Draft Determinations to resolve disputes between each of Sky, TalkTalk and Virgin Media and BT regarding BT's charges for Ethernet services

Draft Determinations and Explanatory Statement

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Draft Determination

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Section 1

Summary

1.1 These draft determinations (the "Draft Determinations") set out Ofcom's proposals for resolving the disputes brought by TalkTalk Telecom Group plc ("TTG" or "TalkTalk"), British Sky Broadcasting Ltd ("Sky") and Virgin Media Limited ("Virgin") (collectively, the "Disputing CPs") against British Telecommunications plc ("BT") about BT's charges for certain of its wholesale Ethernet services (the "Disputes"). We propose to conclude that BT has overcharged for certain Ethernet services and must make repayments to the Disputing CPs for the amounts that it has overcharged them.

Background to the Disputes

1.2 On 27 July 2010, Sky and TTG jointly referred a dispute with BT to Ofcom for resolution. The dispute alleged that BT had overcharged Sky and TTG for certain Backhaul Extension Services ("BES") in the period 24 June 2004 to 31 July 2009, on the basis that BT had failed to comply with its obligations to ensure that its charges for BES were cost orientated. Sky and TTG requested that Ofcom determine the level of charges that should have applied for BES and direct BT to refund any overcharge, with interest.

1.3 Virgin submitted a dispute on 10 August 2010, alleging that BT had overcharged Virgin for certain Wholesale Extension Services ("WES") as well as certain BES during the period 1 April 2006 to 31 March 2009. Virgin also contended that BT had failed to comply with its cost orientation obligations and requested that Ofcom determine the level of charges that should have applied for the services and direct BT to refund any overcharge, with interest.

1.4 WES and BES are types of wholesale Ethernet services. They provide dedicated transmission capacity at a range of bandwidths between sites. WES are typically used by communications providers ("CPs") to assist in the provision of Ethernet-based leased lines from their network to a retail customer's premises. BES contribute to providing a high speed data link between a CP's core network and its equipment within an unbundled BT local exchange. Further details of these services are set out in Section 6.

1.5 On 13 September 2010, we decided that it was appropriate for Ofcom to resolve the Disputes on the basis of section 186(3) of the Communications Act 2003 (the "Act").[1] We proposed that the scope of the Disputes should be whether, in the "Relevant Period"[2]:

> "*i. BT has overcharged the Parties*[3] *for the BES and/or WES products concerned and, if so;*
>
> *ii. by how much the Parties were overcharged during the Relevant Period; and*

[1] BT brought an appeal against Ofcom's decision to accept the Disputes for resolution on 15 November 2010. The Competition Appeal Tribunal heard the appeal on 7 and 8 March 2011 and dismissed BT's appeal on 3 May 2011.

[2] The 'Relevant Period' was defined as being the period between 24 June 2004 and 31 July 2009.

[3] i.e. the Disputing CPs

iii. whether and by how much BT should reimburse the Parties in relation to the overcharge."[4]

BT's regulatory obligations

1.6 In June 2004, Ofcom published a market review of leased lines (the "2004 LLMR Statement")[5], which found that BT had significant market power ("SMP") in the alternative interface symmetric broadband origination ("AISBO") market (which includes the provision of Ethernet services)[6]. Ofcom therefore imposed an SMP condition on BT, which in summary required BT to ensure that its charges for services (including the services in dispute) are cost orientated ("Condition HH3.1"). Specifically, Condition HH3.1 states:

> *"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 HH1 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]

1.7 In December 2008, Ofcom published the Business Connectivity Market Review (the "2008 BCMR Statement")[8], which concluded that two separate markets should be defined for AISBO services: a low bandwidth market (including Ethernet services up to and including 1 Gbit/s) and a high bandwidth market. An identically worded cost orientation obligation to that imposed in 2004 was imposed on BT in relation to the low bandwidth AISBO market.

1.8 BT is required to maintain appropriate cost accounting systems and to provide detailed financial statements to Ofcom[9]. 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 an explanation of these measures, please see Annex 6).

Ofcom's proposed approach to resolving the Disputes

Preliminary questions

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

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[4] The scope was published in Ofcom's Competition and Consumer Enforcement Bulletin - see http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/open-cases/all-open-cases/cw_01052/.

[5] *Review of the retail leased lines, symmetric broadband origination and wholesale trunk segments markets*: http://stakeholders.ofcom.org.uk/binaries/consultations/llmr/statement/state_note.pdf.

[6] This finding was made in the 2004 LLMR Statement (see further below at paragraph 4.22 *et seq*.).

[7] Annex D to the 2004 LLMR Statement.

[8] http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr08/summary/bcmr08.pdf

[9] '*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

1.9.1 which are the relevant services that are in dispute?

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

1.9.3 what methodology should we use for resolving the Disputes?

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

Services in dispute

1.10 The Disputing CPs referred to a number of different BES and WES services in their submissions. We examined each of the services referred to and considered whether the Disputing CPs and BT (the "Parties") were in dispute in respect of each of them and, if so, during what period?

1.11 Following a review of the evidence provided to us by the Disputing CPs and BT, as well as that contained in BT's RFS, we provisionally concluded that certain services and years were not properly in dispute as between the Parties. Accordingly, we have reached the provisional view that the Disputes are confined to the following services and years:

Table 1.1: Summary of the disputed services

	04/05	05/06	06/07	07/08	08/09	09/10*
BES100 rental		ST	STV	STV	STV	ST
BES1000 rental		ST	STV	STV	STV	ST
BES100 connection		ST	ST	STV	STV	ST
BES1000 connection		ST	ST	ST	ST	ST
WES10 rental					V	
WES100 rental			V	V	V	
WES1000 rental			V	V	V	
Main link rental			ST	ST	ST	ST

** 2009/10 from 1 Apr 2009 to 31 Jul 2009*

Source: Annex 1 of Sky and TTG's Joint Dispute Submission and paragraphs 20 and 24 of the Virgin Dispute Submission. Note: 'S' denotes that Sky claims to be in dispute in respect of the service and year in question; 'T' denotes that TTG claims to be in dispute in respect of the service and year in question; and 'V' denotes that Virgin claims to be in dispute in respect of the service and year in question.

Which charges should be cost orientated?

1.12 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:

1.12.1 the explicit requirements of Condition HH3.1 and the precedent provided by the Competition Appeal Tribunal (the "CAT") in assessing whether BT's charges for Partial Private Circuits ("PPCs") were cost orientated[10]; and

[10] See Ofcom's determinations (the "PPC Final Determinations") of disputes about the pricing of Partial Private Circuits (the "PPC Disputes"): http://stakeholders.ofcom.org.uk/binaries/consultations/draft_deter_ppc/PPC_final_determination.pdf; and the

1.12.2 the arguments raised by BT and the Disputing CPs regarding the appropriate level of aggregation of charges. In particular, we consider the three forms of aggregation contemplated by BT: market aggregation, aggregation of main link and rental charges, and aggregation of connection and rental charges.

1.13 We do not consider that we should depart from the requirement clearly set out in Condition HH3.1. We therefore propose to resolve these Disputes on the basis of a disaggregated assessment of each individual charge in dispute.

Methodology

1.14 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 Condition HH3.1. 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 Ethernet charges with their respective DSACs to identify any charges exceeding DSAC.

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.

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

Has BT satisfactorily demonstrated that its charges were cost orientated?

1.16 We conclude in Section 10 that BT has not demonstrated to our satisfaction that its charges were cost orientated or that steps that it took historically to ensure compliance were sufficient to meet its cost orientation obligations. In particular, we have provisionally formed the following views in relation to each of BT's arguments:

1.16.1 BT's analysis of its rates of return on capital employed uses an inappropriate level of aggregation;

CAT's judgment disposing of the PPC appeal on 22 March 2011 (the "PPC Judgment") [2011] CAT 5: www.catribunal.org.uk/files/1146_BT_Judgment_CAT5_220311.pdf

1.16.2 BT's comparison of revenues to DSAC fails to demonstrate that its charges were cost orientated, again because we consider that BT has used an inappropriate level of aggregation;

1.16.3 the international benchmarking analysis provided by BT relates solely to prices and fails to consider possible cost differences between the services being compared;

1.16.4 BT's arguments in relation to economic harm are irrelevant, as economic harm is not a prerequisite for considering whether BT's charges are cost orientated (and, in any event, BT has not shown that there is no economic harm);

1.16.5 BT has not provided sufficient evidence to support its view that it had a legitimate expectation that Ofcom considered its charges to be cost orientated;

1.16.6 Ofcom's approach to adjustments to the starting charges for the purposes of the 2009 LLCC Statement[11] (in which only the starting charge for BES1000 rental was adjusted) did not reflect a view that other charges were cost orientated, but rather reflected a preference for the use of glide paths wherever possible; and

1.16.7 although BT was prevented from implementing price reductions in 2008 for a period of nearly ten weeks, this factor can be taken into account when assessing the level of any overcharge.

Which is the appropriate DSAC data for assessing cost orientation?

1.17 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.

1.18 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[12] guidance and with its own stated methodology.

1.19 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:

1.19.1 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;

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

[11] http://stakeholders.ofcom.org.uk/binaries/consultations/llcc/statement/llccstatement.pdf
[12] The Office of Telecommunications.

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

1.20 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

1.21 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.

1.22 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 1.2.

Table 1.2: Summary of proposed overcharging finding

	05/06	06/07	07/08	08/09	09/10
BES100 rental	No	Yes	Yes	Yes	Yes
BES1000 rental	No	Yes	Yes	Yes	Yes
BES100 connection	No	Yes	Yes	No	No
BES1000 connection	No	Yes	No	No	No
WES10 rental				Yes	
WES100 rental		Yes	Yes	Yes	
WES1000 rental		Yes	Yes	Yes	
Main link rental		n/a	No	No	No

Source: Ofcom based on BT data

Key – No = Provisionally conclude no overcharging, Yes = Provisionally conclude overcharging, n/a = no data available because aggregated with other services. Crossed out cells indicate services not in dispute.

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

1.24 We have calculated the level of overcharge for BT's customers by comparing actual charges with the maximum charge under which we would have considered BT not to have overcharged for its services. This is normally at the level of DSAC.

Repayments

1.25 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 Condition HH3.1 in a manner which should lead us to reduce the level of repayments to the Disputing CPs.

1.26 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.

1.27 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 1.3: Repayments due to the Disputing CPs

CP	2006/07	2007/08	2008/09	2009/10*	Total
Sky	[✂]	[✂]	[✂]	[✂]	[✂]
TTG	[✂]	[✂]	[✂]	[✂]	[✂]
Virgin	[✂]	[✂]	[✂]	[✂]	[✂]
Total	[✂]	[✂]	[✂]	[✂]	**64,753,000**

**4 months only (1 April 2009 - 31 July 2009). Estimated pro rata to full year overcharge.*
Source: Ofcom based on BT data

1.28 Ofcom proposes to direct that payment of interest should be in accordance with the contractual provisions entered into by the Parties, which in this case means that interest will not be payable.

Next steps

1.29 Interested parties have until **5 pm** 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 this draft determination are set out in **Annexes 1 and 2**.

Structure of the remainder of this document

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

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

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

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

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

1.30.5 further information about BES and WES services is set out in **Section 6**;

1.30.6 **Section 7** sets out the services in dispute;

1.30.7 our analytical framework is set out in **Sections 8** and **9**;

1.30.8 our assessment of the disputes against our analytical framework is set out in **Sections 10 to 13**;

1.30.9 our consideration of whether we should require BT to make repayments to the Disputing CPs is set out in **Section 14**.

1.30.10 the Draft Determinations setting out how we propose to resolve these Disputes are set out in **Annexes 3** to **5**;

1.30.11 an explanation of the cost standards used in Ofcom's analysis is set out in **Annex 6**; and

1.30.12 there is a glossary of terms used in these Draft Determinations at **Annex 7**.

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")[13] 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.

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.[14]

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;

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.

[13] 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.

[14] We believe that exceptional circumstances did surround these Disputes.

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.[15]

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.

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 BT has been found to have significant market power ("SMP") in the alternative interface symmetric broadband origination ("AISBO") market (which includes the provision of Ethernet services)[16]. Ofcom therefore imposed SMP obligations on BT

[15] Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services, 7 March 2002.
[16] This finding was made in the 2004 LLMR Statement (see further below at paragraph 4.22 *et seq.*).

("Conditions HH"), requiring it, among other things, to provide Network Access on reasonable request (Condition HH1). The definition of Network Access is found in section 151 of the Act (see paragraph 8.5).

2.12 The SMP obligations also include an obligation on BT to ensure and to be able to demonstrate that its WES and BES charges are cost orientated ("Condition HH3.1"):

> *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 HH1 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.*

2.13 BT is subject to SMP cost orientation obligations which are worded in the same way in a number of markets, for example Wholesale Local Access services[17], Wholesale Broadband Access in Markets 1 and 2[18], Traditional Interface Symmetric Broadband Origination ("TISBO") with a bandwidth capacity up to and including 8 Mbit/s and TISBO with a bandwidth capacity above 8 Mbit/s and including 45 Mbit/s[19].

2.14 BT is also subject to an SMP obligation to publish detailed financial statements, known as BT's Regulatory Financial Statements ("RFS"). Further information on the RFS is set out in Section 5

The PPC Judgment

2.15 On 22 March 2011 the Competition Appeal Tribunal (the "CAT") issued its judgment (the "PPC Judgment")[20] disposing of BT's appeal (the "PPC appeal") of Ofcom's determinations (the "PPC Final Determinations")[21] of disputes about the pricing of Partial Private Circuits (the "PPC Disputes"). The CAT upheld Ofcom's PPC Final Determinations, concluding that BT's charges for certain Partial Private Circuits ("PPCs") were in breach of its relevant cost orientation obligation. BT had therefore overcharged for those PPCs and should repay to the disputing CPs the sums they had overpaid[22].

2.16 Condition HH3.1 is worded identically to the cost orientation obligation considered by the CAT in the PPC Judgment. We therefore consider that the PPC Judgment is relevant to our determination of these Disputes and refer to it throughout these Draft Determinations, as relevant.

2.17 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 resolving the PPC Disputes was based on the RFS in the years relevant

[17] http://stakeholders.ofcom.org.uk/binaries/consultations/wla/statement/WLA_statement.pdf
[18] http://stakeholders.ofcom.org.uk/binaries/consultations/wba/statement/wbastatement.pdf
[19] http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr/summary/bcmr_pt4.pdf
[20] www.catribunal.org.uk/files/1146_BT_Judgment_CAT5_220311.pdf
[21] http://stakeholders.ofcom.org.uk/binaries/consultations/draft_deter_ppc/PPC_final_determination.pdf
[22] On 26 April 2011, BT applied to the CAT for permission to appeal the PPC Judgment and part of the PPC Preliminary Issues Judgment to the Court of Appeal. On 13 June 2011, the CAT refused BT leave to appeal; on 27 June 2011, BT submitted to the Court of Appeal an application for permission to appeal the PPC Judgment and parts of the PPC Preliminary Issues Judgment. The Court of Appeal has given permission for the case to go before the Court of Appeal, to include consideration of permission.

to those disputes (which includes some of the years relevant to these Disputes), and BT did not raise concerns about the use of this data during resolution of the PPC Disputes or during its PPC appeal.

Conclusion on the exercise of Ofcom's dispute resolution function

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

2.18.1 the facts of the case; and

2.18.2 the legal framework, in particular Condition HH3.1.

Section 3

Summary of the Disputes and Ofcom's investigation

The Disputes

The dispute submissions

3.1 The disputes in this case were brought by TalkTalk Telecom Group plc ("TTG" or "TalkTalk"), British Sky Broadcasting Ltd ("Sky") and Virgin Media Limited ("Virgin") (collectively, the "Disputing CPs") against British Telecommunications plc ("BT"). They relate to BT's charges in respect of wholesale Ethernet services known as Wholesale Extension Services ("WES") and Backhaul Extension Services ("BES") (the "Disputes").[23]

3.2 BES are data circuits that run between a BT exchange and another CP's network. They are used by Local Loop Unbundling ("LLU") operators to carry their traffic from an unbundled exchange to their own networks.

3.3 WES are used by CPs to provide a dedicated fibre optic data circuit between their customer's premises and their network via BT's core network.

3.4 TTG and Sky submitted a joint dispute (the "Joint Dispute Submission") on 26 July 2010. They assert that from the date that Condition HH3.1 was imposed on 24 June 2004, up to 31 July 2009, BT has overcharged for certain BES services because, in summary, its charges have not been cost orientated.

3.5 Virgin submitted a dispute on 11 August 2010, making similar claims in relation to BES services for the period 1 April 2006 to 31 March 2009 and additionally alleging that certain WES services were not cost orientated in that same period.[24]

3.6 Given the similarities between the issues raised in the Joint Dispute Submission and the Virgin Dispute Submission, Ofcom decided to handle the Disputes together[25].

3.7 The Disputing CPs argue that BT should be required to repay to them the amounts that they have been overcharged, which they estimate to be over £[✄] million in total, plus interest.

3.8 The Disputing CPs supplied evidence with their submissions to demonstrate that they had negotiated with BT in relation to these services but that, ultimately, those commercial negotiations had been unsuccessful.

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[23] A more detailed explanation of the WES and BES services is set out in Section 6 below.
[24] Virgin originally submitted a dispute on this issue on 22 April 2010 but decided to withdraw the dispute (following discussions with Ofcom) on the basis that the outcome of the dispute could potentially be affected by the outcome of the PPC appeal. Following the Joint Dispute Submission, Virgin resubmitted its dispute on 10 August 2010 ("the Virgin Dispute Submission").
[25] On 9 December 2011, we opened a dispute between Cable & Wireless Worldwide plc and BT concerning BT's charges for Ethernet services. The dispute brought by Cable & Wireless Worldwide plc raises similar issues to these Disputes. Case CW/01078/11/11 (the "Cable & Wireless dispute") http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/open-cases/all-open-cases/cw_01078/?utm_source=updates&utm_medium=email&utm_campaign=cw_01078

3.9 BT provided initial comments on the Joint Dispute Submission on 10 August 2010, and on the Virgin Dispute Submission on 26 August 2010. In both responses, BT claimed that negotiations between the Parties had not reached an impasse but that they had merely been stalled by the PPC appeal[26]. BT additionally argued that the issues raised were not suitable for dispute resolution but rather constituted a claim that BT had failed to comply with an SMP condition. In relation to the Joint Dispute Submission, BT argued that it was unclear exactly what the parties were proposing as an appropriate and actual charge for the disputed products. BT was therefore of the view that Ofcom should not accept the Disputes for resolution.

Scope

3.10 Ofcom informed the Disputing CPs and BT (the "Parties") of its decision to accept the Disputes for resolution and published details of the Disputes on its website on 13 September 2010, including the proposed scope. We received no representations on the proposed scope of the Disputes in the period provided for comments.

3.11 The published scope of the Disputes is:

"To determine whether, during the Relevant Period:[27]

i. BT has overcharged the Parties[28] *for the BES and/or WES products concerned and, if so;*

ii. by how much the Parties were overcharged during the Relevant Period; and

iii. whether and by how much BT should reimburse the Parties in relation to the overcharge."[29]

Exceptional circumstances

3.12 As noted at paragraph 2.3 above, under section 188 of the Act Ofcom must resolve disputes within four months of the date of the decision to handle the dispute, except in exceptional circumstances. When accepting the Disputes, we sought the views of interested parties as to whether the apparent overlap between issues raised in the Disputes and issues raised in the PPC appeal that was before the CAT at the time gave rise to exceptional circumstances (the PPC appeal is discussed above at paragraphs 2.15 to 2.17).

3.13 Having considered representations from the Disputing CPs, Ofcom concluded that there was a significant overlap between the issues raised in the PPC appeal and those in the Disputes, and that the judgment in the PPC appeal was likely to have a bearing on the issues to be considered here. We therefore concluded on 5 October 2010 that exceptional circumstances existed and that as a result it might not be possible to resolve the Disputes within four months. We did, however, note our intention to progress consideration of the Disputes as far as possible in advance of

[26] The PPC appeal is discussed above at paragraphs 2.15 to 2.17).
[27] The 'Relevant Period' was defined as being the period between 24 June 2004 and 31 July 2009.
[28] i.e. the Disputing CPs.
[29] The scope was published in Ofcom's Competition and Consumer Enforcement Bulletin - see http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/open-cases/all-open-cases/cw_01052/.

the CAT's judgment, in order to enable us to resolve the Disputes as soon as possible thereafter.[30]

The preliminary issues appeal

3.14 On 15 November 2010 BT appealed Ofcom's decision to accept the Disputes to the CAT. BT's submission contained two main grounds of appeal:

3.14.1 that Ofcom had erred in concluding that the matters could not be resolved by negotiation (and that a dispute therefore existed) as negotiations could resume after the CAT's judgment in the PPC appeal; and

3.14.2 that Ofcom had erred in concluding that it was appropriate to handle the Disputes when alternative means for dealing with the issues were available in the form of (a) negotiations after a judgment in the PPC appeal, or (b) enforcement proceedings under sections 94 to 103 of the Act.[31]

3.15 The appeal was heard by the CAT on 7 and 8 March 2011. The CAT issued its judgment on 3 May 2011 and unanimously dismissed BT's appeal (the "Preliminary Issues Judgment").[32]

The PPC Judgment

3.16 The CAT issued its judgment disposing of the PPC appeal on 22 March 2011, enabling Ofcom to take forward its resolution of the Disputes.

BT's submissions on errors of law

3.17 BT's 20 May submission (see paragraph 3.25 below) set out its views on the error of law which it considered that Ofcom made in accepting the Disputes for resolution and the errors of law which it would make if it followed the PPC Judgment in resolving the Disputes. We consider BT's submissions on these points briefly as they were addressed by the CAT in its judgment on preliminary issues in the PPC appeal (the "PPC Preliminary Issues Judgment")[33] and in the PPC Judgment.

3.18 BT argued that historic disagreements, especially those based on an allegation of historic non-compliance with an SMP condition, fall outside Ofcom's jurisdiction to resolve disputes between CPs. In the PPC Preliminary Issues Judgment the CAT found that section 185(1) of the Act contains no distinction between historical and non-historical disputes, and that there is nothing in the Act to suggest that certain disputes should be considered by means of the compliance process contained in sections 94 to 104 of the Act rather than by means of the dispute resolution process. We therefore reject BT's claim as to the limits of Ofcom's jurisdiction.

3.19 BT has also argued that the CAT's approach to cost orientation in the PPC Judgment was legally flawed. In particular BT considers that the CAT:

[30] We published an update to the Competition and Consumer Enforcement Bulletin on 5 October 2010 setting out this view.
[31] BT additionally argued in its submission that Ofcom had erred in deciding to progress the Disputes as far as possible in advance of the PPC Judgment but BT chose not to continue with this ground of appeal when the CAT heard the appeal.
[32] *British Telecommunications plc v Office of Communications* [2011] CAT 15 http://www.catribunal.org.uk/files/1171-72_BT_Judgment_030511.pdf.
[33] *British Telecommunications plc v Office of Communications* [2010] CAT 15 http://www.catribunal.org.uk/files/1146_BT_Judgment_CAT15_110610.pdf

3.19.1 failed to have regard to Ofcom's duties under section 3(3) of the Act to act in a manner which is transparent, accountable, proportionate and consistent;

3.19.2 failed to have regard to the scheme and objectives of the Common Regulatory Framework ("CRF"), including the duty placed on Ofcom to promote competition; and

3.19.3 failed to take account of Ofcom's 1997 and 2001 NCC Guidelines (see paragraphs 4.15 to 4.17 below), including their provision that the primary focus when assessing cost orientation is the effect or likely effect of a charge on competition and consumers.

3.20 We note that BT has sought leave to appeal the PPC Judgment and the relevant paragraphs of the PPC Preliminary Issues Judgment to the Court of Appeal, however, Ofcom will follow the approach set out in those judgments unless and until they are overturned on appeal.

Information provided by the Parties

3.21 On 13 October 2010 we met with BT to discuss the dispute submissions and on 22 October 2010 sent BT a notice under section 191 of the Act[34] seeking information in connection with the Ethernet services which are in dispute (the "22 October section 191 notice"). BT responded to this notice in several tranches on 3, 15 and 22 November 2010, 12 January 2011 and 18 February 2011. We also asked a series of follow-up questions following BT's responses to the notice.

3.22 On 8 December 2010 BT provided its initial submission setting out why it considered that its charges are cost orientated. We shared a non-confidential version of the submission with the Disputing CPs ("BT's 8 December submission").

3.23 On 24 March 2011 we sent section 191 notices to Sky, TTG and Virgin seeking information relating to Ethernet services purchased from Openreach (the "24 March section 191 notices"). TTG responded on 1 April 2011, Virgin on 7 April 2011 and Sky on 8 April 2011.

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

3.25 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, which we shared with the Disputing CPs. 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. BT's views and our consideration of the points BT makes are set out in detail in Section 10 of this document. BT's submission also set out its views on errors of law which it considers that Ofcom made in accepting the Disputes for resolution and which it might make in resolving the Disputes, as set out at paragraphs 3.17 to 3.19 above.

[34] Referred to in these Draft Determinations as a "section 191 notice".

3.26 On 25 May 2011 Sky submitted a paper on why it considers that Ofcom should use Fully Allocated Cost ("FAC") as the appropriate cost standard for assessing the level of any overcharge.

3.27 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[35] seeking further information on BT's proposed DSACs (the "16 June section 191 notice"). BT responded in two tranches on 22 June and 30 June 2011.

3.28 On 16 June 2011, Sky, TTG and Virgin provided comments on BT's 20 May submission.

3.29 On 17 June 2011 we met with BT to discuss its submission on the Disputes.

3.30 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 run incremental costs ("LRICs") and DSACs. On 27 June 2011 BT wrote to Ofcom claiming that some of the information requested was subject to legal litigation privilege.

3.31 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").

3.32 BT has provided us with additional information in the context of the Cable & Wireless dispute. We refer to this information where relevant.

[35] This was sent as a joint information request covering both these Disputes and the currently ongoing disputes between BT and various parties relating to PPCs, as BT's proposals impacted published data in relation to Ethernet and PPC services. Further information in relation to these ongoing PPC disputes can be found here: http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/open-cases/all-open-cases/cw_992/

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 Ethernet services.

