Annex 8.
Ethernet Backhaul Direct ("EBD") a wholesale Ethernet product that offers permanently connected, point-to-point, high speed data circuits that provide a secure and uncontended backhaul service for Communications Providers.
Fixed Common Costs ("FCC") See Common costs in Annex 8.
Fully Allocated Cost ("FAC") See Annex 8.
Gbit/s Gigabits per second. A measure of speed of transfer of digital information.
Kbit/s kilobits per second. A measure of speed of transfer of digital information
Leased line A permanently connected communications link between two customer

premises, or between a customer's premises and the CP's network, dedicated to the customers' exclusive use.
Long Run Incremental Cost ("LRIC") See Annex 8.
Main link the straight-line distance between connecting BT exchanges
Mbit/s Megabits per second. A measure of speed of transfer of digital information.
Partial Private Circuit ("PPC") A generic term used to describe a category of private circuits that terminate at a point of handover between two communications providers' networks. It is therefore the provision of transparent transmission capacity between a customer's premises and a point of connection between the two communications providers' networks. It may also be termed a part leased line**.**
Point of Handover ("POH" a point where one CP interconnects with another CP for the purposes of connecting their networks to third party customers in order to provide services to those end customers.
Regulatory Financial Statements ("RFS") The annual financial statements that BT is required to prepare and publish in order to demonstrate compliance with its regulatory obligations.
Stand-alone cost ("SAC") See Annex 8.
Symmetric broadband origination ("SBO") A symmetric broadband origination service provides symmetric capacity from a customer's premises to an appropriate point of aggregation, generally referred to as a node, in the network hierarchy. In this context, a "customer" refers to any public electronic communications network provider or end user**.**
Traditional interface symmetric broadband origination ("TISBO") A form of symmetric broadband origination service providing symmetric capacity from a customer's premises to an appropriate point of aggregation in the network hierarchy, using a CCITT G703 interface.
Weighted Average Cost of Capital ("WACC") See Annex 8.