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 6 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*", 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]

4.6 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].

4.7 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").[40] The June 1996 Consultation set out the proposed "floors and

[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.

[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 http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/pri1997b/contents.htm

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.[41]

4.8 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.*"[42]

4.9 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*."[43]

The 1997 NCC Statement

4.10 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*."[44]

4.11 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.*"

[41] Annex D to the June 1996 Consultation.

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

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

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

Introduction of a cost orientation obligation

4.12 On 26 July 1997, European Directive 97/33/EC was published (the "Interconnection Directive").[45] 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.*"

4.13 Articles 7(5) and 8(2) of the Interconnection Directive required National Regulatory Authorities ("NRAs") 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.

4.14 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 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.*"

The Network Charge Control Guidelines

4.15 In October 1997, Oftel issued the Network Charge Control Guidelines (the "1997 NCC Guidelines"). 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*." [46]

4.16 Annex C stated that the "stand alone cost ceiling" would not be the 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 5.9, *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)*."

[45] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997L0033:EN:HTML

[46] http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/ncc1097.htm, paragraph 3.5.

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

The Common Regulatory Framework

4.18 On 25 July 2003, the suite of EU directives known as the 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.

4.19 Article 16 of Directive 2002/21/EC (the "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 market and impose on them appropriate regulatory obligations. 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.

4.20 Article 13(3) of Directive 2002/19/EC (the "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.*"

4.21 Ofcom has to date carried out two market reviews that have imposed regulatory obligations on BT in relation to Ethernet products.

The 2004 Leased Lines Market Review

4.22 On 24 June 2004, Ofcom published a market review of leased lines (the "2004 LLMR Statement")[48] which set out our analysis and conclusions in relation to leased lines markets (including AISBO services) at that time.

4.23 Ofcom concluded that BT had SMP in five markets: four wholesale markets, including the AISBO market, and one retail market. 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 in each of the four wholesale markets. Conditions HH can be found at Annex D to the 2004 LLMR Statement. Condition HH3.1 applied to services in the AISBO market (at all bandwidths) and provides that:

> "*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 HH1 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.*"

[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

[48] Review of the retail leased lines, symmetric broadband origination and wholesale trunk segments markets, 24 June 2004: http://stakeholders.ofcom.org.uk/binaries/consultations/llmr/statement/state_note.pdf.

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

> *"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."* [49]

4.25 Further:

> *"It might be argued that the Competition Act should be used to avoid excessive or predatory pricing. However, Ofcom considers that sectoral tests are likely to be more stringent and more effective than the Competition Act, giving the SMP communications provider less latitude and providing greater certainty for access customers".* [50]

4.26 Ofcom considered supplementing the cost orientation obligation with a charge control obligation but concluded at the time that it was unnecessary to do so. Ofcom reasoned that:

> "*The AISBO market is in a relatively early stage of development and it is necessary to give time for the effects of the cost orientation obligation to impact on the competitiveness of the market before considering whether a price control is necessary. The need for a price control will be considered when the market is next reviewed.*"[51]

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")[52].

4.28 Ofcom concluded that two separate markets should be defined for AISBO services: a low bandwidth AISBO market for services with bandwidths up to and including 1 Gbit/s and a high bandwidth AISBO market for services with bandwidths above 1 Gbit/s. Ofcom concluded that BT continued to have SMP in the market for low bandwidth AISBO services but that no CP had SMP in the high bandwidth AISBO market.

4.29 On this basis, Ofcom imposed identical cost orientation obligations on BT in relation to the low bandwidth AISBO market to those which had been imposed in relation to the AISBO market in the 2004 LLMR Statement. Conditions HH are set out at Schedule 4 to Annex 8 of the 2008 BCMR Statement. Ofcom additionally concluded that it was now appropriate to impose a charge control in relation to low bandwidth AISBO services, with the terms of the charge control to be set in a separate consultation document.

The 2009 Leased Lines Charge Control

4.30 The Leased Lines Charge Control consultation (the "2008 LLCC Consultation")[53] was published at the same time as the 2008 BCMR Statement and set out proposals as

[49] LLMR Statement, paragraph 7.10.
[50] *Ibid*. paragraph 7.55.
[51] *Ibid.* paragraph 7.63.
[52] http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr08/summary/bcmr08.pdf

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. The 2008 LLCC Consultation included details of the charge controls proposed on low bandwidth AISBO services.

4.31 The charge controls were set in a further statement, published on 2 July 2009 (the "2009 LLCC Statement")[54][55]. The 2009 LLCC Statement defines six charge control baskets, of which the alternative interface ("AI") basket is of particular relevance to the issues under consideration in the Disputes. The AI basket contains all BT low bandwidth AISBO services. A charge cap of RPI-7.0% was set on this basket. BT was additionally required to reduce the price of the standard BES1000 rental service by 17% and introduce this new charge from 1 August 2009.

4.32 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.

4.33 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

4.34 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.

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[53] http://stakeholders.ofcom.org.uk/binaries/consultations/llcc/summary/leasedlines.pdf
[54] http://stakeholders.ofcom.org.uk/binaries/consultations/llcc/statement/llccstatement.pdf
[55] The 2009 LLCC Statement was appealed to the CAT, which referred certain price control matters to the Competition Commission ("CC"). The CC issued a determination (discussed further in Section 12). This 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 (http://stakeholders.ofcom.org.uk/binaries/consultations/openreachframework/statement/revisedsmpconditions.pdf). References to the 2009 LLCC Statement in these Draft Determinations are to the statement as amended.

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."* (paragraph 2.28)

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 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."[56]

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 including the AISBO market:

> *"[…] 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 […]"*[57]
>
> *"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"*[58].
>
> *"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."*[59]

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 Notification")[60]. 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.[61] So, for example, the 2008/09 RFS set out each of these measurements separately for BES100 rentals for that year; they also set them out separately for BES100 connections for that year.

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

[56] 2001 NCC Guidelines, paragraph 3.17.
[57] 2004 LLMR Statement, paragraph 10.1.
[58] 2004 LLMR Statement, paragraph 10.10.
[59] 2004 LLMR Statement, paragraph 10.13.
[60] http://stakeholders.ofcom.org.uk/binaries/consultations/fin_reporting/statement/finance_report.pdf
[61] 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.

5.7 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 the LRIC model works, and the specific aspects which apply to our calculations for the purpose of resolving these Disputes, is set out at paragraphs 11.4 to 11.17. 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:

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 regulatory financial statements is to ensure that the appropriate data is published to enable compliance with SMP conditions to be monitored.[62]

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

[62] PPC Judgment, paragraph 161.

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 the Disputes over a five year period).

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 Ethernet 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.

Section 6

Wholesale Ethernet products

6.1 AISBO is a form of broadband origination providing symmetric capacity between two sites. Services based on AISBO can be used to carry many types of data.

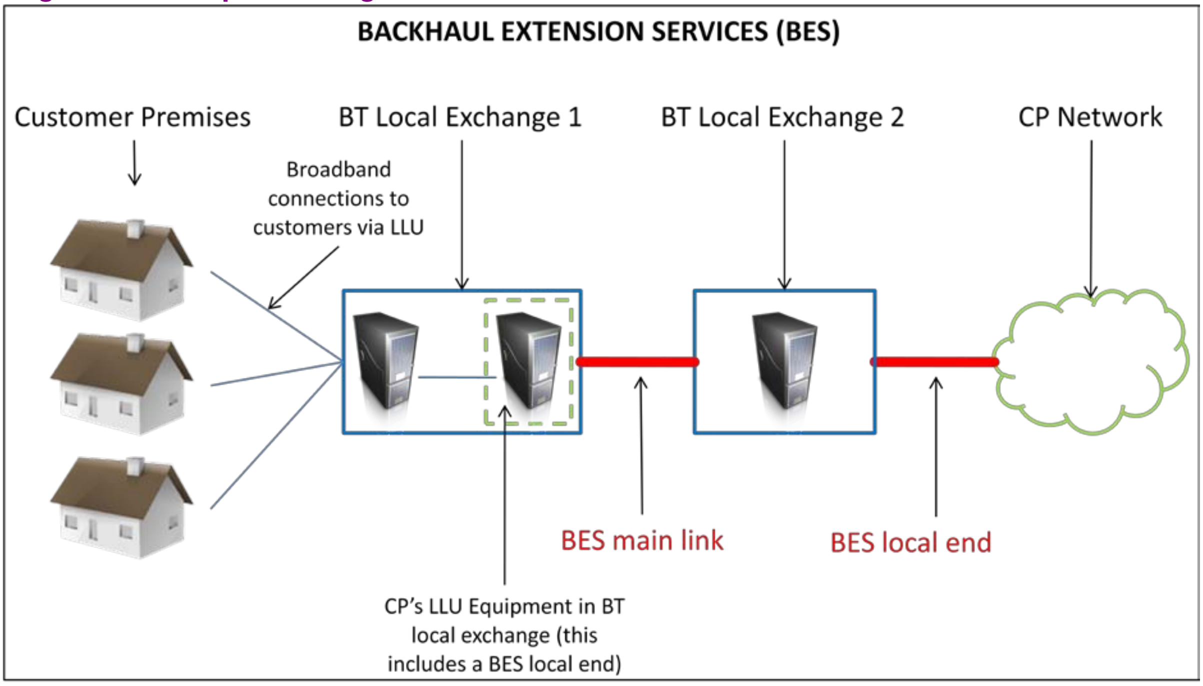
6.2 Wholesale Ethernet products, which use AISBO, provide high bandwidth data connectivity over BT's network. BT supplies wholesale Ethernet products through its Openreach division to other CPs who use them to connect different parts of their own networks and to supply high bandwidth data connectivity to their business and residential customers.

6.3 BT now provides a large number of different types of Ethernet products, however these Disputes focus on two particular types: BES and WES.

Backhaul Extension Services (BES)

6.4 BES are data circuits that run between a BT exchange and a CP's network. They are used by Local Loop Unbundling ("LLU") operators to connect the equipment they have installed in BT's local exchange to their own core network, thereby allowing them to provide telephony and/or broadband services to their customers. A simplified diagram is shown in figure 6.1.

Figure 6.1: Simplified diagram of BES



6.5 As shown in figure 6.1, a CP providing telephony and/or broadband to its customers using LLU needs to place its own equipment in the BT local exchange that serves those customers. CPs need to connect this equipment to their core network but do not necessarily maintain direct connections between their core network and every BT local exchange.

6.6 As can be seen in the diagram, BES services can consist of "local ends" and "main links". The main link is used to connect the CP's equipment in a BT local exchange to a second BT local exchange, whereas a local end is used to connect that equipment to the CP's core network.

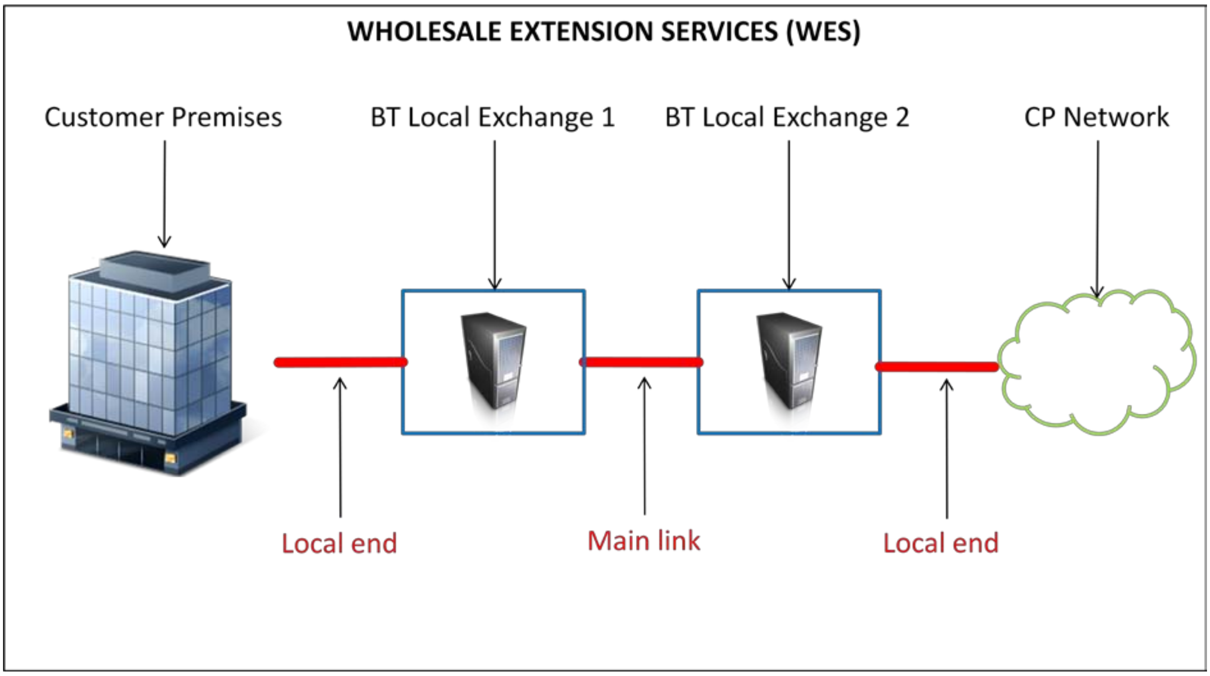
6.7 When a CP is providing LLU services from a BT local exchange where it already has a direct connection to its core network (i.e. BT Local Exchange 2 in the diagram), the CP will only require a local end and will not require a main link.

6.8 BES can be provided in different bandwidths starting from 10 megabits per second, and BES products are known by acronyms made up of the type of service and the bandwidth, eg "BES10" for 10 Mbit/s, "BES100" for 100 Mbit/s etc.

Wholesale Extension Services (WES)

6.9 WES are used by CPs to provide a dedicated fibre optic high bandwidth data circuit between their customers' premises and their own network via BT's network. Unlike BES, WES services provide high bandwidth data connectivity directly to the CP's customer's premises, as shown in figure 6.2 below.

Figure 6.2: Simplified diagram of WES



6.10 As can be seen in the diagram, WES services also consist of "local ends" and "main links". The local end is used to connect a customer's premises to a BT local exchange, whereas main link is used to connect that BT local exchange with another BT local exchange where the CP has an interconnection with BT.

6.11 As with BES, where the customer's premises are connected to a BT local exchange which already has a direct connection to the CP's core network (i.e. BT Local Exchange 2 in the diagram), the CP will only require two local ends and will not require a main link.

6.12 Like BES, WES can be provided in different bandwidths starting from 10 megabits per second, and they are known by acronyms made up of the type of service and the bandwidth, eg "WES10" for 10 Mbit/s, "WES100" for 100 Mbit/s etc.

Variants

6.13 BES and WES are sold in different variants, including ‘extended reach’, ‘term’ and ‘daisy chain’ variants, in addition to the ‘standard’ service.

6.13.1 BES (but not WES) are available in a ‘term’ variant, whereby BES are available for a 36 or 60 month minimum period, as opposed to the standard twelve month minimum period.

6.13.2 All of the services are limited in the distance they can cover, with the basic limit being a 25km radius from the end point of the circuit. BES1000 and WES1000 services both have an ‘extended reach’ variant that can increase the distance covered to 35km.

6.13.3 BES services are available in a ‘daisy chain’ variant, whereby a link can be provided between two exchanges containing the CP’s own equipment (as distinct from the standard BES, which provides a link between an exchange containing the CP’s own equipment and the CP’s own network). The ‘daisy chain’ variant may be combined with the ‘extended reach’ and ‘term’ variants.

Charges for WES and BES products

6.14 BT’s charges for main link, connection and rental services for both BES and WES, at different bandwidths, have been set out individually in the Openreach Price List throughout the Relevant Period, e.g. separate WES100 rental charges and WES100 connection charges are listed. The Openreach Price List is a publicly available document on the Openreach website[63].

6.15 For each local end, BT levies a connection charge and a rental charge. The connection charge is set on a ‘per unit’ basis for each local end, so that a circuit with two local ends will incur two one-off connection charges. In other words, there is a charge for the “end” of the circuit which connects to the CP’s network and another charge for the other “end” of the circuit which arrives at the local BT exchange (for BES) or the CP’s customer’s premises (for WES). We understand that BT’s customer, having paid the connection charge at the start of the service provision, would not have to pay a further connection charge in subsequent years as the circuit is already connected.

6.16 Each local end also attracts a rental charge. However, unlike connection charges, the ‘per unit’ rental charge is a periodic charge. While the one-off connection charge is levied up front, charges for rentals are generally billed quarterly in advance (although monthly billing is available). In contrast to connection charges, rental charges are therefore levied in each year, and not only at the start of the service provision.

6.17 There is no connection charge for main link, but the ‘per unit’ charge for main link rental is a charge per metre (usually charged annually). This is in contrast to the prices of local end connections and rentals,which do not fluctuate with distance from the BT local exchange.

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[63] The OPL price list for BES is available at:
http://www.openreach.co.uk/orpg/home/products/pricing/loadProductPriceDetails.do?data=K9Cqp01UhnAMs22R9huCHWVvGaJZjqBmLZgtNRLEaGolMnGHsqdC0vzO163bJmh34D91D7M0q8u%2F%0AIlSgtIFAKw%3D%3D
The OPL price list for WES is available at:
http://www.openreach.co.uk/orpg/home/products/pricing/loadProductPriceDetails.do?data=bj1iagV2rmVhUxhJRV2ItZ6l6oCf3ew2ZeuZm4VRqG0lMnGHsqdC0vzO163bJmh34D91D7M0q8u%2F%0AIlSgtIFAKw%3D%3D

6.18 The Openreach Price List also sets out separate charges for different variants of the services, including separate charges for different combinations of variants (e.g. BES1000 can be purchased using any combination of the 'term', 'extended reach' and 'daisy chain' variants and separate charges are set out in the Openreach Price List for each of these combinations).

6.19 BT's standard terms for BES and WES services offer the services for a minimum period of twelve months. As noted at paragraph 6.13.1, longer minimum periods of 36 or 60 months are also available for BES services.

6.20 In addition to the publicly available pricing information in the Openreach Price List, BT has provided billing data, which shows revenues per customer for external sales of BES and WES. The Disputing CPs have also provided information regarding the amounts they paid for each service.

Section 7

Services in dispute

Introduction

7.1 For the purposes of resolving the Disputes we first consider whether the Parties are in dispute in relation to all of the services notified to us in their dispute submissions.

7.2 As discussed in Section 2, the Disputing CPs requested that we resolve disputes relating to the alleged overcharging by BT for certain BES and WES services in the Relevant Period. The products and timeframes for which each CP claimed to be in dispute with BT differed but the scope of the Disputes was set to encompass the broadest product range and timeframe covered by the dispute submissions.

7.3 Table 7.1 below sets out the services and years that each Disputing CP included in their dispute submission.

Table 7.1: Services included in Disputing CPs' submissions

	04/05	05/06	06/07	07/08	08/09	09/10*
BES100 rental	ST	ST	STV	STV	STV	ST
BES1000 rental	ST	ST	STV	STV	STV	ST
BES100 connection	ST	ST	STV	STV	STV	ST
BES1000 connection	ST	ST	STV	ST	ST	ST
BES10000[64] rental			S	S		
BES10000 connection			S	S		
WES10 rental					V	
WES100 rental			V	V	V	
WES1000 rental			V	V	V	
Main link rental			ST	ST	ST	ST

** 2009/10 from 1 Apr 2009 to 31 Jul 2009*

Source: Annex 1 of Sky and TTG's Joint Dispute Submission and paragraphs 20 and 24 of the Virgin Dispute Submission.

Note: 'S' denotes that Sky claims to be in dispute in respect of the service and year in question; 'T' denotes that TTG claims to be in dispute in respect of the service and year in question; and 'V' denotes that Virgin claims to be in dispute in respect of the service and year in question.

7.4 In order to avoid unnecessary analysis of whether overcharging has taken place, we begin our assessment of the overcharging claims by identifying the specific services and years for which the Disputing CPs are in dispute with BT.

7.5 The Disputes are based on allegations of overcharging. In order for a party to have been overcharged for a product or service, it is necessary for that party to have purchased that product or service.

7.6 We have therefore considered the evidence supplied by the Disputing CPs in their dispute submissions and information request responses to ensure that they were

[64] It is worth noting that the BES10000 service was first introduced in June 2007. As explained in Section 12 below, regulation was removed from these services on 8 December 2008 after Ofcom concluded that BT no longer had SMP in the market for high bandwidth AISBO services (i.e. services with a bandwidth above 1Gbit/s). Any assessment of overcharging in relation to BES10000 would therefore have been limited to the period 14 June 2007 to 7 December 2008.

purchasing the services in each of the years that they are disputing and that they have provided evidence for each year to support their claim that they were being overcharged.

Claims of the Disputing CPs

Claims of Sky and TTG

2004/05

7.7 Having reviewed the information supplied by both Sky and TTG to support their Joint Dispute Submission, Ofcom has identified that neither party has indicated that it purchased the BES services that are the subject of these disputes in 2004/05.[65]

7.8 This was echoed in the responses provided by Sky and TTG to the 24 March section 191 notices. These notices asked each of the Disputing CPs to provide details of the amounts that they had paid BT during each year of the Disputes for the BES in relation to which they considered themselves to be in dispute with BT. The responses provided by Sky and TTG contained no reference to either of them having purchased BES from BT during 2004/05.

7.9 The AFS produced by BT for 2004/05 also support the position that Sky and TTG did not purchase BES in 2004/05. They indicate that the only wholesale Ethernet services purchased in 2004/05 were purchased by BT's downstream operations.

7.10 Sky provided details of the LAN Extension Service ("LES") circuits that it purchased from BT during 2004/05. LES are retail Ethernet products that were used by CPs prior to the introduction of the wholesale WES and BES products by BT. LES products do not fall within the AISBO market and are not covered by the cost orientation obligation imposed on BT in this market in June 2004. LES products are also outside the scope of the Disputes that Ofcom has agreed to resolve.

7.11 We therefore propose to conclude that there is no dispute between BT and each of Sky and TTG in relation to BES services in 2004/05.

2005/06 to 2009/10

7.12 Both Sky and TTG have supplied evidence to demonstrate that they were purchasing BES in the period 2005/06 to 2009/10. The RGL Report supplied with the Joint Dispute Submission contains analysis of why Sky and TTG believe that they have been overcharged for BES between 2006/07 and 2008/09. Although it does not contain detailed analysis in relation to 2005/06, it explains why overcharging may have also occurred in that year and the steps that Ofcom should take to assess this.

7.13 The confidential annexes supplied with the Joint Dispute Submission contain details of the BES that Sky and TTG purchased between 2006/07 and 2008/09 and demonstrate that they were purchasing BES100 and BES1000 services in this period. Although the Joint Dispute Submission contained no details of the BES that they were purchasing in 2005/06, Sky and TTG's individual responses to the 24

[65] As part of the dispute submission, Sky and TTG provided a report prepared for them by RGL Forensics (the "RGL Report") and made clear that they relied on this report as support for their claim that they had been overcharged by BT. The RGL Report is clear that it only relates to the period 2005/06 to 2008/09 and its conclusions make no reference to 2004/05.

March section 191 notices demonstrate that they were in fact purchasing BES in that year.

7.14 Sky's response to its 24 March section 191 notice provides details of services it purchased from BT in the period but does not indicate which variants of the BES100 and BES1000 products were being purchased (e.g. 'standard', 'daisy chain' or 'extended reach'). TTG provided more granular information in its response to its 24 March section 191 notice, giving details of the amounts that it had spent on each BES100 and BES1000 product variant.

7.15 We consider in greater detail below whether BT has overcharged Sky and TTG for BES100 and BES1000 services in the period 1 April 2005 to 31 July 2009.

7.16 Sky has, however, provided no specific data in relation to the BES10000 service that it claims to have purchased during this period. It has additionally failed to provide any evidence to demonstrate why it believes that BT was overcharging for these services. Although the BES10000 product is listed in the Joint Dispute Submission as being one of the services in dispute, the remainder of the Joint Dispute Submission makes no arguments as to why Sky has been overcharged by BT for this service. The RGL Report on which Sky relies to support its claims of overcharging makes no separate reference to the BES10000 service (other than to include pricing information) and contains no indication of the amount by which Sky has been overcharged for these services.

7.17 We therefore propose to conclude that there is no dispute between BT and Sky in relation to BES10000 services.

Claims of Virgin

2006/07 to 2008/09

7.18 The Virgin Dispute Submission provides evidence as to why Virgin believes that it has been overcharged for WES100, WES1000, BES100 and BES1000 services in 2006/07 to 2008/09. We therefore consider in greater detail below whether BT has overcharged Virgin for those services in the period 1 April 2006 to 31 March 2009.

7.19 Virgin has, however, only supplied evidence for 2008/09 to demonstrate why it believes that it has been overcharged for WES10 services. Our analysis of whether BT has overcharged Virgin for WES10 services is therefore limited to the period 1 April 2008 to 31 March 2009.

7.20 Virgin also told us in its response to its 24 March section 191 notice that BES1000 connections in 2006/07 were not in dispute. In the same response it also stated that BES100 connections were not in dispute in 2006/07. We therefore treat BES100 and BES1000 connections as not in dispute between Virgin and BT in 2006/07.

Conclusion regarding services in dispute

7.21 In light of the assessment that we have carried out above, we have concluded that we should investigate in greater detail whether BT has overcharged the Disputing CPs for the services set out in Tables 7.2, 7.3 and 7.4 below in the years identified.

Table 7.2: Services to be investigated for overcharging – Sky and TTG

	04/05	05/06	06/07	07/08	08/09	09/10*
BES100 rental		X	X	X	X	X
BES1000 rental		X	X	X	X	X
BES100 connection		X	X	X	X	X
BES1000 connection		X	X	X	X	X
WES10 rental						
WES100 rental						
WES1000 rental						
Main link rental			X	X	X	X

** 2009/10 from 1 Apr 2009 to 31 Jul 2009*
Source: Annex 1 of Sky and TTG's Joint Dispute Submission

Table 7.3: Services to be investigated for overcharging – Virgin

	04/05	05/06	06/07	07/08	08/09	09/10
BES100 rental			X	X	X	
BES1000 rental			X	X	X	
BES100 connection				X	X	
BES1000 connection						
WES10 rental					X	
WES100 rental			X	X	X	
WES1000 rental			X	X	X	

Source: Paragraphs 20 and 24 of the Virgin Dispute Submission and response to its 24 March section 191 notice.

Table 7.4: Summary of the disputed services

	04/05	05/06	06/07	07/08	08/09	09/10*
BES100 rental		ST	STV	STV	STV	ST
BES1000 rental		ST	STV	STV	STV	ST
BES100 connection		ST	ST	STV	STV	ST
BES1000 connection		ST	ST	ST	ST	ST
WES10 rental					V	
WES100 rental			V	V	V	
WES1000 rental			V	V	V	
Main link rental			ST	ST	ST	ST

** 2009/10 from 1 Apr 2009 to 31 Jul 2009*
Source: Summary of Tables 7.2 and 7.3

7.22 As noted in paragraphs 3.10 and 3.11, Ofcom received no representations as to the scope of the Disputes which is:

> *"To determine whether, during the Relevant Period:*[66]
>
> *i. BT has overcharged the Parties*[67] *for the BES and/or WES products concerned and, if so;*
>
> *ii. by how much the Parties were overcharged during the Relevant Period; and*
>
> *iii. whether and by how much BT should reimburse the Parties in relation to the overcharge."*[68]

[66] The 'Relevant Period' was defined as being the period between 24 June 2004 and 31 July 2009.
[67] i.e. the Disputing CPs.

Section 8

Which charges should be cost orientated?

Overview

8.1 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. This is a key issue in these Disputes because BT contends that services should be aggregated and that it is the charge for aggregated services that should be considered by Ofcom. In contrast, the Disputing CPs consider that the charges should be considered on a disaggregated basis. In this section we therefore consider the appropriate approach to aggregation in these Disputes.

8.2 The section is structured as follows:

8.2.1 our consideration of the explicit requirements of Condition HH3.1 and the precedent provided by the PPC Judgment;

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

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

The requirements of Condition HH3.1

Condition HH3.1

8.3 As noted at paragraph 2.11, Conditions HH were initially imposed on BT following an analysis of the AISBO market and a finding by Ofcom that BT has SMP in that market in the 2004 LLMR. They were subsequently re-imposed by Ofcom as a result of a further analysis of the AISBO market in the 2008 BCMR. Conditions HH applied initially to the AISBO market at all bandwidths; since the 2008 BCMR they have applied to the low bandwidth AISBO market,[69] including the BES and WES services in dispute.

8.4 Condition HH3.1 requires that:

> *"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 HH1 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."*

[68] The scope was published in Ofcom's Competition and Consumer Enforcement Bulletin - see http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/open-cases/all-open-cases/cw_01052/.
[69] Up to and including 1 Gbit/s.

8.5 Condition HH1 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.

8.6 Given the explicit requirements of Condition HH3.1, 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

8.7 This view is in accordance with the findings of the CAT in the PPC Judgment, which we consider directly relevant to our application of Condition HH3.1 in these Disputes.[70]

8.8 The wording of Condition HH3.1 is identical to the wording of SMP Condition H3.1, which 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). Like Condition HH3.1, Condition H3.1 was first imposed by Ofcom in the 2004 LLMR and subsequently re-imposed in the 2008 BCMR.

[70] We note that in its letters to Ofcom of 10 and 25 August 2010, BT argued that the meaning of "each and every charge" was a similarity or "cross-over" issue which prevented full and effective resolution of the Disputes before the outcome of the PPC appeal was known.

8.9 Condition H3.1 was applied by Ofcom in the PPC 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.

8.10 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*"[71] 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>."*[72] (Emphasis added)

8.11 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"*.[73]

8.12 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.[74]

8.13 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."*[75]

Assessment of aggregation in these Disputes

8.14 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.

8.15 Not only do we consider this approach to be consistent with the explicit requirements of Condition HH3.1 and the precedent provided by the PPC Judgment, but we also consider it is reflected in BT's approach to connections and rentals. BT has published separate data for connections and for rentals in its RFS since 2006/07; as set out in Section 6, BT publishes separate connection and rental charges for the services in dispute in the Openreach Price List.

8.16 BT argues however that we should consider cost orientation on an aggregated basis and we consider its arguments, and those of the Disputing CPs, below.

[71] PPC Judgment, paragraph 214.
[72] PPC Judgment, paragraph 228.
[73] PPC Judgment, paragraph 228.
[74] PPC Judgment, paragraph 228.
[75] PPC Judgment, paragraph 229.

BT's views

8.17 BT claims that:

> "*Ofcom should not focus exclusively, or even primarily, on the individual DSACs of each and every product. It goes without saying that BT's charges can be cost orientated even though the charge for an individual product is above DSAC. BT cannot be expected mechanistically to demonstrate that individual charges for each and every single charge or product always fell below DSAC*."[76]

8.18 BT argues that:

> *"...it would be wholly wrong to assume that Ofcom's approach to resolving the PPC dispute and/or the CAT's Judgment on the subsequent appeal in any way support a read across of a rigid approach to compliance based on comparing observed revenues with observed DSACs at a granular service level*".[77]

8.19 BT argues first that we should consider aggregation across the market as a whole. It considers the following factors are relevant in this regard:

8.19.1 the absence of aggregation across markets;

8.19.2 the absence of a charge control;

8.19.3 aggregation in BT's RFS; and

8.19.4 the nascent state of the market.

8.20 Notwithstanding BT's position that we should consider aggregation across the market as a whole, it also argues that we should aggregate connection and rental charges for each bandwidth. BT additionally argues that we should aggregate main link and rental charges.

Market level aggregation

8.21 BT's primary argument is that we should consider aggregation across the market as a whole. We set out its specific arguments in support of this approach at paragraphs 8.21 to 8.27 below.

<u>Absence of aggregation across markets</u>

8.22 In these Disputes, BT claims that it "*is not seeking, and has not sought, to "*aggregate*" across two separate markets, which have two distinct (and, as the CAT, found entirely unconnected) obligations in the way that the CAT held BT had done for Trunk services and TISBO [Traditional Interface Symmetric Broadband Origination] services. Accordingly the arguments considered and dismissed by the CAT on aggregation, at §§218-226 of the Substantive PPC Judgment, have no application to this case*."[78]

[76] BT's 20 May submission, paragraph 69.
[77] BT's 20 May submission, paragraph 3.
[78] BT's 20 May submission, paragraph 30(i).

Absence of a charge control

8.23 BT argues that, as there were no charge controls in place in relation to the services in dispute during the Relevant Period, there is therefore no prospect of distorting charge control incentives through aggregation. BT considers that "*Ofcom made it clear it considered this an important consideration in the separate treatment of trunk segments in the case of PPCs*".[79]

RFS aggregation

8.24 In the early years of the Relevant Period, BT reported data on the AISBO market in its RFS on a considerably more aggregated basis than in the later years. BT argues that aggregation of services within the AISBO market is therefore further justified as "*Ofcom itself implicitly acknowledged this in only requiring in the RFS a breakdown for the market as a whole in 2004/05 and for only two items in 2005/06*".[80]

8.25 BT further argues that:

> *"Ofcom itself has acknowledged that the emerging nature of the AISBO market meant that an overly granular focus was an inappropriate tool for cost orientation. Ofcom specifically prescribes the individual elements in respect of what information is to be published in the RFS. Such was the emerging nature of the AISBO market that:*
>
> *(a) for the year to 31 March 2005 (the first year after the implementation of the cost orientation obligation in the AISBO market), in the AISBO market, BT was required only to publish a DSAC, DLRIC and FAC for SHDS (Short Haul Data Services); and*
>
> *(b) for the year to 31 March 2006 (the second year after the implementation of the cost orientation obligation in the AISBO market) BT was required only to publish a DSAC, DLRIC and FAC for i) Wholesale and LAN Extension Services in aggregate and (ii) Backhaul Extension Services in aggregate."*[81]

Aggregation at the market level as the market was nascent

8.26 BT argues that, as the AISBO market was a nascent market during the Relevant Period, we should aggregate data at the level of the entire AISBO market when assessing cost orientation:[82]

> "...*certainly until the market had become properly established, BT is entitled to use as a parameter for gauging its cost orientation, indicia (including where appropriate DSAC) for the AISBO market* *<u>as a whole</u>*".[83]

8.27 BT contends that AISBO services were not clearly identified and established when the cost orientation obligation was imposed in 2004.[84] It argues that, as a consequence, there was none of the "pre-existing history" of product development and cost allocation that had been established with PPCs.

[79] BT's 8 December submission.
[80] BT's 20 May submission, paragraph 70.
[81] BT's 20 May submission, paragraph 36.
[82] BT's 20 May submission, paragraph 70.
[83] BT's 20 May submission, paragraph 32(iii).
[84] BT's 20 May submission, paragraph 26.

8.28 Furthermore, BT also argues that in a developing market (such as the AISBO market):

> "*A new product cannot be considered in isolation given that (a) the common costs are spread across the market and (b) the risk of whether a new product succeeds or fails is necessarily borne by that market.*"[85]

Rental and connection charges aggregation

8.29 BT argues that, notwithstanding its arguments in relation to aggregation at the entire market level, "*the lowest level of aggregation that might be deemed appropriate*"[86] is aggregation of local end rentals and connections. It argues this on the basis that:

8.29.1 local end rentals and connections are not separate services[87]. They are always purchased in combination with one another, and "*they are only ever purchased in fixed proportion to each other*";[88] and

8.29.2 Ofcom considered local end rentals and connections in aggregate for the purposes of assessing start charge changes in the 2009 LLCC[89].

Main link and rental aggregation

8.30 In BT's 8 December submission, BT argued that local end rentals and main link rentals should be considered in aggregate. BT's arguments were as follows:

8.30.1 main link rentals cannot be purchased in isolation; and

8.30.2 main link and local end rental services both enable CPs to serve end users where they are not directly connected to the CP's network and, as such, fulfil the same economic function.[90]

Disputing CPs' views

8.31 The Disputing CPs submitted that we should assess BT's compliance with its cost orientation obligation by considering the different charges which BT makes on a disaggregated basis. Their arguments were primarily based on the wording of Condition HH3.1. However, they also noted that the elements that make up BES and WES circuits (i.e. rentals, main links and connections) were not purchased by CPs in fixed proportions.[91]

8.32 In the Joint Dispute Submission, Sky and TTG observed that *"rental and connection will be used in different proportions depending on the length of time a circuit is rented for; and the length (and cost) of the main link will differ by customer and exchange"*. They considered that economic harm might result if charges were considered on anything other than a disaggregated basis.[92]

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[85] BT's 20 May submission, paragraph 70.
[86] BT's 20 May submission, paragraph 98.
[87] BT's 8 December submission, page 3.
[88] BT's 20 May submission, paragraph 72.
[89] BT's 20 May submission, paragraph 71.
[90] BT's 8 December submission, page 3.
[91] Joint Dispute Submission, paragraphs 39 to 40; Virgin Dispute Submission, paragraphs 32 to 33.
[92] Joint Dispute Submission, paragraph 40.

8.33 Virgin considered that because *"Ethernet services (main link rental, local end connection and local end rentals)… are not purchased in fixed proportions"*, if charges were considered on an aggregated basis, Ofcom would be required *"to carry out a series of cost orientation tests that differ by carrier. In the interests of regulatory certainty it is more appropriate to apply the DSAC test to each and every individual charge."*[93]

8.34 Sky and TTG also argued that *"BT must have understood the Condition to apply on a charge-by-charge basis because it reports connection, rental and mainlink costs separately in its RFS"*; and that some of the costs associated with the products are distinguishable from each other.[94]

Ofcom's views

Market level aggregation

<u>Absence of aggregation across markets</u>

8.35 At the outset Ofcom considers that BT's view, set out at paragraph 8.16, appears at variance with the wording of the SMP obligation which requires that *"each and every charge offered payable or proposed for Network Access… is reasonably derived from the costs of provision"*.

8.36 As BT notes, in these Disputes it is only seeking to aggregate services within a single market, rather than across markets as it did in the PPC appeal. However, the CAT not only rejected BT's arguments in relation to aggregating across the terminating segment and trunk markets but it also went on to reject aggregation <u>within</u> the trunk market. It concluded 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</u> i.e. the charge for each bandwidth must be cost orientated.*"[95] [Emphasis added]

8.37 We therefore disagree with BT when it argues that: "*BT has exclusively considered cost orientation in respect of the <u>single</u> AISBO market (and the products wholly within that market). The Substantive PPC Judgment was <u>not</u> considering this situation,*" [96] [emphasis original] and we consider the CAT's findings as to the charges which must be cost orientated are relevant to this case. Rather, we consider that separate charges will generally provide economically meaningful signals for potential purchasers to take into account in their decisions on matters such as which services to purchase and from which suppliers, and in investment decisions about self-provision or entry.

[93] Virgin Dispute Submission, paragraph 33.
[94] Joint Dispute Submission, paragraph 40.
[95] PPC Judgment, paragraph 228.
[96] BT's 20 May submission, paragraph 30(i).

Absence of a charge control

8.38 BT is correct to note that none of the services it is seeking to aggregate were subject to a charge control during the Relevant Period.[97]

8.39 In the PPC Judgment the CAT considered that the potential for an aggregated approach (in particular aggregation of trunk and terminating segments) to undermine the charge control on particular services was a "*strong point in favour*" of the disaggregated approach.[98]

8.40 However, as explained above, the CAT's conclusion on which charges must be cost orientated was based on its construction of Condition H3.1. We do not consider that the absence of a charge control suggests we should construe Condition HH3.1 differently. Our view that separate charges will generally provide economically meaningful signals for potential purchasers, noted at paragraph 8.36, holds regardless of the existence or absence of a charge control.

RFS aggregation

8.41 In addition to cost orientation obligations, BT has obligations in relation to accounting separation and cost accounting for the markets in which it has SMP. BT seeks to fulfil those obligations by producing annual RFS. Within these RFS, BT reports unit volumes, average charges, unit FACs, unit DSACs and unit DLRICs for a range of services. Data for the services in dispute has been reported on an increasingly disaggregated basis (such as by bandwidth) over the Relevant Period, as set out in Table 8.1.

Table 8.1: Level of service aggregation

Year	Services
2004/05[99]	Short Haul Data Services (SHDS) only (i.e. aggregation at the market level)
2005/06	Wholesale and LAN Extension services in aggregate
	BES in aggregate[100]
	No split by bandwidth, or by rental, connection and main link
2006/07	For each BES bandwidth – with rental and connection services listed separately
	For each WES/WEES[101] bandwidth – with rental and connection services listed separately
	Main link data was aggregated with rental services
	BES services listed 100Mb/s, 1000Mb/s and "Other" bandwidths

[97] The charge control imposed in the LLCC 2009 commenced on 1 October 2009, which was outside the Relevant Period.
[98] PPC Judgment, paragraph 227.
[99] We do not consider that any services were in dispute in this year.
[100] The total revenue associated with these services was only around [£6 million].
[101] WEES are Wholesale End to End Services, see Annex 7 for more detail.

Year	Services
	WES services listed 10Mb/s, 100Mb/s, 1000Mb/s and "Other" bandwidths
2007/08	As in 2006/07, but main link services were reported separately from rental services

Source: Ofcom based on published RFS in each year

8.42 For the purposes of reporting financial data in its RFS, Ofcom has permitted BT to merge some "low value services" where operating costs are typically less than £10 million per annum.[102] Ofcom made clear that this was permitted in order to reduce the regulatory burden on BT, but that BT "*will however retain data at service level and make this available to Ofcom.*"[103]

8.43 If BT was required to report the revenue, DSAC, DLRIC and FAC associated with every single charge listed in its price list, the cost accounting obligation could become too onerous. In setting reporting requirements we have therefore sought to strike a balance, requiring BT to publish the information needed by Ofcom and by other CPs but *"avoiding undue emphasis or excessive analysis effort on immaterial activities"*.[104]

8.44 However, BT must be able to demonstrate to our satisfaction that those charges covered by a cost orientation obligation are compliant with that obligation. The fact that BT is not required to publish the information to demonstrate this in its RFS does not mean it need not be able to provide it if required.[105] As such, in our view BT cannot infer from the aggregated approach to financial reporting that was permitted, particularly in the early years of the Relevant Period, that an aggregated approach to cost orientation is appropriate.

8.45 Even where BT's RFS include more disaggregated data (i.e. from 2006/07 onwards), they do not disaggregate data to the level contained in the Openreach Price List. For example, while the Openreach Price List sets out charges for variants of BES1000 ('standard', 'daisy chain', 'extended reach' and 'term' rentals), BT's RFS only includes details on 'BES1000' rentals, i.e. BT aggregates all variants of BES1000 and reports them under the heading 'BES1000 rentals' in the RFS. We have been unable to robustly disaggregate the cost and revenue data that relates to the different variants. The implications of this are discussed further at paragraphs 12.9 to 12.14 below.

8.46 For the reasons set out above, we disagree that the aggregation of services in the RFS in the earlier years of the Relevant Period suggests that an aggregated assessment of cost orientation is appropriate.

Aggregation at the market level as the market was nascent

8.47 When considering which SMP remedies to adopt in relation to the AISBO market in the 2004 LLMR, we acknowledged the relative immaturity of the market:

[102] Paragraph 6.8 of "Proposed changes to BT's regulatory financial reporting framework" – Regulatory reporting May 2005 http://stakeholders.ofcom.org.uk/binaries/consultations/regfinch/summary/regfinch.pdf

[103] *ibid*, paragraph 6.10.

[104] *ibid*, paragraph 6.1.

[105] We discuss the availability of data not published in the RFS in Section 11.

> *"The AISBO market is in a relatively early stage of development and it is necessary to give time for the effects of the cost orientation obligation to impact on the competitiveness of the market before considering whether a price control is necessary"*[106]*.*

8.48 The developing nature of the AISBO market was therefore a relevant factor in our decision not to impose a charge control on the Ethernet services. However, we nevertheless considered it appropriate to impose a cost orientation obligation.

8.49 A number of factors are in our view relevant when considering BT's arguments about the relative immaturity of the AISBO market:

8.49.1 First, although the AISBO market may have been nascent for part of the Relevant Period, the wording of the cost orientation obligations imposed on different markets as a result of the 2004 LLMR[107] applies the same requirements regardless of whether the services are in nascent or mature markets;

8.49.2 Second, we confirmed in the 2004 LLMR Statement that the cost orientation obligation imposed on the AISBO market covered <u>all</u> services in the market, including any new services introduced by BT:

> "*The condition will apply across all services within this market. This means that the price of all services provided by BT in the market should be based on LRIC and allowing an appropriate mark-up for the recovery of common costs.*"[108]

> "*Ofcom confirms that all new services that are introduced into this market will be covered by the same pricing rule*".[109]

8.49.3 Third, under Condition HH3.2, Ofcom can direct that a charge need not be set on a forward-looking LRIC basis, if BT wishes to set a price for a service in the market on another basis and Ofcom determines it is appropriate[110]. We did not issue such a direction with respect to any service in the AISBO market.

8.50 BT argues that in 2004 "*AISBO services were not clearly identified*".[111] It further argues that "*BT's products and the precise allocation of costs to this AISBO market were thus not at all established or clear-cut*".[112] BT appears to argue that this supports an approach based on aggregating charges and costs across the entire AISBO market.

8.51 We acknowledge that where services are new and future demand is uncertain, firms may have difficulty in ensuring that the charges for individual services remain aligned to the costs of those services and may make forecasting errors that lead to charges exceeding the appropriate cost benchmark.

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[106] 2004 LLMR Statement, paragraph 7.63.
[107] Conditions G3.1, GG3.1, H3.1 and HH3.1.
[108] 2004 LLMR Statement, paragraph 7.57.
[109] 2004 LLMR Statement, paragraph 7.58.
[110] 2004 LLMR Statement, paragraphs 7.59(ii) and 7.60.
[111] BT's 20 May submission, paragraph 26.
[112] BT's 20 May submission, paragraph 28.

8.52 However, as we explain in more detail in Section 9, in our view the appropriate response to this uncertainty is not to consider services in aggregate, as proposed by BT, but to ensure that assessment of the individual affected charges is not based on a mechanistic application of a cost benchmark.[113] Where there is evidence that the specific circumstances faced by a firm in relation to a service gave rise to what might appear to be a breach of a cost orientation obligation, those circumstances should be taken into account in assessing the appropriateness of the charge for that service.

8.53 We have a number of additional observations in relation to BT's argument that AISBO services and the costs of those services were not clearly established in 2004:

8.53.1 Although a number of the services within the AISBO market were relatively new wholesale services in the early years of the Relevant Period, they had existed for a number of years previously as retail services. As such, the underlying products and the costs of provision were perhaps more developed and should have been better understood than is implied by BT's contention that these services were nascent;

8.53.2 Even if the products were relatively new, their nature and specification must have been understood by both BT and its customers in order for them to be commercially useful. Again, this view is reinforced by the fact that there were prior retail services;

8.53.3 Even if the wholesale products were new, BT had an obligation to ensure that its charges were cost orientated. As such, it needed to ensure that mechanisms were put in place to enable it to understand its cost base when offering the products;

8.53.4 BT has not provided any specific evidence of difficulties in establishing the cost base for these services. If it were able to do so then we would consider any such evidence. Furthermore, we have reviewed BT's internal pricing papers prepared for its internal pricing governance process[114] and can find no evidence of such difficulties within these papers. We discuss these pricing papers further at paragraphs 10.100 to 10.101.

8.54 BT makes two additional arguments in relation to why services in a developing market should not be considered in isolation. First, it argues that services cannot be considered in isolation because "*the common costs are spread across the market*"[115]. BT's submission does not elaborate on this point and consequently its precise argument is unclear to us. However, the following observations are likely to be relevant:

8.54.1 There are some common costs that are particular to individual markets, but there are also very significant common costs (such as duct) which are common to a wide range of markets, whether developing or not. As such it is unclear why the existence of common costs justifies an aggregated approach to our assessment of cost orientation in these Disputes;

[113] As we explain in more detail in Section 9 we consider this approach to be consistent with the CAT's findings in the PPC Judgment in relation to ensuring that cost orientation is not assessed in a mechanistic manner.
[114] These WPAG papers were provided to Ofcom under our information gathering powers for the purposes of resolving these Disputes.
[115] BT's 20 May submission, paragraph 70.

8.54.2 It is important that an allowance is made for common costs when BT sets its prices. Indeed this is explicitly referred to in Condition HH3.1. The application of DSAC and DLRIC (as pricing ceiling and floor) on a disaggregated basis generally provides BT with appropriately bounded pricing flexibility for it to efficiently recover its common costs, given the typical range between DLRIC and DSAC.[116]

8.55 Second, BT argues that services cannot be considered in isolation in a developing market because "*the risk of whether a new product succeeds or fails is necessarily borne by that market".* Again, BT does not elaborate on this point and so its precise argument is unclear to us, such as the nature of the risk and why this justifies adopting an aggregated approach to assessing cost orientation. The potential for a highly uncertain outcome with a significant *ex ante* risk that any given product may succeed or fail may be a relevant consideration in deciding whether the pricing flexibility implied by a given cost benchmark is appropriate (as we explain further in paragraph 9.78), but it does not appear to us to provide strong justification for considering charges in aggregate.

8.56 In conclusion, we see no compelling justification for departing from the wording of Condition HH3.1 on the basis of BT's argument that the AISBO market was a nascent market during some of the Relevant Period.

Purchasing patterns

8.57 Where CPs purchase services in varying proportions, it is important that each charge is individually cost orientated. This is because the prices will generally provide economically meaningful signals for potential purchasers to take into account in their decisions on matters such as which services to purchase and from which suppliers, and in investment decisions about self-provision or entry. As the CAT noted in the PPC Judgment:

> *"...the purchaser of 2 Mbit/s trunk 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."*[117]

8.58 If cost orientation were assessed on an aggregated basis, this would allow BT to charge a high price for service A (relative to costs), and a low price for service B (relative to costs). While in aggregate, prices might be similar to costs, those who bought relatively more of service A would be disadvantaged relative to those who bought relatively more of service B, and both groups of CPs would face distorted price signals.

8.59 As we illustrate in Figures 8.1, 8.2 and 8.3 below[118], CPs can and do buy the various AISBO services in differing proportions. Therefore, the separate charges for the different services are generally economically meaningful signals. Aggregation at the market level would permit cross-subsidisation between the WES and BES families of products, as well as between different products within each of the WES and BES families. This in general supports a disaggregated approach to assessing whether charges were cost orientated.

[116] See paragraphs 11.47 to 11.48.
[117] PPC Judgment, paragraph 228.
[118] We have illustrated this point in Figures 8.1 to 8.3 by reference to 2007/08. However, we consider this point should remain valid for other years in the Relevant Period.

Figure 8.1: BT billed revenues by CP split by WES and BES services, 2007/08

[✄]

Note: excludes WES and BES other and main link services
Source: Ofcom based on BT billing data

Figure 8.2: BT billed revenues by CP split by rental, connection and main link, 2007/08

[✄]

Note: connection data not included for WES services
Source: Ofcom based on BT billing data

Figure 8.3: BT billed revenues by CP split by bandwidth, 2007/08

[✄]

Note: connection data not available for WES services and BES10
Source: Ofcom based on BT billing data

Rental and connection charges aggregation

8.60 We address BT's arguments in relation to aggregation of rental and connection charges under two headings: (i) Ofcom's approach to starting charges in the 2009 LLCC Statement; and (ii) fixed proportions.

<u>Ofcom's approach to starting charges in the LLCC 2009</u>

8.61 We consider that assessing cost orientation and setting a charge control are two distinct regulatory activities and the approach taken in one does not imply the correct approach to take in the other.

8.62 When services are subject to a charge control, as well as applying an RPI-X glidepath we can require changes to the charges that are set at the beginning of the control period. In deciding whether to require such changes we need to balance a number of competing efficiency considerations.[119] On the one hand, inefficient entry signals and allocative inefficiency can arise where the prices of individual services are significantly out of alignment with the underlying costs of provision. On the other hand, starting charge changes can reduce a firm's incentives to reduce costs towards the end of a charge control period, if the firm believes the cost savings will be eliminated at the start of the next charge control.[120]

8.63 In general therefore, we prefer to make as few starting charge changes as possible, and to allow BT to use the flexibility within the charge control design to adjust its charges where necessary. However, in cases where charges are materially out of alignment with underlying costs, starting charge changes may be the most

[119] 2008 LLCC Consultation , paragraph 5.45.
[120] We explain these competing considerations and our principles for making one-off adjustments to start charges in paragraphs 3.216 to 3.223 of the 2009 LLCC Statement.

appropriate course of action. For example, we required BT to make a one-off reduction to the starting charge for BES1000 rental of 17% in the 2009 LLCC.[121]

8.64 In that case, we established the appropriate level of the starting charge for BES1000 rental by comparing the aggregate connection and rental prices over the contract life of an AISBO circuit (assumed to be three years) to the aggregate of our adjusted DSAC values for these services. We explained that in considering possible start charge adjustments, we had looked at BT's rental and connection costs (for each BES and WES service) together, as those charging elements fall in the same economic market; BT's wholesale customers would necessarily consume them together; and it is not always clear what the optimal structure of charges is, and what the balance should be between up front (connection) and recurring (rental) elements for efficient recovery of costs[122]. We said that in formulating the start charge adjustments, we had *"taken an initial view of how BT would be required to comply with its cost orientation requirement. This is not a definitive position in relation to BT's compliance with its cost orientation obligation, but it does reflect our interpretation of the requirement based on the information currently available."*[123]

8.65 We do not agree with BT that we are required to take the same approach to assessing BT's compliance with its cost orientation obligations. Indeed, we said explicitly in the 2009 LLCC that our approach to starting charge adjustments was "*without prejudice to cost orientation*".[124] We further noted that "*cost orientation issues are not within the scope of the LLCC*".[125] As we stated when we set Condition HH3 in the 2008 BCMR Statement, *"although the charge control conditions will… limit average charges, they do not in themselves control the level of individual charges within a basket subject to an average charge control. In the absence of this* [cost orientation] *condition, BT might set individual charges at excessively high or anti-competitvely low levels within a basket."*[126]

8.66 The adjustment to BES1000 rental charges was not intended to ensure that BT was compliant with its cost orientation obligation.[127] Rather it was intended to strike a balance between the competing efficiency considerations we have identified in paragraph 8.61 above, in the knowledge that any such starting charge changes would be complemented by the cost orientation obligations.[128] In our view, assessing compliance with cost orientation obligations is a regulatory exercise distinct from setting starting charges for a charge control and it is important not to confuse the two, not least because:

8.66.1 the process of setting starting charges for a charge control involves the use of historical data that may relate to two financial years or more prior to the start of the charge control (i.e. it may not necessarily reflect costs when the starting charges come into force); and

8.66.2 there may be specific circumstances which mean that a charge which appears to fail a DSAC test (using non-contemporaneous cost data) is nevertheless still cost orientated.

[121] 2009 LLCC Statement, paragraph 5.89.
[122] 2009 LLCC Statement, paragraph 3.235.
[123] 2009 LLCC Statement, paragraph 3.241.
[124] 2009 LLCC Statement, paragraph 5.90.
[125] 2009 LLCC Statement, paragraph 3.227.
[126] Table 8.11 of the 2008 BCMR Statement
[127] 2009 LLCC Statement, paragraph 5.90 and 5.94.
[128] See, for example, 2009 LLCC Statement, paragraphs 3.228 to 3.231and 3.240.

8.67 Finally, BT cannot argue that it took any comfort or guidance from the 2009 LLCC Statement when considering the appropriateness of its charges, as the 2009 LLCC Statement was published after the charges in dispute were set.

Fixed proportions

8.68 In this sub-section we consider BT's arguments that local end rentals and connections are always purchased in combination and in fixed proportion to each other.

8.69 We acknowledge that connections and rentals are only useful together, and that there is an initial period in which they are purchased together and in fixed proportions. BT is contractually able to set a minimum rental period, typically of one year.

8.70 However BT charges for connections and rentals separately: we note that these charges are listed as separate items in the Openreach Price List, and that the connection charge is a one off charge whereas the rental charge is recurring. Given the wording of Condition HH3.1, we place substantial weight on this fact.

8.71 Further, connections and rentals have been reported separately in the RFS since 2006/07. Connection and rental charges have different costs associated with them and, in the LRIC model, connections and rentals have different underlying network components

8.72 In addition, although they are purchased together, we do not agree with BT that rentals and connections "*are only ever purchased in fixed proportion to each other*". For example, the proportions vary with the length of time for which circuits are purchased. As the Disputing CPs submit, and as illustrated at Figures 8.1 to 8.3 above, CPs can and do buy the services in differing proportions.

8.73 The variations in purchasing patterns suggest that aggregation of all rental and connection charges for each bandwidth within a financial year could give rise to distorted price signals and cross-subsidisation between different groups of customers.

8.74 For example, if rental charges were "too high" but connection charges are "too low", such that over one year the aggregate revenues are below cost and over two years the aggregate revenues are above cost, then the CP purchasing the two year circuit will be facing a charge which is cross-subsidising the CP purchasing the one year circuit. As noted in paragraph 8.12 above, the CAT found such scope for cross-subsidisation a *"powerful pointer"* in favour of a disaggregated approach.

8.75 BT refers in its 20 May submission to a letter written by Ofcom to BT on 6 December 2010 about the interpretation of BT's cost orientation obligations in the Wholesale Line Access market.[129] Ofcom wrote in that letter:

> *"With regard to the question of connections and rentals, we recognised in the PPC appeal that it made sense to look at services together if they are bought in fixed proportions. Connections and rentals have an element of fixed proportions through minimum contract periods, although there is also a variable element as contract periods vary. This is one of the issues we would be likely to consider in*

[129] BT's 20 May submission, footnote 32.

an assessment of cost orientated charges for those WLA services which are subject to the cost orientation requirement."

8.76 We do not consider that BT can establish a legitimate expectation in law that would have the effect that Ofcom would be required to aggregate rental and connection charges when considering cost orientation on the basis of this letter. Ofcom is not precluded from exercising its discretion to resolve disputes in accordance with its statutory duties and functions.

8.77 As noted in the PPC Judgment, the conduct relied upon to create a legitimate expectation must be "*clear, unambiguous and devoid of relevant qualification*"[130]. The letter, which was written in the context of a different market, says that Ofcom would "be likely to consider" the issue of connections and rentals: it gave no assurance as to future Ofcom conduct.

8.78 In addition, the CAT found that *"Members of the public […] have an expectation that public law instruments* [such as Condition H3.1] *will be interpreted and applied according to their terms. Here, we are very conscious that were BT to have a legitimate expectation in relation to Condition H3.1 that was* <u>*different*</u> *to that of the Altnets, applying Condition H3.1 in accordance with BT's legitimate expectation might very well be unfair to the Altnets. We consider this to be a relevant factor in assessing whether BT's reliance on any statements or representations that may have been made by OFCOM was reasonable*."[131] [Emphasis in original]. We do not consider that Ofcom can be precluded from applying the clear words of Condition HH3.1.

8.79 Finally, the letter was written on 6 December 2010, while BT's charges are disputed for a period up until 31 July 2009. The letter cannot create a legitimate expectation for a prior period.

8.80 We therefore disagree with BT that aggregating the connection and rental charges for each bandwidth is the correct approach for resolving these Disputes. In any event, the words of Condition HH3.1 explicitly require that each and every charge is cost orientated.

Main link and rental charges aggregation

8.81 The local end rental charge is an annual charge per local end whilst the main link charge is a per km charge based on the distance between exchanges. BES and WES services do not require a main link if the circuit is a local circuit (where both ends of the circuit are served by the same BT exchange). However, a main link cannot be purchased in isolation from a local end.[132]

8.82 While main link services cannot be purchased in isolation, it is possible to purchase local end rental services on their own. Therefore the situation is similar to that considered in the PPC Final Determinations in relation to the aggregation of trunk and terminating segments. In this case the main link service is analogous to the trunk segment in that it cannot be purchased in isolation. However its price is still a meaningful economic signal because CPs can and do purchase main link and local end services in varying proportions (as demonstrated in Figure 8.4 below). As the

[130] Bingham LJ in *R v Inland Revenue Commissioners ex p MFK Underwriting Agents Limited* [1990] 1 WLR 1545, quoted at paragraph 207(1) of the PPC Judgment.
[131] PPC Judgment, paragraph 207(5).
[132] See Section 6 for an illustration of the constituent parts of an Ethernet circuit.

separate charges are individually meaningful economic signals, the nature of the services would tend to support a disaggregated approach to assessing cost orientation.

Figure 8.4: BT billed revenues by CP split by Rental and Main Link, 2007/08

[✂]

Source: Ofcom based on BT billing data

8.83 We note that in this case, the two services are within the same economic market, whereas in the PPC Disputes the two segments were in different markets. However, the economic rationale for disaggregation does not rely on the two services being in different markets.

8.84 Furthermore, the aggregation of rentals and main link raises the risk of cross subsidisation between different groups of CPs who purchase the two services in different proportions. If local end charges were "too high" (relative to costs) and main link charges "too low" (relative to costs), this would tend to be to the disadvantage of CPs who purchased a relatively lower proportion of main link (or in the extreme case, no main link services). As noted in paragraphs 8.12 and 8.71 above, the CAT found such scope for cross-subsidisation to be *"a powerful pointer in favour"*[133] of a disaggregated approach.

8.85 We note that BT is correct to contend that local ends and main links both "connect" CP networks with the BT network. However because they connect networks in a different manner, they are sufficiently different that they could not be considered to be performing the same economic function, and as such are closer to complements than substitutes for each other.

8.86 We therefore consider that the nature of local end rental and main link services and the way in which they are purchased suggests that it is appropriate to assess the cost orientation of each charge separately.

[133] PPC Judgment, paragraph 228.

Conclusions on aggregation

8.87 In assessing whether BT's disputed charges were consistent with its cost orientation obligations during the Relevant Period, we must determine the appropriate level of aggregation for the assessment. The Disputing CPs argue that the assessment should consider each charge in dispute separately, consistent with the approach adopted by Ofcom and the CAT in the PPC Disputes. However, BT argues that the circumstances of this case suggest that a more aggregated approach is appropriate.

8.88 BT lists separate charges for connections and rentals in the Openreach Price List. Further, the connection charge is a one off charge, whereas the rental charge is recurring. Given the wording of Condition HH3.1, we place substantial weight on this fact.

8.89 In its PPC Judgment, the CAT concluded that the words *"each and every charge offered"* rendered the test for cost orientation applicable separately to each discrete service to which it applied. Furthermore, it could not see how either Ofcom or the Tribunal itself could sanction an approach to cost orientation that disregarded the clear meaning of the Condition.

8.90 BT contemplates three forms of aggregation: market aggregation, aggregation of main link and rental charges, and aggregation of connection and rental charges. We have assessed BT's arguments in relation to each of these forms of aggregation above. We do not consider that BT has made any argument which suggests that we should depart from the requirement clearly set out in Condition HH3.1. We therefore propose to resolve these Disputes on the basis of a disaggregated assessment of each individual charge in dispute.

Section 9

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

Introduction

9.1 In Section 8 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, taking into account the arguments made by the Parties.

9.2 Given the similarities[134] between these Disputes and the PPC Disputes,[135] we consider it appropriate to adopt the same approach that we adopted in the PPC Final Determinations, which were upheld by the CAT in the PPC Judgment, for resolving these Disputes. However, we acknowledge that the factual circumstances relevant to these Disputes are not identical to those of the PPC Disputes. We therefore consider in this section how we will address any differences in the factual circumstances.

9.3 The various cost concepts relevant to these Draft Determinations were discussed in detail in the PPC Final Determinations[136] and the PPC Judgment.[137] Rather than explain these concepts again in this document, we have provided brief definitions in **Annex 6**.

9.4 This section is structured as follows:

9.4.1 paragraphs 9.5 to 9.11 discuss BT's obligations in relation to cost orientation for the services in dispute;

9.4.2 paragraphs 9.12 to 9.17 discuss the implications of BT's obligations for determining the Disputes;

9.4.3 paragraphs 9.18 to 9.79 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?

9.5 The charges in dispute are subject to Condition HH3.1, a cost orientation obligation imposed on BT in the 2004 LLMR Statement. The wording of Condition HH3.1 is

[134] For example: consistency of the wording of the relevant SMP conditions and that the conditions were all imposed in the same market review for the same time period.
[135] BT's 8 December submission (prior to the handing down of the CAT's PPC Judgment) notes similarities (as well as differences) between the two disputes. It anticipated that clarity would be provided by the CAT's judgment in the PPC appeal about: the nature of the 'first order' test provided by DSAC; the degree of disaggregation at which cost orientation should be assessed; the importance that should be placed on the impact on consumers and competition; and what second order tests are appropriate and the weight that should be given to them.
[136] PPC Final Determinations, Annex 11.
[137] PPC Judgment, Section IV: "The Economics of Cost Orientation" and Annex B.

identical to that of the SMP condition which was considered in the PPC Judgment (Condition H3.1).

9.6 BT's compliance with this cost orientation obligation 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.

9.7 Condition HH3.1 (like Condition H3.1) requires that:

9.7.1 first, each and every charge covered by Condition HH3.1 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.

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

9.8 If BT is unable to fulfil these two requirements for any of the charges covered by Condition HH3.1, it will be in breach of Condition HH3.1.

9.9 The CAT considered in the PPC Judgment how the first of these requirements operates:[138]

> *"**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."*

[138] PPC Judgment, paragraph 245.

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

9.11 As the CAT noted in the quote above, and as we explained in Annex 11 of the PPC Final Determinations, there is no uniquely correct or appropriate method for allocating common costs.[139] 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".*[140]

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

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

9.13 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 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.*"[141]

[139] PPC Final Determinations, Annex A11.10.
[140] PPC Judgment, paragraph 246. See also paragraph 247.
[141] PPC Judgment paragraph 249.

9.14 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:

9.14.1 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.

9.14.2 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.

9.15 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.

9.16 In BT's 20 May submission, it argues that it should be afforded a considerable degree of freedom in how it demonstrates that its charges are cost orientated. In particular BT notes that "*no test is prescribed as to how <u>exactly</u> BT was to demonstrate cost orientation. BT is therefore not restricted in the material upon which is can rely to demonstrate compliance and is, again, accorded a considerable discretion.*"[142]

9.17 As we have explained above, BT's obligation is to be able to demonstrate "*to the satisfaction of Ofcom*" that its charges are cost orientated. We agree with BT that it is afforded discretion in this respect, as long as it can demonstrate to our satisfaction that its chosen approach is appropriate.

DSAC as an appropriate accounting mechanism for allocating costs

9.18 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.

9.19 In Section 5 of the PPC 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:

9.19.1 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;[143]

[142] BT's 20 May submission, paragraph 22(b)
[143] PPC Final Determinations, paragraph 5.56.

9.19.2 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 competition from either harmful or anti-competitive charges that could arise from boundless pricing flexibility;[144]

9.19.3 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*".[145][146]

9.20 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.*"[147]

9.21 Furthermore, the CAT found that[148]:

9.21.1 the two other approaches available to Ofcom (i.e. SAC/combinatorial testing and FAC) were not appropriate on the basis of "*FAC being too rigid and combinatorial tests being unworkable*". As a consequence it found that "*our conclusion is that in the context of orienting to cost prices like 2Mbit/s trunk, DSAC was the only practicable test to use*";

9.21.2 the operation of Condition H3.1 was "*clear and we are not persuaded that there is any legal uncertainty in the present case*". Furthermore, the CAT concluded that "*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*"; and

9.21.3 "*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 exactly what Condition H3.1 requires.*"

9.22 Given the clear similarities and overlaps between the issues in these Disputes and those considered in the PPC Final Determinations and the PPC appeal, 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".

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[144] PPC Final Determinations, paragraph 5.112.
[145] PPC Final Determinations, paragraph 5.56.
[146] 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.
[147] PPC Judgment, paragraph 307(3).
[148] PPC Judgment, paragraph 307.

9.23 BT considers that "*Ofcom should not focus exclusively, or even primarily, on the individual DSACs of each and every product.*" It then goes on to argue that: "*in a developing market like AISBO, any analysis needs first to consider rates of return within the market*"[149].

9.24 We have explained why we think that using disaggregated data to assess cost orientation is appropriate in Section 8. 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, but even in the case of developing markets, the DSAC test is of primary importance.

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

9.25 In the PPC Final Determinations we explained that we did not consider it appropriate to apply the DSAC test in a purely mechanistic manner. 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*".[150] The specific factors to be taken into account are dependent on the details of the case under consideration.

9.26 In the PPC 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.

9.27 In the PPC Judgment the CAT concluded that, although Condition H3.1 (and therefore by implication Condition HH3.1) requires Ofcom to treat prices above DSAC as intrinsically excessive and in breach of the condition[151], "*Ofcom must guard against the possible injustices of a mechanistic application of a test for the allocation of common costs*" [152]. 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*".[153]

9.28 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 (i.e. at the time it sets its charges) while we are retrospectively assessing whether it has been compliant (i.e. at the time the Disputes were brought to us). 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*

[149] BT's 20 May submission, paragraphs 69 and 70.
[150] PPC Final Determinations, paragraph 5.37.
[151] PPC Judgment, paragraph 307(3).
[152] PPC Judgment, paragraph 305.
[153] PPC Judgment, paragraph 305.

> *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.*"[154]

9.29 The CAT concluded that Ofcom acted correctly in considering:

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

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

9.29.3 the rate of return on capital employed. [155]

9.30 We discuss the role of these considerations in these Disputes in more detail in the sections below. 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*"[156] 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*"[157]. On the basis of the CAT's conclusions we do not consider economic harm in these Draft Determinations.

Magnitude and duration by which charges exceed DSAC

9.31 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[158] as part of our assessment of overcharging. This is consistent with the approach we adopted in the PPC Final Determinations.

9.32 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.[159] 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[160], it could be argued that it is unreasonable to consider that this one charge in isolation represents an overcharge.

9.33 In the PPC 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

[154] PPC Judgment, paragraphs 303 and 304.
[155] PPC Judgment, paragraph 305.
[156] PPC Judgment, paragraph 327.
[157] PPC Judgment, paragraph 329.
[158] We consider in Section 11 the DSAC data we should use for our assessment.
[159] 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.
[160] For example, as a result of an unexpected holding gain incurred on an asset used by the relevant services.

its charges appropriately. However, where charges exceeded DSAC in fewer than three financial years, we argued that consideration of the specific circumstances is warranted.[161]

9.34 Given the CAT's view of the appropriateness of our approach in the PPC Final Determinations, we propose to adopt a similar approach to resolving these Disputes. Each of the services in these Disputes is in dispute for a different length of time, ranging over a period of five financial years. Where charges exceeded DSAC in fewer than three financial years, we propose that BT's underlying reasons why BT's charges exceeded DSAC should be given more weight in determining whether it overcharged for its services.

9.35 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 PPC 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.

9.36 The CAT made it clear that the DSAC benchmark is important. Therefore, as we explain further in Section 12, in order to conclude that a charge that exceeds DSAC does not constitute overcharging due to the circumstances surrounding the pricing decision, we would need BT to provide us with a specific and evidence-based explanation of those circumstances.

BT's views

9.37 BT considers it was more difficult to accurately forecast forward looking costs in the AISBO market than the PPCs market because of the "nascent" nature of the AISBO market. BT considers that the relative immaturity of the market hindered its ability to forecast forward looking costs in two ways:

9.37.1 **A lack of historic data.** BT argues that "*until there is several years of data allowing BT to obtain meaningful projections of volumes and revenue, BT cannot confidently predict whether and how it needs to change prices*".[162]

9.37.2 **Consistently underestimating volumes.** BT argues that forecasting volumes was particularly difficult as demonstrated by a number of independent forecasts that consistently underestimated actual volumes in the AISBO market.[163]

Ofcom's views

9.38 We consider such arguments can be relevant to understanding the circumstances surrounding BT's charges and their relationship to DSAC, particularly in the early years of a product's development.[164] There may be uncertainty in the expected costs and volumes of a service, leading to uncertainty in the service DSACs. If BT was able to demonstrate that, despite reasonable endeavours, its charges exceeded DSAC as

[161] PPC Final Determinations, paragraphs 5.95 and 5.96.
[162] BT's 20 May submission, paragraph 32(i).
[163] BT's 20 May submission, paragraphs 38 and 39.
[164] As we noted in paragraphs 8.46 to 8.55 where we considered the relevance of BT's nascency of the market arguments in relation to the appropriate level of service aggregation.

a consequence of genuine difficulties in forecasting unit costs, we may consider that charges above DSAC were nonetheless cost orientated.

9.39 However, while in general we would expect to take into account the uncertainty and lack of data that BT may face in relation to setting specific charges, we would make the following observations:

9.39.1 BT may not have had a great deal of historic data for the AISBO market on which to base forecasts of volumes and costs, particularly in 2005/06 and 2006/07.[165] However, this does not relieve it from its obligations to ensure that each and every charge is cost orientated and that it can demonstrate this to us. BT could have asked Ofcom to remove or temporarily waive its obligation to set charges on a LRIC plus mark-up basis, but it did not do so.[166] We are also able to consider whether there is a range of prices which would be consistent with the cost orientation obligation, including assessing BT's rates of return on capital employed ("ROCE")[167]. We consider this further at paragraphs 9.65 to 9.83.

9.39.2 The inability of BT to accurately calculate unit DSACs for its services until after the end of the financial year is not unique to services in the AISBO market, but is true for all markets where BT has cost orientation obligations. The lack of data and uncertainty in volumes and costs may have made it more difficult for BT to forecast unit DSACs for services in the AISBO market than for services in some other markets. However, this does not mean that the DSAC test should not be applied, only that we should take account of any evidence of the potential for higher volatility of unit DSACs when considering whether a charge above DSAC is cost orientated or not.

9.40 Notwithstanding these observations, where BT provides specific evidence-based arguments as to why, given the specific circumstances of the case, a particular charge was appropriate despite failing the DSAC test, we will take these into account in our assessment in the final determinations of these Disputes.

Comparison of revenues with FAC

9.41 As set out at paragraph 5.5, the RFS reports other cost measures including FAC as well as DSAC.

Parties' views

9.42 The Disputing CPs consider that we should undertake a comparison of revenues with FAC for two purposes:

9.42.1 determining whether BT complied with its cost orientation obligations; and

9.42.2 determining the extent to which BT overcharged the Disputing CPs. [168]

[165] Although as we note in paragraph 8.52.1, while a number of the services within the AISBO market were relatively new as wholesale services over the Relevant Period, they had existed for a number of years previously as retail services.
[166] LLMR 2004, paragraph 7.60.
[167] LLMR 2004, paragraph 7.59(iii).
[168] The Joint Dispute Submission, paragraphs 45 and 48.

9.43 In the RGL Report, Sky and TTG identify two key constraints that the cost orientation obligation places on BT:

9.43.1 prices for individual services should be set between the DLRIC floor and the DSAC ceiling; and

9.43.2 a requirement that common costs should not be over-recovered.[169]

9.44 Sky and TTG recognise that DSAC is the test that Ofcom has previously used for identifying whether overcharging has taken place but consider that "*DSAC is not, however, an infallible way of measuring the degree to which BT has overcharged for BES (it is perhaps for this reason that it is only a 'first order test').*" They consider this for two reasons:

9.44.1 if BT were to charge at DSAC for all services in a market then BT would over-recover its common costs and would earn a high rate of return. They argue that BT's return would not be "appropriate" in such a scenario; and

9.44.2 a situation in which BT charges at DSAC for all its services in a market is not consistent with the outcomes of a competitive market, as such high rates of return would not be sustainable in a competitive market.[170]

9.45 In order to mitigate the perceived deficiencies of DSAC as a sole benchmark, Sky and TTG propose that we should also use FAC to conduct a cross-check to determine whether BT has complied with its cost orientation obligations.[171]

9.46 Sky submitted further representations on the use of FAC in assessing BT's Ethernet charges following the PPC Judgment. Sky argues that it is inappropriate to compare revenues to DSAC in isolation, but that there should be a comparison of revenues to FAC as well, in order to consider the degree of overcharging. It argues that:

9.46.1 a situation in which BT sets all of its charges at DSAC would not be consistent with the aim of Condition HH3.1, which Sky claims is to protect against "*excessive pricing*"; and

9.46.2 relying on DSAC alone would "*run the risk of not properly assessing whether there remained over-recovery of common costs in the AISBO market*".[172]

9.47 In its analysis of overcharging, the RGL Report annexed to the Joint Dispute Submission compares BT's BES revenues against both FAC and DSAC costs. It suggests that the services in relation to which repayment is due can be determined in one of two ways: either they should include all services for which prices were above FAC or they should only include those for which prices were above DSAC.[173] The RGL Report considers that, having made this determination, an appropriate basis for calculating the repayment due is the difference between the actual price charged and FAC.[174]

[169] Paragraph 2.3.11 of the RGL Report.
[170] The Joint Dispute Submission, paragraph 44.
[171] The Joint Dispute Submission, paragraph 48.
[172] Sky FAC submission, paragraphs 10 and 14.
[173] RGL Report, paragraph 5.2.2.
[174] RGL Report, paragraph 5.2.1.

9.48 In justifying their proposed use of FAC, Sky and TTG note that we have used FAC in previous regulatory decisions, including for the purposes of measuring BT's costs in the 2009 LLCC Statement. They also claim that we suggested using FAC when interpreting a 'Basis of Charges obligation' in the Fixed and Narrowband Service Wholesale Market Review.[175]

Ofcom's views

9.49 As discussed above, we consider that the DSAC test should play a central role in determining whether BT overcharged its external customers. However, where charges are above DSAC, we also consider the relationship of charges to FAC to determine whether a charge is nonetheless cost orientated, despite being above DSAC. The use of FAC in this manner can act as a useful cross-check to ensure that unjust outcomes are avoided. A charge being above FAC is not intrinsically an indicator that a charge is not cost orientated. However if a charge was above DSAC, and revenues were significantly above FAC, this evidence would corroborate a conclusion of overcharging.

9.50 While we agree that comparing revenues with FAC can provide a useful cross-check on the results of the DSAC test, where we identify that overcharging has occurred, we consider that DSAC rather than FAC should act as the maximum level of any charge for the purposes of quantifying the overcharge. As we explain in more detail below, our view is based on:

9.50.1 DSAC providing a greater degree of flexibility in pricing than FAC and therefore being the most appropriate measure based on the regulatory objectives for cost orientation;

9.50.2 setting all of the charges in one market at DSAC is not necessarily inconsistent with a competitive market; and

9.50.3 the use of DSAC is consistent with regulatory certainty.

Greater flexibility of DSAC

9.51 As set out in Condition HH3.1, Ofcom must consider whether BT's allocation of the common costs recovered by an individual charge is appropriate for the purposes of assessing cost orientation. In doing this, Ofcom is seeking to strike a reasonable 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 competition from harmful or anti-competitive charges that could arise from boundless pricing flexibility.

9.52 In our view, the use of DSAC strikes this balance appropriately. If FAC were used as an upper bound this would typically lead to a significant restriction on BT's pricing flexibility. No price above FAC would be permitted, and any price below FAC would result in BT failing to recover all of its common costs. The CAT considered the use of FAC in the PPC judgment and concluded:

[175] The Joint Dispute Submission, paragraphs 46 and 47. Wholesale Fixed Narrowband Services Markets Review published in September 2009 available at http://stakeholders.ofcom.org.uk/binaries/consultations/wnmr_statement_consultation/summary/main.pdf

> "*Had OFCOM sought to use FAC as the test for BT's compliance with Condition H3.1, then we consider that this would not have been an appropriate course.*"[176]

9.53 The CAT noted that BT would have been able to use FAC to demonstrate compliance with cost orientation, but that it would have been unlikely to do so as FAC is not flexible.[177]

9.54 Imposing FAC as the maximum level of any charge would also risk imposing "rate of return" regulation. If no individual charge could earn a rate of return above the firm's Weighted Average Cost of Capital ("WACC"), then the maximum rate of return that BT could earn in the market as a whole would also be the firm's WACC. This provides BT with no incentive or ability to recover common costs in an efficient manner across the full range of services that share them. Nor does it provide BT with an incentive to reduce costs, as it would not benefit from any cost savings that it made since these would immediately be passed on to BT's consumers.

<u>Setting all charges at DSAC in a specific market is not incompatible with the outcome of a competitive market</u>

9.55 In our view a situation in which all of BT's charges within a specific market were set at DSAC would not necessarily result in a higher rate of return than would be possible in a competitive market. As is the case here, common costs are often shared not only between services in the same market, but also across services in many different markets. Therefore, considering the extent of common cost recovery, or the rate of return on a FAC basis, for a single market, is not definitive. Where common costs have to be recovered across a number of services and markets, it is unlikely that setting prices at FAC (which is based on accounting rules rather than economic theory) would lead to the most economically efficient outcome (or one which is consistent with a fully competitive market). In general, it would be more economically efficient for the firm to put relatively higher mark-ups (i.e. potentially greater than those embodied by a FAC regime) on services where (market) demand is more inelastic. Such an approach minimises the distortion of consumer choices because a relatively larger proportion of common costs is recovered from consumers who are relatively less sensitive to higher prices than those where market demand is more elastic. Therefore, if all the services in a market are relatively price inelastic compared to some other services in other markets with which they share common costs, then prices at or around DSAC could be compatible with the outcome in a competitive market.

9.56 As BT is likely to have a better understanding than the regulator of the nature of demand across the markets in which it operates, there can be benefits in allowing it flexibility in deciding on the appropriate level of mark-ups to ensure recovery of common costs.

9.57 Furthermore, a firm's WACC is usually devised as the rate of return that it could expect to earn across all (or a large sub-set) of the markets in which it operates, were they to be competitive. Different services and different markets may attract different rates of return, despite all the markets being competitive and the firm yielding a rate of return equal to its WACC across all of its services.

[176] PPC judgment, paragraph 286(2).
[177] PPC judgment, paragraph 286(2).

Regulatory certainty

9.58 Condition HH3.1 requires BT to ensure that its prices are derived from LRIC plus an appropriate mark-up for the recovery of common costs (including an appropriate return on capital employed). The condition does not define what constitutes an "appropriate" mark-up.

9.59 We have previously indicated that the maximum appropriate mark-up is one where BT's charges do not exceed DSAC. Oftel indicated that:

> *"In general, Oftel would consider a good first order test of whether a charge is unreasonable or otherwise anti-competitive to be whether the charge in question falls within a floor of long run incremental cost and a ceiling of stand-alone cost (paragraphs C3-C5 below explain Oftel's methodology for deriving floors as the incremental cost of conveyance broken down into component costs, and ceilings as the stand-alone efficient operator cost of conveyance broken down into component costs)."*[178]

9.60 The CAT also considered that it was clear that BT understood the significance of DSAC in assessing cost orientation.[179]

9.61 It is therefore clear that both Ofcom and BT were aware of the significance of DSAC in assessing cost orientation throughout the Relevant Period. If we were to now change the maximum pricing level to FAC, we would be acting in a manner that is inconsistent with the position as understood by Ofcom, BT and the CPs that were paying the charges, at the time those charges were levied. It is also inconsistent with our previously stated position and regulatory practice.

9.62 We do not believe that the arguments put forward by Sky and TTG provide a compelling justification for departing from our previously stated approach to assessing cost orientation.

9.63 In setting charge controls (i.e. in setting the average level of maximum charges in advance), we have used FAC as a relevant cost measure. Charge controls tend to be imposed where cost orientation alone would not be a sufficient constraint on a firm with SMP. The roles of charge controls and cost orientation are quite different and so different cost standards apply. This can be illustrated by considering the cases in which charge-controlled services are also subject to a cost orientation requirement. The level of charge controls is often set by reference to FAC – this applies to the average level of charges under the cap. But the regulated firm can vary the levels of individual charges as long as the average charge is compliant with the cap - cost orientation sets the limits on this pricing flexibility in relation to individual charges within the cap and DLRIC/DSAC are more appropriate cost standards for this purpose.

9.64 We note the discussion regarding the use of FAC contained in Annex 14 to the Fixed and Narrowband Service Wholesale Market Review. However, Ofcom subsequently withdrew Annex 14 in light of representations from stakeholders that further consultation would be beneficial [180].

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[178] The 1997 NCC guidelines, paragraph C.1.
[179] PPC Judgment, paragraph 278.
[180] http://stakeholders.ofcom.org.uk/binaries/consultations/wnmr_statement_consultation/annexes/Annex_14.pdf

Rates of return on capital employed ("ROCE")

BT's views

9.65 As set out in paragraph 9.23, BT considers that "*Ofcom should not focus exclusively, or even primarily, on the individual DSACs of each and every product."* It argues that "*in a developing market like AISBO, any analysis needs first to consider rates of return within the market*".[181]

9.66 BT argues that any analysis of the rates of return it earned in the AISBO market must reflect the specific nature of the AISBO market. Specifically, it argues that it is entitled to earn a rate of return for AISBO services above its WACC given the developing nature of the market. It considers that:

9.66.1 Ofcom specifically gave BT wider latitude in assessing cost orientation when the market was developing and new services were being introduced. BT quotes paragraph 7.58 of the 2004 LLMR:

> "*Ofcom confirms that all new services that are introduced into this market will also be covered by the same pricing rule … this does not however mean that BT cannot recover costs appropriate to new wholesale services*",

noting that Ofcom added in paragraph 7.59(iii):

> "…*there might be a range of prices which will be consistent with cost orientation given the uncertainty about the take up and future profitability of the service. In determining whether a charge is not cost orientated, Ofcom would consider whether the expected or achieved return on capital was excessive. In making this assessment Ofcom will need to take account of the risk of the new service failing and the lost investment that will result…*";[182] and

9.66.2 given the level of uncertainty in the market, returns above the WACC are not unreasonable. BT maintains that AISBO services were in a new market which required considerable up front investment without any guarantee that demand would be at a level where returns were above costs. In such circumstances, returns above the cost of capital can be expected when new services prove to be successful.[183]

Ofcom's views

ROCE analysis

9.67 In demonstrating that its charges are cost orientated, BT must demonstrate that those charges have been derived from LRIC plus "an appropriate mark-up for common costs". Condition HH3.1 does not specify that BT can only demonstrate that mark-ups are appropriate by using DSAC. BT is able to allocate common costs using other methods as long as it can demonstrate to us that it is "appropriate". In the PPC Judgment the CAT considered that a range of options for demonstrating that its charges were cost orientated was open to BT.

[181] BT's 20 May submission, paragraphs 69 and 70.
[182] BT's 20 May submission, paragraph 30(ii).
[183] BT's 20 May submission, paragraphs 31 and 32(ii).

9.68 BT has sought to demonstrate compliance with its cost orientation obligations by analysing its rate of return across the AISBO market as a whole. We consider in Section 10 whether BT's application of ROCE analysis in this case is satisfactory.

BT's WACC

9.69 We need to consider the appropriate WACC for the services in dispute, both for the purposes of considering BT's evidence that its charges were cost orientated, and also because rates of return may be a relevant factor in addition to a comparison of charges against DSAC in our assessment of whether BT's charges were cost orientated.

9.70 In order to do this, we consider in this section BT's arguments as to the appropriate WACC that should be used when considering cost orientation in terms of two questions:

9.70.1 Does the average WACC for "rest of BT"[184] appropriately reflect the risks faced by BT in Ethernet services?

9.70.2 Do the characteristics of the market warrant consideration of, and adjustments for, "fair bet" concerns?

9.71 We then conclude on the use of ROCE to assess cost orientation.

Treatment of product-specific risks

9.72 In considering risk,[185] two broad categories are typically identified:

9.72.1 systematic risk – also referred to as "market" or "undiversifiable" risk; and

9.72.2 specific risk – also referred to as "diversifiable" or "idiosyncratic" risk.

9.73 Our approach to reflecting these risks in a firm's cost of capital was outlined in our "Cost of Capital" document of August 2005.[186] Consistent with economic theory, our approach to setting a firm's WACC is to reflect only those risks that cannot be diversified away by investors (i.e. systematic risks). Therefore, specific risks are not typically reflected in the WACC. This approach has been confirmed by the CC's decisions in the Openreach Financial Framework Review (OFFR) and LLCC appeals.[187]

9.74 Since 2005, we have used two different WACCs for BT. In order to reflect the variations in risk across BT we concluded that BT's business (and hence its cost of capital) can be split into two constituent parts:

9.74.1 BT's copper access business; and

9.74.2 the rest of BT.

[184] The BT WACC relevant to Ethernet services is the "rest of BT" WACC.
[185] Under a CAPM approach in particular.
[186] http://stakeholders.ofcom.org.uk/binaries/consultations/cost_capital2/statement/final.pdf, in particular paragraphs 3.2 to 3.5 ("2005 Cost of Capital document").
[187] See the CC's decisions in case 1111/3/3/09 "*The Carphone Warehouse Group plc v Office of Communications*", August 2010 (the "LLU decision" and in case 1112/3/3/09 "*Cable and Wireless UK v Office of Communications*", June 2010 (the "LLCC decision").

9.75 As Ethernet services do not relate to BT's copper access business we use the "rest of BT" cost of capital.

9.76 It could be argued that, if there were higher levels of systematic risks associated with Ethernet services than for the "rest of BT" as a whole, it may be appropriate to reflect this in a higher WACC for Ethernet services. However, in the 2005 Cost of Capital document we set out a number of criteria for identifying a WACC that is specific to a project rather than using the firm's WACC. These were:

9.76.1 strong *a priori* reasons for believing that the risk faced by the activity was different from that of the overall company;

9.76.2 availability of evidence to assess the differences in risk; and

9.76.3 an expectation that reflecting differences in risk in an adjusted rate of return would bring gains for consumers.[188]

9.77 Therefore, in order for us to adopt a product-specific WACC for Ethernet, BT would need to demonstrate, as a minimum, that each of these three criteria is met in this case. Further, for the purposes of these Disputes, BT would also need to provide evidence of what it considers the appropriate WACC to be for Ethernet services within the Relevant Period.

"Fair bet" considerations

9.78 We agree with BT that, in considering the relevance of individual rates of return, we would expect to take into account the specific circumstances that may surround the launch of risky new services. Where outcomes are particularly uncertain, a charge that yields only a return equal to the WACC may not be sufficient to ensure firms are offered a "fair bet".[189] The apparently high charge relative to cost may be simply the favourable outcome *ex post*, even though unfavourable, loss-making outcomes were also possible *ex ante*. Failing to take this "fair bet" consideration into account where relevant might lead to a conclusion of overcharging that, in effect, penalises "success" (whereas, if the outcome had instead been unfavourable, i.e. a "failure", the firm and its investors would have had to bear the loss themselves).

9.79 In our view "fair bet" considerations are more likely to be relevant when:

9.79.1 there is significant uncertainty over demand for a service (or other factors that affect returns) when setting prices; and

9.79.2 where the firm incurs significant levels of sunk cost to provide a service.

9.80 If "fair bet" concerns underpin the observations made by BT in its 20 May submission[190], and it is able to provide specific evidence to demonstrate that both of the two factors identified above were relevant to specific services in dispute during the Relevant Period, then it may be relevant to take such concerns into account in

[188] See 2005 Cost of Capital document, paragraph 5.24.
[189] For a description of the "fair bet" issue, see Annex 4 (especially paragraphs A4.3 to A4.6) of *Provision of Technical Platform Services, Guidelines and Explanatory Statement*, Ofcom, 21 September 2006:
http://stakeholders.ofcom.org.uk/binaries/consultations/tpsguidelines/statement/statement.pdf and Annex 8 of http://stakeholders.ofcom.org.uk/binaries/consultations/823069/summary/condoc.pdf
[190] For example, paragraph 31.

our assessment of charges. While BT has advanced this argument as a point of principle, it has not yet provided such evidence.

9.81 To the extent that "fair bet" concerns arise, these are more likely to be relevant in the early years of a product's lifecycle. In the case of a risky project that turns out to be successful, the observed rate of return could be substantially above the WACC. However, further investments in the same (successful) project are likely to be less risky and therefore the difference between the observed rate of return and the cost of capital is likely to be less.[191] We would therefore anticipate "fair bet" concerns, where relevant, to be more important for the early years of the Ethernet products, unless BT can provide evidence to the contrary. In this context it is worth noting that a number of BT's Ethernet products had existed prior to the Relevant Period, albeit as retail products rather than wholesale products (see also paragraph 8.52.1).

9.82 Where DSAC provides a more limited rate of return for individual services we may be able to take this into account in our assessment of charges. However, in order for us to do so, BT would not only need to supply us with evidence that "fair bet" concerns are of sufficient importance to justify or explain the specific prices and rates of return observed for the services in dispute.

<u>Conclusion on use of ROCE to assess cost orientation</u>

9.83 In conclusion, we agree with BT that caution is required in using rates of return to consider compliance with cost orientation. There is a risk of drawing incorrect conclusions from a particular rate of return if the circumstances surrounding a charge are not considered. Specifically, a charge which results in a rate of return above BT's average WACC may not necessarily imply overcharging.

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

9.84 We set out below the three steps we propose to take in the assessment we carry out in **Sections 10 and 12**:

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 Condition HH3.1.

Step 2

In the event that BT's evidence does not satisfy us that it has met the requirements of Condition HH3.1, we then go on to consider whether BT's charges were nevertheless cost orientated. We do this by comparing the relevant Ethernet charges with their respective DSACs to identify any revenues exceeding DSAC.

[191] See "Provision of Technical Platform Services" – Paragraph A4.6.

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.

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

Section 10

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

Introduction

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

10.2 To do this, Ofcom has considered the arguments which BT has made to us. These are considered in this Section 10.

10.3 However, one of BT's primary arguments to Ofcom is also that Ofcom should disregard BT's DSACs which were published (within its RFS) the year after BT levied the charges[192]. BT therefore seeks to argue that its charges should be judged now by reference to a revised and re-worked version of its DSACs which have been produced recently and should, BT argues, have retrospective effect. Ofcom disagrees that this is the correct approach. One of the purposes of the RFS is to ensure that the appropriate data is published at the time the charges are levied (or shortly thereafter) to enable compliance with SMP conditions to be monitored.

10.4 BT argues that it can demonstrate that its charges were cost orientated. It also considers that the historic actions of both BT and Ofcom indicate that BT sought to ensure its charges were cost orientated. BT's principal arguments are as follows:

10.4.1 **BT claims it can demonstrate that its charges complied with its cost orientation obligations.** It argues that it can demonstrate this on the basis of:

(a) **Analysis of rates of return on capital employed**. BT argues that analysis of rates **of return at the AISBO market level demonstrates that its charges were cost orienta**ted (paragraphs 10.7 to 10.20);

(b) **Comparison of revenues to DSAC**. BT argues that, by generating revised DSACs and then comparing revenues to these DSACs at an aggregate market (or sub-group of the market) level, it can demonstrate that its charges were cost orientated (paragraphs 10.21 to 10.26);[193]

(c) **International benchmarking of charges.** BT argues that international benchmarking analysis shows UK consumers have benefited from lower retail prices for Ethernet services than

[192] BT published its financial data and methodology in its RFS in the period immediately following each financial year in which the relevant charges were levied (although these may subsequently have been restated). BT has more recently revised its methodology with consequent changes to the reported financial data.

[193] BT considers that the DSACs generated in its RFS are incorrect, and has suggested a new approach for calculating DSACs that it considers to be more appropriate. See Section 11 for more detail on this issue and Ofcom's views on BT's representations.

consumers in other comparable countries. It goes on to argue that these lower prices demonstrate that its charges are cost orientated (paragraphs 10.27 to 10.35);

(d) **The extent to which its charges gave rise to economic harm.** BT claims that no observable economic harm has occurred as a result of its charges, and that this demonstrates that its charges are cost orientated (paragraphs 10.36 to 10.48).

10.4.2 **BT took steps to ensure compliance historically.** BT argues that it can demonstrate that it took steps to ensure that its charges were cost orientated.

(a) **Interaction with Ofcom between 2004 and 2007.** BT considers that it is relevant that there was interaction with Ofcom in the period 2004 to 2007. During this period, Ofcom handled a complaint from [✂] plc ("[✂]") and BT responded to an information request from Ofcom. BT argues that Ofcom's actions and omissions in relation to these matters demonstrated that its prices were cost orientated (paragraphs 10.55 to 10.75);

(b) **Lack of action by Ofcom in respect of the LLCC 2009.** BT argues that Ofcom's adjustment of only one starting charge in the 2009 LLCC Statement suggested that Ofcom was content that BT's charges were cost orientated (paragraph 10.77 to 10.88);

(c) **BT sought to reduce prices in 2008/09.** It did this after it had identified potential concerns with its pricing whilst reviewing the draft RFS for 2007/08. Specifically, BT was concerned that its prices might have started to move away from acceptable latitude allowed for cost orientation. However, it argues that price reductions were delayed due to a number of CPs objecting to a waiver of BT's 90 day notice period for price changes (paragraphs 10.89 to 10.99).

10.5 We discuss below the evidence submitted by BT to demonstrate that its charges were cost orientated and our provisional determination as to why BT has failed to demonstrate to our satisfaction that its charges were cost orientated. We also discuss why we believe that there is nothing in either BT's or Ofcom's historic actions that supports BT's contention that it had a legitimate expectation that Ofcom considered its charges to be cost orientated.

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

10.6 Before considering BT's arguments as to why its charges were cost orientated, we note that BT has not argued that each of its individual charges in dispute was cost orientated by reference to the RFS that it published during the Relevant Period.

Rate of return on capital employed

<u>BT's views</u>

10.7 As set out in paragraph 9.23, BT considers that "*Ofcom should not focus exclusively, or even primarily, on the individual DSACs of each and every product.*" It argues that "*in a developing market like AISBO, any analysis needs first to consider rates of return within the market*".[194]

10.8 On this basis, BT undertakes an analysis of its rates of return over the Relevant Period by comparing its revenues and costs in aggregate across the AISBO market (up to and including 1Gbit/s services). For the reasons we explain in Section 8, it considers using aggregated data to be more appropriate than assessing each charge individually.

10.9 BT argues that its ROCE analysis demonstrates that its disputed charges were cost orientated during the Relevant Period. In particular:

10.9.1 BT's market ROCE was sufficiently low in most years that its charges were cost orientated; and

10.9.2 where its charges resulted in a high ROCE it sought to reduce its charges as soon as possible.

10.10 BT argues that its ROCE for the AISBO market was at or below 20% in all but two of the years (i.e. 2007/08 and 2008/09) covered by the Disputes, and that this is consistent with its charges being cost orientated.

10.11 BT set out in its response the level of the AISBO market ROCE by year and any significant events which it considers are relevant to a consideration of cost orientation. We replicate this information in Table 10.1 below.

Table 10.1: ROCE in AISBO market measured against significant events

Event	04/05	05/06	06/07	07/08	08/09	09/10
RFS publication date	Sep 05	Sep 06	Aug 07	Sep 08	Aug 09	Jul 10
Reported ROCE AISBO CCA basis	8.8%	15.9%	20.0%	31.1%	37.3%	13.5%[2]
Phase 1 WES/BES price changes notified			Dec 06			
S135 response re. cost orientation[1]				Jun 07		
EBD and EAD[195] launch notification					May 08	
Draft 2008 RFS review					Jun 08	
Price reductions notification following RFS review					Nov 08	
LLCC BES1000 start price adjustment						Jul 09
First year of price control reduction						Jan 10

Source: RFS and BT's 20 May submission.
[1] We discuss BT's response to the section 135 notice in paragraphs 10.68 to 10.75 below.
[2] BT's ROCE of 13.5% excludes a large holding gain on duct valuation reported in the 2009/10 RFS.

[194] BT's 20 May submission, paragraphs 69 and 70.
[195] Ethernet Access Direct

Ofcom's views

Holding gain associated with duct

10.12 Before we consider whether BT's use of ROCE is appropriate in assessing cost orientation, we first need to consider which figure for ROCE should be used to carry out any assessment in 2009/10. 2009/10 is different to other years because BT reported a large holding gain[196].

10.13 As shown in Table 10.1, the ROCE BT relies on to demonstrate its cost orientation in 2009/10 was 13.5%. This figure excludes a large reported holding gain associated with duct in its 2009/10 RFS. This holding gain arose from a change in accounting estimates reflecting BT's revised estimate of the replacement cost of its duct network. It resulted from BT revising one of the input assumptions forming part of the asset valuation rather than, for example, a significant increase in the cost of labour or materials associated with building duct. BT's 2009/10 RFS states that "*whilst this large holding gain has been recognised in 2009/10 it does not represent a genuine periodic change in the valuation of the duct assets. BT believes that it results in an artificial upwards distortion of returns in the year*".[197]

10.14 As a result of this large holding gain, the 2009/10 RFS reported two ROCEs for each market – one including the duct holding gain and one excluding it. For the AISBO market the ROCE including the duct holding gain was reported as 25.4% and the ROCE excluding it was reported as 13.5%. We agree with BT's view that, on this occasion, making allowance for the duct holding gain would result in an artificial distortion of returns. We discuss this issue further at paragraphs 12.86 to 12.91.

Use of ROCE to establish cost orientation

10.15 As set out in paragraph 9.67, there is a range of options open to BT for demonstrating cost orientation, however it is necessary to consider whether the indicator BT has chosen has been applied correctly. Specifically, the indicator should be used on disaggregated data.

10.16 BT has sought to demonstrate compliance with its cost orientation obligations by analysing its rate of return across the AISBO market as a whole.

10.17 If BT wishes to use such analysis we consider that, as set out in Section 8, such an analysis would need to be in relation to each individual charge. An analysis of rates of return for aggregated groups of charges is not sufficient to satisfactorily discharge its obligation under Condition HH3.1, as we explain further below.

10.18 In seeking to demonstrate its compliance with cost orientation in the PPC Disputes, BT used ROCE analysis on an aggregated basis i.e. in relation to trunk and terminating segment services combined.[198] The CAT rejected BT's evidence on the basis that:

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[196] A 'holding gain' is the increase in the replacement cost of an asset during the year, under current cost accounting (CCA). It has the effect of increasing profit (by reducing costs) during the year in which the gain is recognised. It therefore results in a higher return for that year.

[197] 2009/10 RFS, page 18, http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2010/CurrentCostFinancialStatements2010.pdf

[198] PPC Judgment, paragraph 130.

> "*…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.*"[199]

10.19 In these Disputes, BT has carried out its ROCE analysis on an aggregated basis, assessing ROCE on the basis of the entire market rather than in relation to individual charges. We do not consider that this level of aggregation is appropriate for the purpose of demonstrating cost orientation. As explained in Section 8, Condition HH3.1 requires that "each and every charge" be cost orientated. It is therefore the ROCE generated by individual charges that should be considered when assessing cost orientation.

10.20 We therefore provisionally conclude that BT's ROCE analysis fails to demonstrate that BT's charges were cost orientated. We carry out our own analysis of BT's rates of return resulting from its individual charges in Section 12. We use this to inform our provisional conclusions on whether BT's charges were cost orientated.

Comparison of DSAC with revenues

<u>BT's views</u>

10.21 BT considers that the DSACs identified in its RFS for WES and BES services were "too low"[200]. The reasons why BT considers them to be inaccurate, and our consideration of these arguments, are discussed in Section 11. BT has provided us with revised DSACs and it is these that BT uses to demonstrate its compliance with its cost orientation obligation. We refer to these as BT's "revised DSACs".

10.22 BT identifies that, on the basis of its revised DSACs, its charges were below DSAC for the AISBO market (as a whole) in each of the years from 2005/06 to 2009/10, with the exception of 2006/07, where revenues exceeded DSAC by just under £2 million. Even when just WES and BES services are considered together (i.e. excluding other AISBO services), BT identifies that charges were only above the combined DSAC in one year (2006/07).[201]

10.23 Furthermore, BT argues that even on the basis of the published RFS data, there is no evidence of overcharging. BT makes reference to the material supplied by the Disputing CPs, which shows that "*BT's charges for the AISBO market did not consistently exceed the DSAC ceiling other than for intermittent odd years*".[202] BT argues that, as charges did not exceed DSAC at the whole market level for two or more consecutive years, overcharging did not occur.

10.24 BT further argues that if connection and rental revenues and costs are aggregated, there is no clear and obvious pattern of overcharging. BT calculates that, based on its revised DSACs, it is only for BES1000 circuits that revenues substantially exceed DSAC in three consecutive years but that even this does not demonstrate that

[199] PPC Judgment, paragraph 274.
[200] BT's 20 May submission, paragraph 77.
[201] BT's 20 May submission, paragraph 80.
[202] BT's 20 May submission, paragraph 79.

overcharging has occurred as other market factors (such as the products being "relatively new" and the resulting difficulties in forecasting volumes) need to be taken into consideration.[203]

Ofcom's views

10.25 We do not agree that BT's DSAC analysis satisfactorily demonstrates that its charges were cost orientated. BT's analysis is based either on the aggregation of services within the entire market or aggregation of rental and connection charges and costs – this applies even when BT uses its revised DSACs. For the reasons we have set out in Section 8, we do not consider that this level of aggregation is appropriate. As a consequence, we do not believe that BT's analysis in relation to DSACs demonstrates that its charges for the relevant Ethernet services were cost orientated.

10.26 As explained in Section 4, DSAC is the primary cost benchmark Ofcom uses for assessing BT's compliance with its cost orientation obligations. The issue that BT has raised in relation to the accuracy of its published DSAC data is therefore relevant to our assessment. However, given that BT's comparison of DSAC data and revenues is based on aggregated data (which we consider to be an inappropriate approach) it is unnecessary for us to consider at this stage BT's claims about the accuracy of the published DSACs. It will however be necessary to consider this issue before we carry out our own DSAC analysis (which we do in Section 12). We therefore consider BT's arguments in relation to the correct numbers to be used in the DSAC test in Section 11.

International benchmarking

BT's views

10.27 BT argues that a comparison of its charges with those of its international peers is a relevant factor in considering whether its charges are cost orientated. BT argues that it can demonstrate that its charges for WES and BES services are "*within, and most likely at the low end, of pricing that would be expected in an effectively contestable market*". It considers that a report it commissioned from Ovum supports this conclusion as it suggests that its prices are below average relative to the benchmarked countries.[204]

10.28 BT commissioned Ovum to benchmark the prices of BT's WES and BES services against the prices of services offered by incumbent operators in a number of European countries. Ovum benchmarked four services:

10.28.1 End-user access service;

10.28.2 Backhaul service;

10.28.3 Full Ethernet Access Direct ("EAD") service; and

10.28.4 WES aggregation service.

[203] BT's 20 May submission, paragraphs 83 to 85.
[204] BT's 20 May submission, paragraphs 87 to 89.

10.29 A summary of Ovum's findings is set out in Table 10.2 below.

Table 10.2: summary of the benchmark monthly prices for each of the four services:

	France (Euro)	Italy[205] (Euro)	Spain (Euro)	Netherlands Euro)	UK (Euro)	Average (Euro)
End-user access						
10 Mbit/s; 1km circuits	671	631	344	146	249	408
100 Mbit/s; 1km circuits	1,523	2,718	450		285	1,244
1000 Mbit/s 1km circuits			1,654	557	530	914
Backhaul Service						
1000 Mbit/s[206]	1,042		323	1,489	1,410 (UK C)	1,025
					1,012 (UK B)	
					876 (UK A)	
Full EAD type services						
1km end-user access	3,064		709	958	951	1,420
7km end-user access	3,524		845	958	951	1,569
30km end user access	3,524		1,154	958	951	1,647
WES Aggregation Services						
10 end-users, 1km end-user accesses	17,768		4,371	2,739	3,993	7,218
10 end-users, 7km end-user accesses	22,368		5,600	2,739	3,993	8,675
10 end-users, 30km end-user accesses	22,368		8,378	2,739	3,993	9,369

Source: Ovum report prepared for BT.

Ofcom's views

10.30 BT's international benchmarking evidence compares against only four other countries. BT has not explained why these four countries are representative or more relevant comparators than all of the other EU countries that are not included in the benchmarking report.

10.31 Moreover, the international benchmarking data appears to be based on the aggregation of different services and the aggregation of connection and rental charges. The benchmarking appears to combine Ethernet Backhaul Direct ("EBD")[207] and BES prices (as well as BES local end and main link prices) in the 'Backhaul

[205] In Italy, trunk services are deregulated so there are no backhaul services benchmarked.
[206] In the UK, the charges for BT's EBD services are dependent on the population density (referred to as A, B, or C). No other country in the benchmarking survey adopts this approach.
[207] EBD provides permanently connected, uncontended bandwidth from an Access Serving Node to an Openreach Handover Point.

services' benchmarking comparisons. Similarly, the prices of WES Aggregation Main and WES Aggregation Spur prices appear to be combined in the 'WES aggregation services' benchmarking comparisons. In both sets of comparisons, the fixed fee and monthly fee charges have been aggregated.

10.32 More fundamentally, however, we do not consider that BT's international benchmarking analysis demonstrates that BT's charges for BES and WES services are cost orientated as it relates solely to prices and fails to give any consideration to possible cost differences between the services being compared. Furthermore, it is based on aggregated connection and rental charges, rather than individual charges.

10.33 The CAT considered the relevance of international benchmarking in the PPC Judgment. It concluded:

> "*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 <u>BT's</u> LRIC, with a mark-up for <u>BT's</u> common costs, and taking into account <u>BT's</u> 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, an international comparison can say very little about BT's compliance with Condition H3.1.*"[208] [Emphasis in original]

10.34 BT's obligations in relation to cost orientation are to ensure that its prices are orientated to its costs, not that they are lower than those of its international peers. In other countries, firms may face different costs and different degrees of competition (which could affect the extent to which prices were above costs). The benchmarking survey does not reveal whether BT's charges in the UK are orientated to its costs in the UK.

10.35 Having considered the international benchmarking evidence supplied by BT, we propose to conclude that it fails to demonstrate that BT's charges for BES and WES services were cost orientated.

The alleged absence of economic harm

<u>BT's views</u>

10.36 BT argues that if its prices had not been cost orientated, this would have led to observable economic harm. BT claims that as there is no observable economic harm, its prices must have been cost orientated. It argues that *"BT's cost orientation obligation in the AISBO market cannot be divorced from the nature of and effect upon the competition in that market".*[209]

10.37 BT assessed what might have happened in both wholesale and retail markets if its prices were not cost orientated. It argued that:

> "*non-cost orientation would be indicated by either (or indeed both):*
>
> *(i) a slow growth in demand (both at the wholesale level and the retail level); and/or*

[208] PPC Judgment, paragraph 266
[209] BT's 20 May submission, paragraph 25

> *(ii) an increase in market share at the retail level for the integrated supplier."*[210]

10.38 BT contends that as BES and WES services grew quickly (relative to independent forecasts), the prices for BES and WES services could not have constrained demand.[211]

10.39 BT also argues that "*BT's market share at the retail level fell significantly over the period, indicating that there was no margin squeeze*".[212]

Ofcom's views

10.40 We disagree that BT's analysis demonstrates that its charges are cost orientated for two key reasons:

10.40.1 in the PPC Judgment, the CAT considered that, in determining whether BT had breached Condition H3.1, it was not necessary for Ofcom to demonstrate that economic harm had occurred; and

10.40.2 notwithstanding that economic harm is not a relevant consideration in assessing cost orientation, BT's analysis does not demonstrate whether or not economic harm has occurred.

10.41 In the PPC Judgment, the CAT found 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"*.[213] This is because an analysis of economic harm was carried out as part of the 2004 LLMR which resulted in Condition H3.1 being imposed. The CAT found that:

> *"BT is not permitted to raise prices beyond those that are cost orientated, because this would be likely to cause economic harm: this was established by the anterior finding of SMP made at the time the condition was imposed. Economic harm and breach of the cost orientation obligation are, therefore, two sides of the same coin."*

10.42 Our justification for imposing Condition HH3.1 on the AISBO market was the same as that for imposing Condition H3.1 on the TISBO market:

> *"As BT has been identified as having SMP in this market, the availability of wholesale [TISBO / AISBO] services at cost oriented prices would help to ensure that the resulting competition in the retail leased lines markets and other downstream markets should lead to lower prices".*[214]

10.43 Given that a finding of economic harm is not a pre-requisite to concluding whether there has been a breach of the cost orientation obligation, BT cannot seek to demonstrate compliance by arguing that no observable economic harm has arisen from its charges.

10.44 Even if economic harm were a necessary consideration in assessing cost orientation, we would note that BT's analysis fails to demonstrate that economic harm has not in fact taken place.

[210] BT's 20 May submission, paragraph 91.
[211] BT's 20 May submission, paragraph 92.
[212] BT's 20 May submission, paragraph 93.
[213] PPC Judgment, paragraph 327.
[214] LLMR 2004, paragraph 6.72 for Condition H3.1, paragraph 7.54 for Condition HH3.1.

10.45 In assessing whether BT's prices had an observable effect that resulted in economic harm, it is important to consider the correct counterfactual. In the current case this would be what would have happened if BT's prices had been lower than they were, such as each charge being at or below DSAC.

10.46 As BT has identified, growth in demand for WES and BES services was relatively fast, driven in part by the growth in take-up of LLU lines by CPs other than BT. However, the fast rate of growth that was observed is not evidence that demand for BES and WES services was not suppressed in some way by high AISBO charges. If charges had been lower, it is possible that growth would have been even higher than that observed. In addition, the fact that demand for BES and WES services was relatively high does not indicate that there were no other economic distortions as a result of BT's charges (such as distorted investment decisions).

10.47 We consider the following observations are relevant in relation to BT's comments on its market share at "the retail level" and the lack of a margin squeeze:

10.47.1 BT fails to elaborate on, or provide any evidence to support the assertion that we quote in paragraph 10.37 above. As a consequence, it is neither clear to which retail markets BT is referring nor what its specific point is in relation to that market or markets;

10.47.2 Even if BT's share of whichever retail market it is referring to fell over the Relevant Period, this is not evidence of a lack of harm in the retail or wholesale markets. BT's retail market share performance is affected by a number of factors, not just the wholesale charges that it faces. This is why it is important to consider the right counterfactual, as noted above. BT's wholesale charges could be causing economic harm and BT's retail market share could still fall; and

10.47.3 It is unclear what significance BT attaches to its observation in relation to the absence or otherwise of a margin squeeze "at the retail level". It is not clear to us why the absence or otherwise of a margin squeeze is a reliable indicator of whether BT's charges were compliant with Condition HH3.1. Depending on the specific characteristics of the market it is perfectly feasible that BT may be levying wholesale charges that are not cost orientated but avoiding a margin squeeze by properly reflecting these high wholesale charges, which are faced by all retail competitors, in its retail charges.

10.48 In conclusion, the PPC Judgment made clear that establishing the existence (or not) of economic harm is not a pre-requisite for assessing cost orientation. Moreover, we propose to conclude that, even if it were a pre-requisite, the analysis provided by BT fails to demonstrate that economic harm has not occurred.

BT's arguments regarding the steps taken to comply

10.49 In this section we consider whether any of BT's or Ofcom's actions indicate that BT's charges were cost orientated, as has been suggested by BT.

10.50 In its response to the Disputing CPs submissions, BT highlighted several instances since 2004 where it believes its actions and the actions (or omissions) of Ofcom demonstrate that its charges for the services in dispute were cost orientated. These are considered below under the following headings:

10.50.1 Interaction with Ofcom between 2004 and 2007;

10.50.2 LLCC start price adjustments; and

10.50.3 Delays to the introduction of price reductions.

10.51 BT also provided a number of pricing papers to us, pursuant to a formal information request[215].

10.52 BT's submissions on these issues appear to imply that Ofcom had created in BT a legitimate expectation that it was satisfied that BT's charges for Ethernet services were cost orientated, such that it would be unfair if Ofcom now found it in breach of Condition HH3.1. We therefore consider BT's arguments in that light.

10.53 As noted in paragraphs 8.76 and 8.77 above, in the PPC Judgment, the CAT considered similar submissions from BT in relation to how Condition H3.1 should be applied. It began its consideration by quoting Bingham LJ's statement that the conduct relied upon to create a legitimate expectation must be "*clear, unambiguous and devoid of relevant qualification*".[216] It went on to say that "*Members of the public […] have an expectation that public law instruments* [such as Condition H3.1] *will be interpreted and applied according to their terms. Here, we are very conscious that were BT to have a legitimate expectation in relation to Condition H3.1 that was different to that of the Altnets, applying Condition H3.1 in accordance with BT's legitimate expectation might very well be unfair to the Altnets. We consider this to be a relevant factor in assessing whether BT's reliance on any statements or representations that may have been made by OFCOM was reasonable*."[217] [Emphasis in original]

10.54 Ofcom does not believe that any of its actions or omissions (or any actions taken by BT) provide evidence that Ofcom considered, or gave BT grounds to believe it considered, that BT's charges for Ethernet services were cost orientated. Further, we do not think BT could ever have a legitimate expectation that Ofcom would not resolve a dispute about the cost orientation of BT's charges (in the light of an SMP obligation) in accordance with its statutory functions.

Interaction with Ofcom between 2004 and 2007

BT's views

10.55 BT argues in its response to the submissions of the Disputing CPs that it was not considering compliance with cost orientation in isolation on the basis that:

10.55.1 it worked very closely with Ofcom, as BT's and Ofcom's respective strategy and policy in respect of AISBO/Ethernet products developed and BT altered its pricing and/or introduced new products; and

10.55.2 it provided "*a very significant level of information* [to Ofcom] *demonstrating BT's compliance with the Condition*".[218]

[215] BT's response of 15 November 2010 to question 15 of the 22 October section 191 notice.
[216] In *R v Inland Revenue Commissioners ex p MFK Underwriting Agents Limited* [1990] 1 WLR 1545, quoted at paragraph 207(1) of the PPC Judgment.
[217] PPC Judgment, paragraph 207(5).
[218] BT's 20 May submission, paragraph 43.

10.56 BT argues that this close working involved many meetings between BT and Ofcom during 2006, 2007 and into 2008. These meetings included discussions of BT's Ethernet services, particularly in respect of BT's committed price review of its Ethernet products that took place during the third and fourth quarters of 2006/2007. BT contends that this close working continued through 2007 as BT developed new AISBO services and into 2008 with the publication of Ofcom's market review consultation document on 17 January 2008.[219]

10.57 BT states that it shared detailed information with Ofcom during this period as a result of two specific events: a complaint by [✂] and Ofcom's preparation for its review of the 2004 LLMR Statement (which subsequently fed into the 2008 BCMR Statement). The information shared as a result of these events included information about the basis on which BT had set its prices. BT argues that Ofcom gave no indication that BT's approach to assessing cost orientation was inappropriate or that Ofcom had any concerns as to whether BT's charges were compliant with its obligations. In these circumstances BT contends that it would be completely wrong (and, it asserts, unlawful) for Ofcom now to find BT was in breach of its cost orientation obligation.[220]

The **[✂]** *Complaint*

10.58 BT's 20 May submission notes that, on 11 May 2007, [✂] made a formal complaint to Ofcom about the pricing of BT's WES/WEES Ethernet product portfolio, which [✂] believed was discriminatory and not cost orientated. On 10 July 2007 Ofcom wrote to BT advising that it had decided not to open an investigation on the basis of administrative priority. Ofcom also noted that "*Ofcom does not consider it appropriate to open an investigation where the matters raised in the* [✂] *complaint are likely to be dealt with under the LLMR…*" (which was about to begin). BT argues that this decision clearly indicated that Ofcom had no significant concerns over BT's pricing of its WES and WEES products.[221]

Response to the LLMR information request

10.59 BT's 20 May submission highlights that, in June 2007, Ofcom sent BT a notice under section 135 of the Act requiring it to provide information about, among other things, the AISBO market and in particular BT's WES and BES products (the "LLMR information request"). Ofcom required BT to provide the following information:

- *"Provide calculations demonstrating how BT's current charges (i.e. those that come into effect on 14 June 2007, following the 90 day notice period) for each and every WES and WEES product complies with BT's ex-ante cost orientation obligation (HH3) imposed under the June 2004 LLMR."*
- *"Provide calculations demonstrating how BT's proposed charges for each and every WES and WEES product, which come into effect on 2 December 2007 and 2 June 2008, complies with BT's ex-ante cost orientation obligation (HH3) imposed under the June 2004 LLMR."*
- *"Provide any information (other than that requested above) that BT considers is relevant to demonstrating that BT has satisfied its ex-ante cost orientation obligation (HH3) in relation to each and every WES and WEES product."*[222]

[219] BT's 20 May submission, paragraphs 44 and 45.
[220] BT's 20 May submission, paragraphs 46 to 48.
[221] BT's 20 May submission, paragraphs49 to 51.
[222] BT's 20 May submission, paragraphs 52 to 53.

10.60 BT notes that it responded fully to these questions and specifically wrote to Ofcom on 6 June 2007 commenting:

> "*The title and some of the commentary included in [Ofcom's letter of 5 June 2007] implies that the information is requested in order to inform a Market Review, however it is our understanding that the information requested, and that we have supplied, is to be used in order to assess BT's compliance with Ofcom's Condition HH3. It is for this purpose that the information is provided.*"[223]

10.61 Ofcom asked a number of follow-up questions about BT's WES and WEES products on 5 December 2007, including requesting further volume and cost information. BT responded to these questions on 9 January and 8 February 2008. There were also further follow-up emails to clarify Ofcom's understanding of the information provided by BT.[224]

Ofcom's views

10.62 Whilst BT and Ofcom had a number of meetings and discussions on issues relating to the development of Ethernet products, this is not unusual. Ofcom regularly meets BT, as it also meets with other CPs, to discuss a range of different topics.

10.63 BT has not provided any evidence to demonstrate that Ofcom made any statement or representation during the course of these meetings and discussions as to whether or not it believed that BT's charges were cost orientated. As such, it is difficult to see how these meetings between Ofcom and BT can amount to evidence that Ofcom considered BT's charges were cost orientated.

The **[✂]** *complaint*

10.64 The complaint made by [✂] in May 2007 alleged that certain wholesale Ethernet price changes announced by BT on 14 March 2007 were not cost orientated in breach of Condition HH3.1, and that BT was also in breach of its obligation not to unduly discriminate. In particular, [✂] complained that shorter distance lower bandwidth Ethernet circuits had become much more expensive in comparison with the (retail) services it had been purchasing up until that point. [✂] requested that Ofcom open an investigation into the price structure and pricing of BT's wholesale Ethernet products.

10.65 Ofcom carried out an assessment to determine whether to open an investigation and on 9 July 2007, wrote to [✂] stating that it had decided not to open an investigation into its complaint *"on the basis of administrative priority"*. Ofcom made it clear that in reaching its decision, it had "*not considered the merits of* [✂] *allegation*". The letter went on to say that Ofcom "*considers the merits of a complaint only once an investigation begins*". It noted that Ofcom considered the issues raised by [✂] were likely to be dealt with in the forthcoming BCMR and therefore opening an investigation would not be an efficient use of its limited resources. Finally, the letter stated that *"[a] decision not to open an investigation due to administrative priorities does not prevent Ofcom from investigating similar conduct in future, or re-considering the same conduct where significant new evidence arises*".

10.66 Ofcom's decision not to open an investigation, was made on the grounds of Ofcom's administrative priorities, including its view of the best use of its resources. It provides

[223] BT's 20 May submission, paragraph 54.
[224] BT's 20 May submission, paragraph 55.

no evidence that Ofcom considered BT's charges to be cost orientated. It did not amount to a statement or representation that Ofcom considered the charges to be cost orientated and it would not have been reasonable for BT to rely on it as such (see in addition paragraph 10.72 below).

10.67 We note that, in any event, [✂] complaint related to different WES services for different periods than the services considered in these Disputes.

Response to the LLMR information request

10.68 As part of its review of the 2004 LLMR Statement, and prompted by [✂] complaint referred to above, Ofcom issued BT with an information request under section 135 of the Act on 5 June 2007. This required BT to provide details of calculations showing that its current and future charges for each and every WES/WEES service complied with BT's cost orientation obligations imposed under the 2004 LLMR.

10.69 When we issued the LLMR information request to BT, we stated that it had the following purpose:

> "***Subject matter and purpose of review***
>
> *"Ofcom is in the process of reviewing the telecommunications markets for retail leased lines; any other forms of retail business connectivity services (that it might be appropriate to include in the relevant market); and associated wholesale services.*
>
> *"On 24 June 2004, Ofcom published its findings in the review of the retail leased lines, symmetric broadband origination and wholesale trunk segments market (LLMR). Ofcom concluded that BT has significant market power (SMP) in a number of markets including the market for alternative interface symmetric broadband origination (AISBO), in which BT was found to have SMP.*
>
> *"As a result of this SMP finding, Ofcom imposed certain SMP services conditions upon BT. These include a requirement that each and every charge offered, payable or proposed for Network Access covered by Condition HH1 is reasonably derived from the costs of provision based on a forward looking long run incremental costs (LRIC) approach and allowing an appropriate mark up for the recovery of common costs and an appropriate return on capital employed. This requirement applies to the provision of BT's Ethernet-based products Wholesale Extension Service (WES) and Wholesale End to End Service (WEES), as these products fall within the AISBO market.*
>
> *"Openreach launched the current portfolio of WES and WEES products on 1 October 2006, and on 14 March 2007, Openreach announced revised pricing that would come into effect in three stages, on 14 June 2007, 2 December 2007 and 2 June 2008.*
>
> *"The purpose of this notice is to obtain specified information that relates to the provision of WES and WEES products, and the revised pricing for these products announced by BT on the 14 March 2007."*

10.70 We note BT's comment (quoted at paragraph 10.60 above) regarding the use to which its response would be put. However, we did not reply to BT accepting its purported revision of the purpose of the LLMR information request. Further, as this was a notice issued by Ofcom under section 135 of the Act, we do not consider that

BT could legitimately expect that its statement could replace the purpose stated in the statutory notice.

10.71 BT responded to the information request on 6 June 2007, providing spreadsheet calculations which, in its view, demonstrated that the WES/WEES prices were cost orientated. BT provided FAC on an historic cost basis, together with the resulting ROCE analysis; these were both at an aggregated level. BT did not provide DSAC data in its response. BT's cost calculations were discussed by Ofcom and BT at a meeting on 12 June 2007, but no indication was provided by Ofcom as to whether we considered that BT's data showed that its charges were cost orientated.

10.72 Ofcom set out a high level comparison of the price of BT's wholesale Ethernet services with Ofcom's preliminary assessment of the cost of delivering those services in Annex 12 to the 2008 BCMR Statement. Ofcom stated that based on the work performed to date using 2006/07 cost data,[225] it did not appear to Ofcom that [✂] particular complaint about shorter distance lower bandwidth WES circuits was supported by the data gathered. However, its preliminary analysis suggested that:[226]

10.72.1 overall revenues for WES/WEES services[227] exceeded Ofcom's estimate of FAC[228] by the order of over 10%;

10.72.2 the then pricing structure for WES/WEES was unbalanced: in general connection charges appeared to significantly exceed underlying FAC costs, whereas some local end rental charges fell below them; and

10.72.3 backhaul per metre distance charges were double FAC.

10.73 Annex 12 to the 2008 BCMR Statement notes Ofcom's aims, consistent with the stated purpose of the LLMR information request:

> *"We are proposing to price control alternative interface services in future. Work is underway to set charge controls from 1 October 2008. We are actively considering whether there should be a one-off adjustment to individual charges at the outset. With this aim in mind we are seeking to refine our understanding of the underlying costs of these services."*[229]

10.74 Ofcom considers that it would only be in a position to reach a conclusion on whether or not BT's charges were cost orientated after it had carried out a detailed investigation of BT's costs. Ofcom did not carry out such detailed investigation and did not reach a conclusion on whether BT's charges were cost orientated during its work in preparing the 2008 BCMR Statement and the subsequent 2009 LLCC, or at any other time. Indeed, Annex 12 of the BCMR explicitly states:

[225] Ofcom made a further section 135 information request on 7 August 2007 to obtain cost and volume information for this comparison.
[226] 2008 BCMR Statement, paragraph A12.4.
[227] Ofcom stated that it was unable to prepare estimates of costs for daisy chain circuits separately from standard BES circuit costs as the data were not available. As a result it only presented the results of its analysis for WES/WEES circuits, which were the services [✂] had complained about. See BCMR Statement, paragraph A12.24.
[228] Ofcom noted that for this particular exercise, it confined itself to comparing costs prepared on a FAC basis with individual service prices and did not attempt to obtain incremental ("floor") and standalone cost ("ceiling") information. See BCMR Statement, paragraph A12.21.
[229] 2008 BCMR Statement, Annex 12.5.

"For this particular exercise we confined ourselves to comparing costs prepared on a fully attributed cost (FAC) basis with individual service prices. We therefore did not attempt to obtain incremental ("floor") and standalone cost ("ceiling") information."[230]

10.75 BT has not offered any evidence to the effect that Ofcom indicated to BT that the information BT provided demonstrated to Ofcom's satisfaction that BT's prices were cost orientated. Ofcom's actions (or lack of action) did not imply any approval of BT's position nor relieve BT of the obligation to ensure that its charges were cost orientated.

10.76 More generally, Ofcom does not accept that it could be precluded by earlier comments or actions from exercising its statutory functions to resolve disputes in the light of the relevant facts and evidence at the time that they arise.

LLCC start price adjustments

BT's views

10.77 BT argues:

"That BT had taken appropriate steps to comply with its cost orientation obligation is affirmed by Ofcom's own subsequent actions in the 2009 leased lines charge control when Ofcom considered that only BT's BES1000 rental prices required a start price adjustment. It seems inconceivable to us that Ofcom would commence a charge control that did not comply with the basis of charges obligation, HH3."[231]

Ofcom's views

10.78 As we explain in paragraphs 8.60 to 8.66 above, as part of the 2009 LLCC Statement, Ofcom required a one-off starting charge reduction of 17% to BT's BES1000 rental charge. This was the only AISBO charge for which we required a starting charge change. As noted in paragraph 8.64, in requiring this change we explicitly noted that "*Our starting charge adjustments are without prejudice to BT's cost orientation obligations.*"[232]

10.79 In advance of the charge control, BT voluntarily made a number of significant reductions to its Ethernet charges in February 2009. BT's specific charge reductions included:[233]

10.79.1 WES /WEES 10 Mbit/s connection charges reduced by up to 33%;

10.79.2 WES/WEES 100 Mbit/s reduced to the same price as 10 Mbit/s products for both connection and rental, representing a reduction of up to 65% for connection and up to 16% for rental;

10.79.3 WES/WEES 1000 Mbit/s connection charges reduced by up to 62% and rental by up to 33%;

[230] 2008 BCMR Statement, Annex 12.21.
[231] BT's 20 May submission, paragraph 8.
[232] 2009 LLCC Statement, page 158.
[233] 2009 LLCC Statement, paragraph 5.77.

10.79.4 BES10 Mbit/s connection charges reduced by 19%;

10.79.5 BES100Mbit/s reduced to the same price as BES10 Mbit/s for connection and rental, representing a reduction of up to 65% for connection and up to 26% for rental; and

10.79.6 BES1Gbit/s connection reduced by up to 62% and rental by up to 31%.

10.80 The BES1000 rental starting charge reduction was part of a package of changes required as part of the charge control, including, for example, reductions to BT's 2Mbit/s trunk charges. The starting point for this package was a set of proposals made by BT. In putting forward its proposals, BT's aims were:

10.80.1 to bring individual 2008/09 prices more into alignment with DLRIC and DSAC; and

10.80.2 to propose the minimum number of changes to minimise disruption.[234]

10.81 As we explained in paragraphs 8.61 and 8.62 above, Ofcom shared BT's preference to minimise the number of starting charge changes, preferring instead to allow BT to use the flexibility within the charge control itself to adjust charges where necessary.

10.82 BT's proposals focussed only on TISBO services; they did not include changes to the charges for BES1000 rental or other AISBO services. In the 2009 LLCC Consultation, we explained that there were arguments for and against making starting charge changes for some of the AISBO services, but reflecting the considerations identified above, on balance we agreed with BT that such changes were not warranted. However, in making this assessment we noted that:

> *"Our analysis indicated that further adjustments to the level of prices may be required, because <u>some</u> charges remain above DSAC, even allowing for some possible imprecision in our DSAC estimates."*[235] [emphasis added]

10.83 Furthermore we raised the potential issue of the compatibility of BT's AISBO charges with the DSAC test, albeit without an explicit reference to cost orientation (reflecting the fact that cost orientation is a distinct exercise to setting starting charges). In this context, we noted that:

> *"Our analysis indicates that even after Openreach's recent price cuts <u>some</u> WES and BES rental prices will be above their DSAC value."*[236] [emphasis added]

10.84 Our decision to require a change to BT's BES1000 rental charge in the 2009 LLCC Statement reflected concerns raised by respondents to our proposals in the consultation document. As we explained:

> *"One stakeholder noted that it is of paramount importance for Ofcom to… revisit its starting charge proposals such that BT's charges are within the stipulated floors and ceilings from the outset."*[237]
>
> *"Another respondent also requested further [one-off]*[238] *price cuts to the starting level of regulated AISBO prices, in particular BES. In its view BES prices, even*

[234] 2009 LLCC Consultation, paragraph 4.84.
[235] 2009 LLCC Consultation, paragraph 5.44.
[236] 2009 LLCC Consultation, paragraph 5.46.
[237] 2009 LLCC Statement, paragraph 5.84.

> *after Openreach's voluntary price cuts, were still above DSAC and at these levels they would fail the first order cost orientation test."*[239]

10.85 Therefore, stakeholders had also raised as a potential issue the compatibility of BT's AISBO charges with the DSAC test.

10.86 In addition, in paragraph 4.190 of the 2009 LLCC Statement relating to TISBO services 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."*

10.87 In reviewing the case for making start charge adjustments, we were therefore explicit that:

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

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

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

10.88 On this basis we do not consider that Ofcom's consideration of starting charges in the 2009 LLCC Consultation and Statement provides BT with any reason to expect that Ofcom would subsequently consider its charges to be cost orientated.

Delays to the introduction of price reductions

BT's views

10.89 BT states that it identified from the draft 2007/08 RFS that its ROCE was high and sought to change its prices. At the same time, it sought a waiver of its price notification obligations from Ofcom in November 2008 to enable it to introduce changes to its Ethernet prices without having to provide 90 days advance notification to its customers. In response to a consultation by Ofcom [240], a number of CPs, including Virgin, objected to the proposed waiver, with the result that BT was unable to introduce the new prices until February 2009.[241][242]

10.90 BT argues that, had it been able to introduce the price changes sooner in 2008/09, the revenues it generated on the Ethernet services would have been lower. BT calculates that the reported return for the AISBO market would have been 26% rather than 37%. The price changes notified in November 2008 reduced the ROCE for the

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[238] Corrected for a typological error in the original.
[239] LLCC 2009 Statement, paragraph 5.82.
[240] http://stakeholders.ofcom.org.uk/binaries/consultations/btprice/summary/btpricecondoc.pdf
[241] http://stakeholders.ofcom.org.uk/binaries/consultations/btprice/statement/Draft_Waiver_Statement_Jan_1.pdf
[242] BT's 20 May submission, paragraphs 57 to 61.

AISBO portfolio from 37.3% in 2009 to 13.5% in 2010. The delays will also impact the comparison of revenue with DSACs.[243]

Views of the Disputing CPs

10.91 Virgin notes that it had objected to the proposed waiver on the basis that its initial work suggested that: "*all of the notified connection charges that it has been able to compare in the time available to it are below BT's LRIC floor and that this may in itself be a breach of Condition HH3 dealing with the requirement for cost orientation*". Virgin maintains that this is not inconsistent with its current claim, which is primarily based on it having been overcharged for rental services. Virgin now considers that it was in error in November 2008 when it identified that the BES100 connection charge was below cost.[244]

10.92 Virgin added that *"…BT's broader argument that much of the overcharge is attributable to Virgin's opposition to it introducing prices early cannot withstand scrutiny. It is BT's obligation to comply with all of its regulatory obligations including both the requirement to ensure its prices are cost oriented and the requirement to give 90 days notice of price changes."*

10.93 Virgin further argued that BT's explanation for the reduction in the ROCE of the AISBO portfolio is misleading and should be ignored. Virgin considers that a large portion of the reduction in ROCE from 2009 to 2010 is due to the change in duct valuation. Virgin suggests that if similar adjustments are made to duct revaluation as are being proposed in the current Charge Control Reviews for LLU and WLR, then ROCE in 2010 is likely to be more than 25.4%.

Ofcom's views

10.94 BT is obliged, under Condition HH6, to send to Ofcom and to every person with which it has entered into a certain contract (known as an access contract) a written notice at least 90 days in advance of introducing price changes to WES, WEES and BES products. Ofcom may give consent in writing to adjust the operation of the price notification requirements. However, before doing so, Ofcom must be satisfied that the giving of such consent would be objectively justified, non-discriminatory, proportionate and transparent, in accordance with section 49(2) of the Act. In addition, Ofcom must publish a notification setting out its proposals to give consent and must provide an opportunity for interested parties to comment on the matter.

10.95 On 24 November 2008, BT notified its customers and Ofcom of new prices for some of its WES, WEES and BES services. In its notification, BT stated that some of these new prices were to become effective from the date of the publication of the notification (i.e. 24 November 2008), whilst others would become effective on 1 February 2009. In doing so, BT failed to comply with the obligation to give 90 days advance written notice of any new price for existing products and services to Ofcom, customers and competitors as required by Condition HH6.

10.96 Following a complaint alleging a breach of the notification obligation, Ofcom intervened and BT withdrew the new charges on 17 December 2008. On the same day, BT also issued a revised notification of the new charges, providing 90 days advance written notice. In the revised notification, it was stated that the new proposed prices would become effective on 1 April 2009.

[243] BT's 20 May submission, paragraph 66.
[244] Virgin's response of 16 June 2011 to BT's 20 May submission.

10.97 On 7 January 2009, BT wrote to us requesting consent to waive the 90 days notice period for the notified price changes. On 16 January 2009 Ofcom published the consultation entitled *Waiver of BT's price notification requirements for certain of BT's WES, WEES and BES prices, Notification of a proposal to give consent to affect the operation of BT's price notification requirements*.

10.98 Following consideration of the available evidence and responses to this consultation, Ofcom concluded that it was appropriate to grant consent to the requested waiver. A statement giving effect to this decision was published on 30 January 2009.[245]

10.99 We therefore acknowledge that the implementation of BT's price reductions was delayed by a period of nearly ten weeks from the date it first intended they would take effect. Where a possible breach of Condition HH3.1 has been prolonged because BT was prevented from introducing lower prices sooner than is usually allowed for under Condition HH6, we have taken this into consideration in our non-mechanistic approach to assessing cost orientation in Section 12.

BT's pricing papers

10.100 Our review of the pricing papers provided by BT demonstrates that BT was aware of its obligation to ensure that its charges were cost orientated. For example, one of BT's pricing papers (relating to WES10) states:

[✂][246]

10.101 The pricing papers we have seen do not, however, reveal any steps taken by BT to ensure that its charges were in fact cost orientated.

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

10.102 Having considered the submissions made by BT in relation to these Disputes, we provisionally conclude that BT has failed to demonstrate to our satisfaction that its WES and BES charges in dispute were cost orientated, in summary for the following reasons:

10.102.1 **Analysis of rates of return on capital employed**. We consider that BT has undertaken its ROCE analysis using an inappropriate level of aggregation and has therefore not satisfactorily demonstrated that its relevant charges were cost orientated.

10.102.2 **Comparison of revenues relative to DSAC**. We do not agree that BT's DSAC analysis demonstrates that its charges were cost orientated, as we do not consider that BT has used an appropriate level of disaggregation to consider the question of cost orientation.

[245] http://stakeholders.ofcom.org.uk/consultations/btprice/statement/
[246] [✂].

10.102.3 **International benchmarking of charges.** We do not consider that BT's international benchmarking analysis demonstrates that BT's charges for the services in dispute are cost orientated, as it relates solely to prices and fails to give any consideration to possible cost differences between the services being compared. Furthermore, it is based on aggregated connection and rental charges rather than individual charges.

10.102.4 **The extent to which its charges gave rise to economic harm.** We disagree that BT's analysis demonstrates that its charges are cost orientated because:

(a) economic harm is not a pre-requisite for considering whether BT's charges are cost orientated; and

(b) in any event, BT's analysis does not demonstrate that economic harm has not occurred.

10.103 We do not consider that BT has shown that it took sufficient steps to ensure compliance historically:

10.103.1 **Interaction with Ofcom between 2004 and 2007.** We do not consider that the actions of Ofcom gave BT any legitimate expectation that Ofcom considered its charges for the services in dispute were cost orientated.

10.103.2 **Lack of action by Ofcom in respect of the LLCC 2009.** We made it clear that our starting charge adjustments were without prejudice to BT's cost orientation obligations. Therefore, we do not consider that the starting charge adjustment should have been read as a signal by BT that the remainder of its charges were cost orientated.

10.103.3 **BT sought to reduce prices in 2008/09.** We note BT's arguments and acknowledge that BT was prevented from implementing the price reductions for a period of nearly ten weeks. We consider that applying the DSAC test non-mechanistically allows us to take into account the prolonged duration of any breach.

10.103.4 **BT's pricing papers.** Although BT's pricing papers show that BT was aware of its obligation to ensure that its charges were cost orientated, those pricing papers that we have seen do not reveal any steps taken to ensure that this obligation was met.

Next Steps

10.104 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 WES and BES services were cost orientated. However, in order to do this, we first need to consider BT's arguments regarding the correct DSAC data to use in this case; we do this in Section 11.

Section 11

Which is the appropriate DSAC data for assessing cost orientation?

Introduction

11.1 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. As described in Section 9, we use the DSAC test to assess cost orientation when BT has failed to demonstrate that its charges are cost orientated. 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[247].

11.2 In this section 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. Finally, we 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.

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

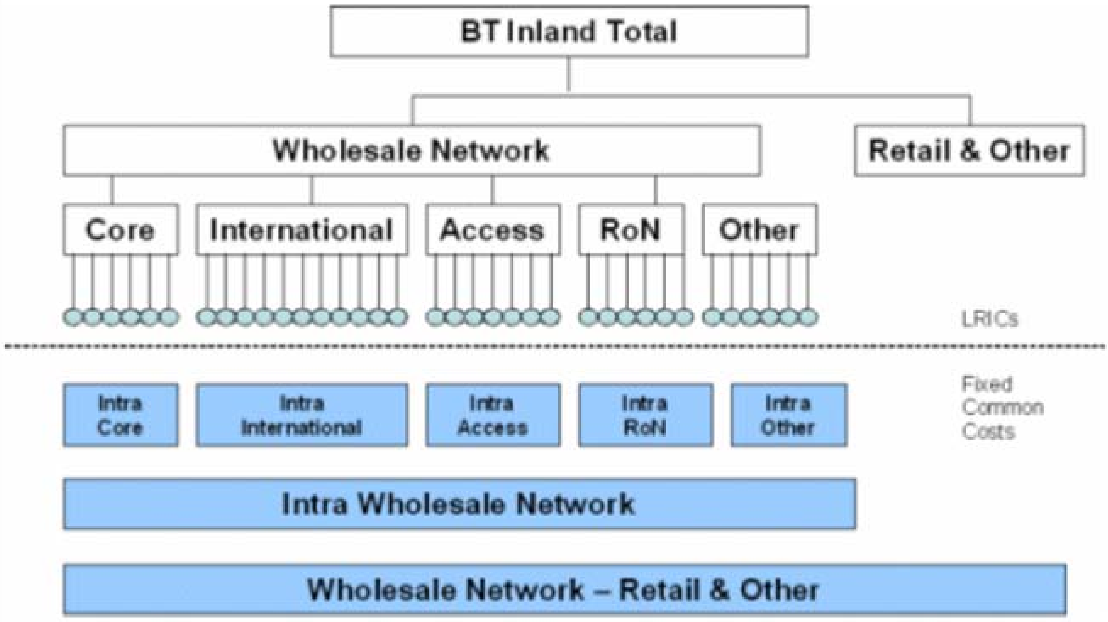
11.3 This sub-section provides a brief overview of the methodology BT has used for calculating DSACs for publication in its annual RFS since 1997. Further detail can be found in BT's Primary Accounting Documents ("PAD")[248] which are published annually with its RFS.[249]

BT's LRIC model structure

11.4 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 11.1.

[247] We note that BT has also adopted this revised approach for its 2010/11 RFS.
[248] For 2008/09, BT's PAD can be found at http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2009/PrimaryAccountingDocuments.pdf
[249] 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 11.1: BT's LRIC Model Structure



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

11.5 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 DSAC estimates 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).

11.6 When allocating costs, BT's LRIC model divides BT's Wholesale Network into sections known as "increments". As shown in Figure 11.1 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

11.7 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[250] 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

[250] See p12 of BT's "Detailed Attribution Method" document available at http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2009/DetailedAttributionMethods.pdf

of how they are used by BT are contained in BT's Long Run Incremental Cost; Relationships & Parameters ("R&P") document.[251]

Distribution of fixed and common costs for DLRICs and DSACs

11.8 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 11.1 as "Intra-Wholesale Network" FCCs. FCCs that are only shared between components in the Core increment are shown as "Intra-Core" FCCs.

11.9 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).

11.10 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

11.11 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".

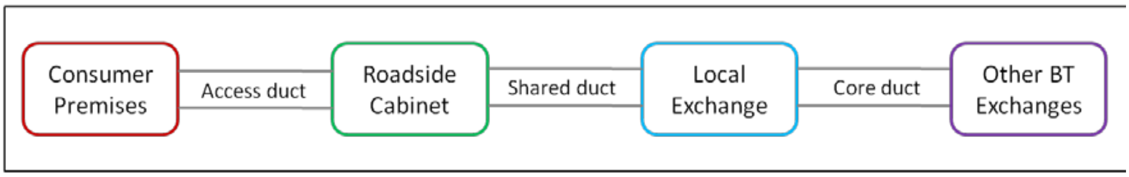
11.12 Most cost categories use a single CVR to calculate LRICs reflecting the existence of one cost driver for that cost category. However, for some cost categories there are two cost drivers for the cost category.[252] In such circumstances the underlying CVR is three dimensional in that it comprises of two different types of incremental costs (i.e. one for each driver) but only one set of FCCs.

11.13 The nature of the three dimensional CVRs is perhaps more easily demonstrated with a (simplified) practical example and illustrated in Figure 11.2 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

[251] See Section 5 of BT's PAD. References to pages of the R&P in this document are to the 2009 R&P document.
[252] 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.

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. 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 11.2: Illustration of duct network



11.14 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").

11.15 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.

11.16 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).[253] BT's LRIC model therefore effectively combines the LRICs of the sub-categories before it distributes the FCCs to calculate DSACs. [254] 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.

11.17 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

[253] There are some increment-specific fixed costs which can be uniquely identified with a sub-category, and BT's LRIC model treats these differently.
[254] 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.

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

11.18 In its response to a follow-up question to the 22 October section 191 notice, BT informed Ofcom on 9 May 2011 of possible anomalies in the DSAC figures published in its RFS (the "published DSACs") for all of the years covered by the 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. BT told us that[255]:

> *"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*".

11.19 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."*[256]

11.20 BT considers the approach it has used to produce its published DSACs is not "*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*".[257] 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."*[258]

11.21 BT also considers that its existing approach is inconsistent with both Geoffrey Myers'[259] witness statement in the PPC appeal 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."*[260]

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

[255] BT's response of 20 May 2011 to follow up question 17 to the 22 October section 191 notice, paragraphs 2 to 4.
[256] BT's 20 May submission, paragraph 76.
[257] BT's response to follow up question 17 to the 22 October section 191 notice, paragraphs 14 and 15.
[258] BT's 11 August response, paragraph 1b.
[259] Director of Competition Economics, Ofcom.
[260] BT's 11 August response, Question 1c.

11.22.1 DSACs should never be below FAC[261];

11.22.2 the calculation of LRICs and the distribution of FCC were not carried out at the same level of granularity[262];

11.22.3 the approach to calculating DSACs was inconsistent with BT's own methodology;[263] and

11.22.4 the approach to calculating DSACs was inconsistent with Ofcom's views of how DSACs should be calculated.[264]

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

11.24 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.[265]

11.25 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*."[266]

11.26 BT proposes to address the issue by calculating the LRIC and common cost allocation at the category level (i.e. 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 (i.e. LRIC<FAC<DSAC) will be maintained, which it considers to be important.

11.27 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.[267] As a result of the change in LRIC levels, the allocation of FCCs between components and services will also change (in a similar manner). Consequently, the

[261] BT's response to follow up question 17 to the 22 October section 191 notice, paragraphs 4 and 16.
[262] BT's 11 August response, questions 1b and 1c; presentation to Ofcom by BT dated 4 August.
[263] BT's response to follow up question 17 to the 22 October section 191 notice, paragraphs 3 and 16.
[264] BT's response to follow up question 17 to the 22 October section 191 notice, paragraph 16.
[265] Slides provided at meeting dated 4 August, page 5.
[266] BT's 11 August response, question 2a.
[267] It is noteworthy in this context that BT's view on the impact of its proposals changed during the course of our consideration of the Disputes. In BT's 20 May response (See 6c of Annex A), BT considered that its proposed adjustments *"only amended the apportionment of the FCC. In practice therefore all of the difference between our adjusted DSACs and the published values can be explained by the changes to FCC."*

DSAC figures against which we would assess whether BT has overcharged for WES and BES services would increase significantly, potentially reducing the extent to which BT may be deemed to have overcharged for those services. Correspondingly, the DSAC figures for other services outside the Disputes would fall significantly. 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 (which are outside of these Disputes) over the period 2006/07 to 2009/10.

11.28 BT reported its unit volumes for BES and WES services differently in 2006/07 and 2007/08 to 2008/09 and 2009/10. In 2006/07 and 2007/08 the unit data was presented per circuit, whereas in 2008/09 and 2009/10 the unit data was presented per local end. The Openreach Price List contains prices on a per local end basis. However, for ease of comparison we have converted unit values to a "per local end" basis for 2006/07 and 2007/08. We have done this by assuming that each circuit requires two local ends. Table 11.1 sets out the unit DSAC per local end based on BT's RFS data, and Table 11.2 sets out the revised DSACs proposed by BT per local end.

11.29 The impact of BT's proposed adjustments to the Ethernet DSAC figures are set out in the Tables below. Table 11.1 sets out the published DSACs in BT's RFS for the years covered by the Disputes, Table 11.2 sets out the revised DSACs proposed by BT for the same services in the same years and Table 11.3 shows the percentage difference between the published unit DSACs and the revised unit DSACs.

Table 11.1: BT's published unit DSACs per local end

AISBO service, £ per local end[268]	2006/07	2007/08	2008/09	2009/10
BES100 rental	£2,536	£994	£1,621	£1,731
BES1000 rental	£2,749	£1,570	£1,660	£2,239
BES100 connection	£1,119	£1,875	£1,704	n/a
BES1000 connection	£3,842	£6,731	£6,026	£26,861
WES10 rental	£2,416	£1,725	£1,790	£2,239
WES100 rental	£2,560	£1,802	£1,782	£2,319
WES1000 rental	£2,750	£2,456	£1,822	£3,028
Main link rental (£ per km)	n/a	£959	£583	£963

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 and 2009/10 are per the original RFS in those years. n/a = not available.

[268] 2006/07 and 2007/08 DSACs are per circuit, 2008/09 and 2009/10 DSACs are per local end. As noted, per circuit figures have been converted to per local end by assuming each circuit requires two local ends.

Table 11.2: BT's proposed unit DSACs per local end

AISBO service, £ per local end	2006/07	2007/08	2008/09	2009/10
BES100 rental	£6,507	£1,220	£2,025	£2,328
BES1000 rental	£6,721	£1,795	£2,065	£2,848
BES100 connection	£1,120	£1,875	£1,704	n/a
BES1000 connection	£3,843	£6,731	£6,026	£26,861
WES10 rental	£5,034	£2,218	£2,245	£3,042
WES100 rental	£5,178	£2,296	£2,237	£3,127
WES1000 rental	£5,369	£2,950	£2,277	£3,862
Main link rental (£ per km)	n/a	£861	£499	£826

Source: BT submission of 22 June 2011

Table 11.3: Change between published unit DSACs and revised unit DSACs

AISBO service	2006/07	2007/08	2008/09	2009/10
BES100 rental	157%	23%	25%	35%
BES1000 rental	144%	14%	24%	27%
BES100 connection	0%	-	-	-
BES1000 connection	0%	-	-	-
WES10 rental	108%	29%	25%	36%
WES100 rental	102%	27%	26%	35%
WES1000 rental	95%	20%	25%	28%
Main link rental	-	(10%)	(14%)	(14%)

Source: BT submission of 22 June 2011

Ofcom's views

Introduction

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

11.30.1 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 in the year after charges were levied[269].

11.30.2 We then go on to explain our rationale for using DSAC as a benchmark for assessing cost orientation.

11.30.3 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. This includes an exploration of the extent to which DSACs are below FAC for the services in dispute.

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

[269] We note that BT has restated its RFS for some years.

Our starting point for considering DSACs in these Disputes

11.31 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 9). 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".

11.32 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 CC. For example, the regulatory accounting information previously produced by BT in relation to the AISBO market underpinned decisions made in respect of the 2009 LLCC. BT's DSAC data specifically were used to inform decisions made in relation to changes to the starting charges for the charge control. However, BT's proposed changes to its DSAC methodology do not just affect DSAC data for the AISBO market, as noted in paragraph 11.27 above. The changes also result in revisions to BT's DSACs for services in other markets, such as the TISBO market (which includes PPC services). As a consequence, the revisions generate DSACs that differ from those used by Ofcom to resolve the PPC Disputes which were the subject of the PPC appeal.

11.33 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.*"[270]

11.34 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.

11.35 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.

[270] PPC Judgment, paragraph 161.

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

11.36 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.

11.37 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.

11.38 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.

11.39 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.

11.40 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.

11.41 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.

11.42 The pricing flexibility provided for by the use of DSAC arises from the fact that in calculating DSAC, the stand-alone cost 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.

11.43 Each of these different approaches involves the distribution of the same stand-alone cost 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 stand-alone cost 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

11.44 We consider that the starting point for our assessment is that we should use the DSACs published by BT at the time (adjusting for factual errors). However, we go on to consider each of BT's arguments in relation to why we should not use its published DSAC figures.

Occurrences of DSAC being less than FAC in these Disputes

11.45 The existence of DSACs below FAC for certain services (and components) is central to BT's argument that its existing approach to calculating DSACs is wrong. Therefore, in this sub-section we consider the extent to which the services in dispute were affected by such a relationship. In Table 11.4 below we present the DSAC to FAC ratio for each of the services in dispute over the relevant financial years. The ratios are based on BT's data before our adjustments (which we discuss in more detail below and in Section 12). Where the DSAC for a service is below FAC the ratio will be less than 100%. We have entered such ratios in bold and red.

Table 11.4: Ratio of DSAC to FAC unit cost data published in the RFS for the services in dispute

AISBO service	2006/07	2007/08	2008/09	2009/10
BES100 rental	**96%**	141%	131%	106%
BES1000 rental	102%	164%	132%	116%
BES100 connection	138%	216%	169%	n/a
BES1000 connection	133%	215%	168%	186%
WES10 rental	106%	128%	131%	134%
WES100 rental	111%	132%	130%	135%
WES1000 rental	117%	150%	132%	144%
Main link rental	n/a	251%	318%	302%

Source: Ofcom based on BT data.
Note: 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 and 2009/10 are per the original RFS in those years. n/a = not available.

11.46 As Table 11.4 demonstrates, we only observe DSAC being below FAC for one service (i.e. BES100 rental) in one year (i.e. 2006/07). For all other service and year combinations the ratio is above 100% and generally significantly so.

11.47 In paragraphs 8.53 to 8.54 above, we explain that BT's cost orientation obligations give it pricing flexibility by allowing it to choose its precise pattern of common cost recovery as long as each individual charge lies within the DLRIC to DSAC range.[271] Therefore, the ratio of DLRIC to DSAC for individual services is more relevant to understanding the extent to which BT's published DSACs provided pricing flexibility than the ratio of DSAC to FAC. In Tables 11.5 to 11.8 below, we therefore present the unit DLRICs, FACs and DSACs, along with the DSAC/DLRIC and DSAC/FAC ratio. A DSAC to DLRIC ratio of 100% implies no flexibility[272].

Table 11.5 – unit DLRIC, FACs, and DSACs for 2006/07 per local end

	DLRIC	FAC	DSAC	DSAC/DLRIC ratio	DSAC/FAC ratio
BES100 rental	£907	£2,651	£2,536	280%	96%
BES1000 rental	£958	£2,704	£2,749	287%	102%
BES100 connection	£760	£809	£1,119	147%	138%
BES1000 connection	£2,707	£2,883	£3,842	142%	133%
WES10 rental	£764	£2,271	£2,416	316%	106%
WES100 rental	£798	£2,307	£2,560	321%	111%
WES1000 rental	£843	£2,354	£2,750	326%	117%

Source: Ofcom analysis of 2006/07 RFS data published in document entitled "Additional information in relation to BT's Current Cost Financial Statements for 2008"[273] published alongside the 2007/08 RFS.

Table 11.6 – unit DLRIC, FACs, and DSACs for 2007/08 per local end

	DLRIC	FAC	DSAC	DSAC/DLRIC ratio	DSAC/FAC ratio
BES100 rental	£325	£706	£994	306%	141%
BES1000 rental	£522	£959	£1,570	301%	164%
BES100 connection	£749	£870	£1,875	250%	216%
BES1000 connection	£2,697	£3,137	£6,731	250%	215%
WES10 rental	£539	£1,345	£1,725	320%	128%
WES100 rental	£560	£1,366	£1,802	322%	132%
WES1000 rental	£772	£1,638	£2,456	318%	150%
Main link (per km)	£249	£382	£959	384%	251%

Source: Ofcom analysis of 2007/08 RFS data as restated in 2008/09 RFS.

[271] Unless there are specific circumstances that imply a charge outside of this range is nevertheless appropriate.

[272] As we explain in paragraphs 12.30 to 12.101 below, we propose to make a number of adjustments to BT's FAC and DSAC data for the purposes of resolving these Disputes. The data presented in Tables 11.5 to 11.8 exclude these adjustments (i.e. they are based on the data provided by BT). Our adjustments will alter the DSAC/FAC and DSAC/DLRIC ratios. However, as we have not had to consider the adjustments required to BT's DLRIC data in resolving these disputes, we do not have adjusted DLRIC data to compare against adjusted DSAC and FAC data.

[273] http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2008/AdditionalinformatonApr09.htm

Table 11.7 – unit DLRIC, FACs, and DSACs for 2008/09 per local end

	DLRIC	FAC	DSAC	DSAC/DLRIC ratio	DSAC/FAC ratio
BES100 rental	£587	£1,239	£1,621	276%	131%
BES1000 rental	£601	£1,256	£1,660	276%	132%
BES100 connection	£997	£1,008	£1,704	171%	169%
BES1000 connection	£3,552	£3,590	£6,026	170%	168%
WES10 rental	£589	£1,369	£1,790	304%	131%
WES100 rental	£585	£1,365	£1,782	304%	130%
WES1000 rental	£600	£1,383	£1,822	304%	132%
Main link (per km)	£116	£184	£583	500%	318%

Source: Ofcom analysis of 2008/09 RFS data as published in the 2008/09 RFS.

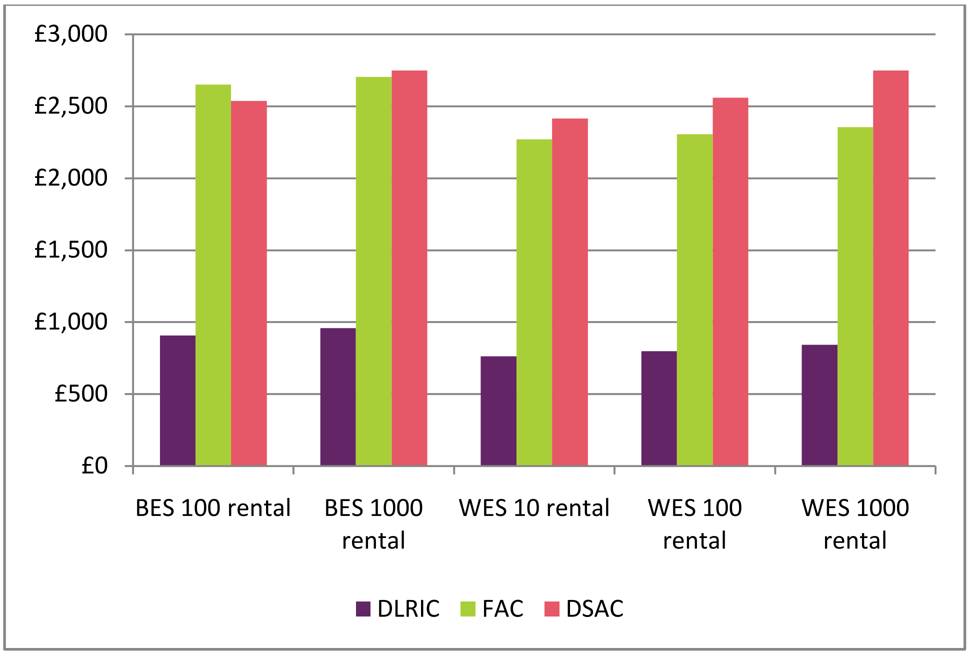
Table 11.8 – unit DLRIC, FACs, and DSACs for 2009/10 per local end

	DLRIC	FAC	DSAC	DSAC/DLRIC ratio	DSAC/FAC ratio
BES100 rental	£678	£1,634	£1,731	255%	106%
BES1000 rental	£885	£1,935	£2,239	253%	116%
BES100 connection	na	na	na	na	na
BES1000 connection	£12,552	£14,439	£26,861	214%	186%
WES10 rental	£620	£1,675	£2,239	361%	134%
WES100 rental	£648	£1,720	£2,319	358%	135%
WES1000 rental	£906	£2,098	£3,028	334%	144%
Main link (per km)	£205	£319	£963	470%	302%

Source: Ofcom analysis of 2009/10 RFS data as published in the 2009/10 RFS.

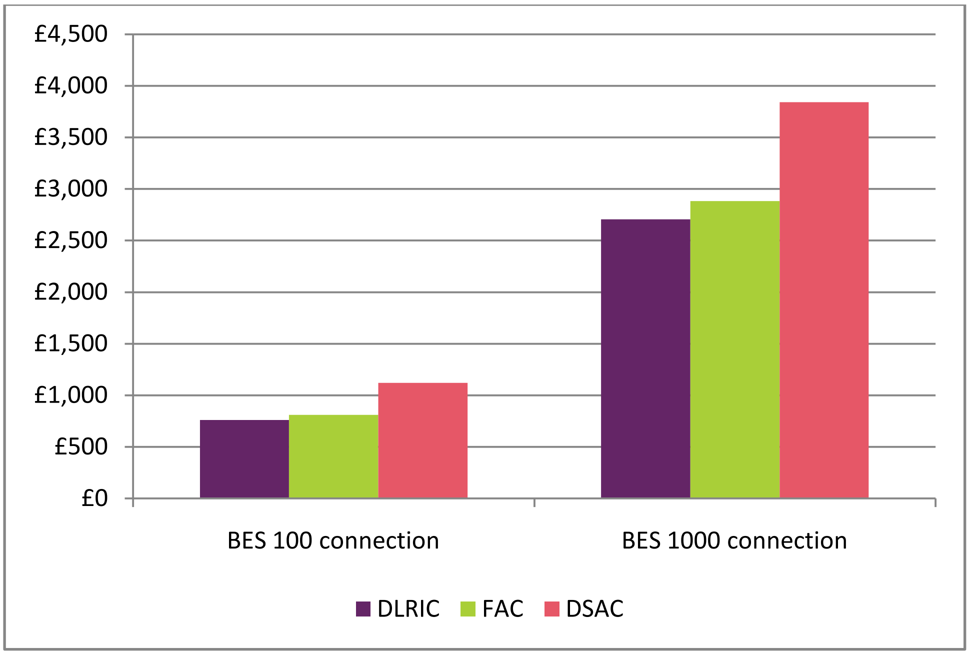
11.48 As Figures 11.3 and 11.4 demonstrate, unit FACs for rental services were close to (or slightly above) unit DSACs in 2006/07, whereas unit FACs for connection services were much closer to unit DLRICs. As can be seen from Tables 11.5 to 11.8, although the pricing flexibility (as measured by the DSAC to DLRIC ratio) is greater for rental services than connection services (as you would expect given the greater use of shared network assets by circuit rentals than by connection services), in both cases DSAC is significantly higher than DLRIC. For rental services the DSAC is double or more the level of DLRIC, implying a significant degree of pricing flexibility. Indeed even for the one example of DSAC below FAC (BES100 rental in 2006/07), BT had a large degree of pricing flexibility as reflected in the ratio of DSAC to DLRIC (around 280%).

Figure 11.3: Unadjusted unit DSACs, FACs and DLRICs for rental services in 2006/07 per local end[274]



Source: Ofcom analysis of 2006/07 RFS data published alongside the 2007/08 RFS data in a document entitled "Additional information in relation to BT's Current Cost Financial Statements for 2008".

Figure 11.4: Unadjusted unit DSACs, FACs and DLRICs for connection services in 2006/07 per local end[275]



Source: Ofcom analysis of 2006/07 RFS data published alongside the 2007/08 RFS data in a document entitled "Additional information in relation to BT's Current Cost Financial Statements for 2008".

[274] In 2006/07, unit costs included an element of main link costs.
[275] In 2006/07, unit costs included an element of main link costs

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

11.49 As we explained in Annex 11 of the PPC Final Determinations, at a high-level DSACs are calculated on the basis of distributing the stand-alone cost 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.

11.50 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.[276] 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*.[277]

11.51 BT's FAC values are calculated using an Activity-Based Costing ("ABC") methodology.[278] 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.

11.52 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 (i.e. for one service in one year for the charges in dispute) 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. This is also the case for BES100 rental in 2006/07 (when DSAC is a little below FAC), because of the significant gap between DSAC and DLRIC.

11.53 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

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[276] [✂] Slides provided at meeting dated 4 August, page 5.
[277] Slides provided at meeting dated 4 August, slide 5.
[278] I.e. costs are allocated on the basis of a series of accounting rules.

DSAC test (see Section 6). 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

11.54 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*".[279] 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*".[280]

11.55 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 11.16 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.

11.56 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

11.57 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[281] 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.

11.58 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:

[279] BT's 11 August response, paragraph 1b.
[280] Slides provided at meeting dated 4 August, slide 2.
[281] Worked example of 14 July 2011.

> *"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."*[282]

11.59 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.

Consistency of BT's published DSACs with Ofcom guidance

11.60 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 the PPC appeal]*."*[283]

11.61 As we have explained in paragraph 11.8 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.

11.62 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 stand-alone cost 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 stand-alone cost 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[284] (this includes the R&P, which we discuss below).

11.63 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.

11.64 BT's model distributes the stand-alone cost 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.

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[282] BT's 11 August response, paragraph 1a.
[283] BT's 11 August response, paragraph 1c.
[284] 2001 NCC Guidelines, paragraph B.3.

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

11.65 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.[285]

11.66 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.

11.67 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).[286] 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*".[287] 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.

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

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

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

11.69 First, the R&P contains a summary of the approach taken when a cost category has two cost drivers,[288] 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.*"[289]

11.70 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.

11.71 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*

[285] See paragraph 11.54 and BT's 11 August response, paragraph 1b.
[286] For example there are common costs associated with "Inland Private Circuits" that are common to just the components in this group.
[287] BT's 11 August response, paragraph 1b.
[288] See appendix 2 (pages 47 to 52) of LRIC R&P - http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2009/LongRunIncrementalCostModel.pdf
[289] See Section 2.3 of R&P.

> *LRIC of Core and the sum of 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.*"[290] (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.*"[291] (emphasis added)

11.72 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.

11.73 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

11.74 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 in section 12[292], 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.

11.75 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

[290] See Section 2.5.2 of the R&P.
[291] See Section 2.5.3.1 of the R&P.
[292] Paragraphs 12.30 to 12.101 below.

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.

11.76 We acknowledge that it is not typical for DSACs to be less than FAC for individual services. 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, although for the services in dispute this is only the case for one service in one year (i.e. BES100 rental in 2006/07).

11.77 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, e.g. in many cases DSAC is at least twice as large as DLRIC (including BES100 rental in 2006/07, which is the only instance where DSAC is below FAC 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.

11.78 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 the PPC appeal.

11.79 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.[293]

11.80 Having concluded that we should use the data generated by BT's LRIC model and published in BT's RFS as the basis for our assessment of cost orientation, in Section 12 we consider whether it is necessary for us to disaggregate and/or adjust any of this data for the purposes of our assessment.

[293] 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.

Section 12

BT's revenues and costs of providing the BES and WES services in dispute

Introduction

12.1 In this section, we set out the adjustments which we have made to BT's published data in order to correct for volume errors and ensure revenues and costs are appropriately matched. We provide a summary of the final data set that we propose to use in resolving these Disputes.

12.2 This section is structured as follows:

12.2.1 paragraphs 12.3 to 12.29 explain the base data we have obtained from BT;

12.2.2 paragraphs 12.30 to 12.101 explain the corrections and adjustments associated with volumes, revenues and costs that we propose to make to this base data;

12.2.3 paragraphs 12.102 to 12.108 discuss the adjustments to the RFS data proposed by the Disputing CPs;

12.2.4 paragraphs 12.109 and 12.110 summarise the impact of the adjustments we have made on the base data revenues and costs;

12.2.5 paragraphs 12.111 to 12.118 explain the adjustments we have made to BT's DSAC data published in its RFS; and

12.2.6 paragraphs 12.119 and 12.120 set out the results of the DSAC test for each of the disputed services, comparing external revenues and external DSAC.

The relevant base data for our comparisons

12.3 As discussed in Section 4, BT is required to publish annual RFS to help demonstrate, and allow Ofcom and its customers to assess, compliance with its cost orientation obligations.

12.4 The published RFS data was used by the Disputing CPs as the basis of their dispute submissions. However, as noted at paragraph 11.23, BT considers that we should disregard its published DSACs. We consider that this is inappropriate for the reasons set out at paragraphs 11.31 to 11.35 and the published RFS therefore form the starting point for our analysis.

<u>The relevant years</u>

12.5 Sky and TTG are disputing various BES services in the period 24 June 2004 to 31 July 2009 and Virgin is disputing various BES and WES services in the period 1 April 2006 to 31 March 2009. However, as discussed in paragraphs 7.7 to 7.11, we have provisionally concluded that there is no evidence that the Parties were in dispute in relation to BES services in 2004/05. This means that, in terms of BT's published RFS data, the periods in dispute are the years (or parts thereof) ending March 2006 to March 2010.

12.6 As set out in Section 7 and reproduced below, the Ethernet services in dispute are BES100 and BES1000 rentals and connections, WES10, WES100 and WES1000 rentals and main link rentals. Not every service is disputed in each year and not every party is disputing each service.

Table 12.1: Ethernet services and the financial years they are in dispute

	05/06	06/07	07/08	08/09	09/10*
BES100 rental	ST	STV	STV	STV	ST
BES1000 rental	ST	STV	STV	STV	ST
BES100 connection	ST	ST	STV	STV	ST
BES1000 connection	ST	ST	ST	ST	ST
WES10 rental				V	
WES100 rental		V	V	V	
WES1000 rental		V	V	V	
Main link rental		ST			

*S=Sky, T=TTG, V=Virgin. *Only the first 4 months of 09/10 are in dispute*

Source: Annex 1 of Sky and TTG's Joint Dispute Submission and paragraphs 20 and 24 of the Virgin Dispute Submission

<u>Available data</u>

12.7 As discussed in Section 8, BT's cost orientation obligation applies to each and every charge that BT levies for services in the AISBO market. In order for us to assess compliance with this obligation, it is necessary for us to analyse the costs and revenues associated with each individual service.

12.8 As discussed in Section 8, BT's RFS report the costs and revenues of Ethernet services at different levels of aggregation across the various years of the Disputes. For example, in 2005/06 BT's RFS reported two services – "Wholesale and LAN extension services" and "Backhaul extension services" with no further disaggregation. In 2006/07 BT's RFS did not separately report the main link rental service. In subsequent years, BT reported Ethernet services at the individual bandwidth level.

12.9 Even where BT's RFS include more disaggregated data (i.e. from 2006/07 onwards), they do not disaggregate data to the level contained in the Openreach Price List. For example, while the Openreach Price List sets out charges for variants of BES1000 ('standard', 'daisy chain', 'extended reach' and 'term' rentals), BT's RFS only includes details on 'BES1000' rentals, i.e. BT aggregates all variants of BES1000 and reports them under the heading 'BES1000 rentals' in the RFS. As referred to in paragraph 8.44, we consider that, as the variants are listed separately and attract different charges in the Openreach Price List, they are distinct charges which should be individually cost orientated.

12.10 Given our provisional conclusions in Section 8 that the cost orientation obligation applies to each and every charge offered by BT for Ethernet services, the published data does not appear to be sufficiently disaggregated to allow us to properly assess each of BT's charges for WES and BES services. In order to resolve the Disputes in as consistent a manner as possible across all years and in line with the requirements of the cost orientation obligation, it is therefore necessary for us to make adjustments to BT's data to disaggregate the published data where reasonable and appropriate, so that we can assess whether each and every charge is cost orientated.

12.11 In the 22 October section 191 notice, we required BT to provide revenue, cost and volume data for each service listed in the Openreach Price List and to reconcile this to the information reported in the RFS for the AISBO market. We also considered the information in BT's AFS, which give a breakdown of costs and mean capital employed ("MCE") for each service published in the RFS. BT does not publish these AFS but provides them to Ofcom on a confidential basis.

12.12 The volume, price and unit cost information supplied by BT in response to the 22 October section 191 notice was the same as that published in the relevant RFS for each year, however BT was unable to provide the level of disaggregated cost information that we had requested.[294] BT explained that cost information at the level of Openreach Price List did not exist in any system within Openreach.[295]

12.13 We have therefore been unable to obtain cost information for each individual service listed in the Openreach Price List. Instead the cost information we use is only disaggregated to the level published in the RFS, although BT has provided details as to which Openreach Price List services are included in each of the entries reported in the RFS.[296]

12.14 Where necessary, we have considered whether we can make sensible assumptions to disaggregate this data further (see paragraphs 12.25 to 12.29). We have, however, been unable to robustly disaggregate the cost data that relates to the different variants, although disaggregated revenue data was made available. We do not consider that this has materially affected our ability to determine whether BT has overcharged for the services in dispute and have therefore not sought to disaggregate the data any further. We consider the impact of this in paragraphs 13.29 and 13.51.

12.15 We set out below the revenue, FAC and DSAC data obtained from BT. We discuss first the period 2005/06, which is highly aggregated. We then consider the data for 2006/07 to 2009/10, which is less aggregated but not fully disaggregated.

2005/06 data

12.16 Sky and TTG are disputing BT's charges for BES100 and BES1000 rental and connection services in 2005/06.

12.17 In 2005/06 BT reported two aggregated services – BES and Wholesale/LAN Extension Services (WES & LES).

[294] We note that BT has subsequently provided us with disaggregated volume and revenue data in relation to the Cable & Wireless dispute but it has not provided disaggregated cost data.
[295] BT's response to the 22 October 2010 section 191 notice, question 2.
[296] BT's response to the 22 October 2010 section 191 notice, question 1.

Table 12.2: Financial data for 2005/06, £m

	BES	WES & LES	Total
Revenue:			
- internal	0	179	179
- external	6	2	8
- total	6	181	187
FAC			
- internal	0	n/a	n/a
- external	6	n/a	n/a
- total	6	165	171
DSAC			
- internal	0	n/a	n/a
- external	10	n/a	n/a
- total	10	297	307

Source: RFS. n/a = data not available

12.18 The 2005/06 RFS reported BES external sales of £6 million with a total DSAC of £10 million. No further disaggregated data was published (see paragraph 8.41 above). There were no internal sales. Without detailed financial information it is not straightforward to apportion total revenue and DSAC between services.

12.19 We have considered how to disaggregate both the £6 million of external BES revenue and £10 million of external DSAC in order to allow an assessment of the disputed BES100 and BES1000 services.

12.20 BT provided us with billing data by service and customer for 2005/06 in its e-mail of 18 February 2011. The 2005/06 billing data suggests that revenue was split between the various BES services as shown in Table 12.3. We have applied this to the £6 million of external BES revenue reported in the 2005/06 RFS to obtain an estimate of external revenue in that year for each BES service.

Table 12.3: Ofcom estimate of external BES revenue in 2005/06 £m

	% split suggested by billing data	% split applied to RFS
BES100 rental	6%	0.4
BES1000 rental	6%	0.4
BES other rental	40%	2.4
BES100 connection	12%	0.7
BES1000 connection	14%	0.8
BES other connection	22%	1.3
		6.0

Source: Ofcom, based on data provided in BT's 18 February 2011 e-mail.
Note: Revenue figures include main link revenue in 2005/06

12.21 We then considered how to disaggregate the £10 million of BES DSAC in 2005/06. This is not straightforward as BT was not able to provide us with any disaggregated cost information on services at a more granular level than that published in the RFS. We have therefore considered ways in which we could estimate how the DSAC could be apportioned to each service.

12.22 There are a number of ways in which we could apportion the total DSAC between BES services. We consider the following three options the most reasonable as they are based on observable data:

12.22.1 assume that 2005/06 DSACs were split in proportion to revenue as set out in Table 12.3;

12.22.2 assume that 2005/06 DSACs were split in proportion to the 2006/07 DSACs (which were published at a more granular level in the RFS for that year); and

12.22.3 assume that the 2005/06 DSACs were split in proportion to the average DSAC split between the services over the three year period from 2006/07 to 2008/09.[297]

12.23 We set out in Table 12.4 the DSACs estimated for each BES service on the basis of the three options highlighted.

Table 12.4: Ofcom estimate of BES DSACs using different methods of apportionment, 2005/06 £m

	Ofcom revenue estimate	DSAC using revenue split	DSAC using 06/07 DSAC split	DSAC using average DSAC split 06/07 - 08/09
BES100 rental	0.4	0.6	3.1	2.4
BES1000 rental	0.4	0.6	1.4	2.1
BES other rental	2.4	4.0	0.6	1.2
BES100 connection	0.7	1.2	1.9	0.9
BES1000 connection	0.8	1.4	2.9	2.7
BES other connection	1.3	2.2	0.2	0.8
	6.0	10.0	10.0	10.0

Source: Ofcom, based on data reported in the RFS 2006/07 – 2008/09 and supplied in BT's 18 February email.
Note: The DSAC splits are based on the DSACs published in the RFS.

12.24 The three options provide a range of different estimated DSACs for the individual BES services. On the basis that the estimated DSACs are considerably above estimated revenue for the BES100 and BES1000 services under each of the scenarios, we do not consider that it is necessary to conclude as to which of the three options is the most reasonable. The outcome of the DSAC test will be the same regardless of whether we use the published, aggregated data or replace it with one of our disaggregated estimates.

2006/07 to 2009/10 data

12.25 BT's RFS contained more disaggregated information in 2006/07 to 2009/10, separately reporting BES and WES services by bandwidth and, from 2007/08, splitting out main link rentals. In 2006/07 the revenues and costs associated with main link rentals were included within the reported BES and WES rental services.

12.26 As discussed above, we required BT to provide us with total revenue, total FAC and total DSAC for each service in dispute in the years 2006/07 to 2009/10. BT provided this data in its response to the 22 October section 191 notice. The volumes, revenue

[297] We did not include 2009/10 in the average because BES100 connection and BES other rental services were too small to report in this year.

and unit cost data provided for each service is the same as that published in the RFS for the years in question as BT was unable to provide more granular information.

12.27 No information is available in the RFS for main link rentals in 2006/07 and BES100 connections in 2009/10. Main link rentals were not separately identified in the 2006/07 RFS but we understand that the revenues and costs are included within those of other Ethernet rental services in this year. This is considered in more detail in paragraphs 12.104 to 12.108 below.

12.28 Similarly, no revenues or costs were identified in the 2009/10 RFS for BES100 connection because the numbers fell below the materiality threshold.[298] BT's response[299] suggests that external revenue in 2009/10 was approximately £[✄], 15% of the FAC which was around £[✄]. No DSAC data is available.

12.29 Table 12.5 sets out the revenue, FAC and DSAC data provided by BT for the period 2006/07 to 2009/10.

Table 12.5: Total revenue and cost data provided by BT for the period 2006/07 to 2009/10, £m

	2006/07	2007/08	2008/09	2009/10
BES100 rental				
Revenue	12	13	16	8
FAC	7	4	8	9
DSAC	7	6	10	9
BES1000 rental				
Revenue	13	27	30	17
FAC	3	3	9	8
DSAC	3	5	11	9
BES100 connection				
Revenue	10	5	2	0
FAC	2	2	1	0
DSAC	4	3	1	n/a
BES1000 connection				
Revenue	9	8	8	2
FAC	3	4	6	17
DSAC	6	9	9	32
WES10 rental				
Revenue	79	62	101	113
FAC	123	73	85	94
DSAC	131	94	113	125
WES100 rental				
Revenue	92	79	86	86
FAC	47	37	44	64
DSAC	52	49	57	86
WES1000 rental				
Revenue	43	27	32	32
FAC	6	5	6	12
DSAC	8	7	7	17

[298] In relation to BES100 connection the 2009/10 RFS says "turnover for this service is <£1m and hence shown within roundings as agreed with Ofcom. Where turnover is immaterial, no volumes or prices are shown" and "costs associated with [this service are] immaterial". (page 52, notes (t) and (u)). http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2010/index.htm

[299] BT's response to the 22 October 2010 section 191 notice, question 2.

	2006/07	2007/08	2008/09	2009/10
Main link rental				
Revenue	n/a	109	138	125
FAC	n/a	77	49	100
DSAC	n/a	195	156	303

Source: BT's response to question 2 of the 22 October Section 191 request.
n/a = not available.

Adjustments we propose to make to the BT base data

12.30 As part of their Joint Dispute Submission, Sky and TTG submitted a report by RGL to support their claim of overcharging. The RGL Report compared revenue against DSAC for the BES services disputed by Sky and TTG.

12.31 RGL made a series of adjustments to the RFS data based on the adjustments made by Ofcom in the 2009 LLCC Statement. Like Ofcom, RGL made adjustments for equipment costs, 21CN, excess construction charges and payment terms but, again like Ofcom, did not make adjustments for holding gains and losses or a Regulated Asset Value ("RAV") adjustment[300]. Each of these adjustments is discussed in more detail in the sub-sections which follow. Ofcom's adjustments have been based on responses by BT to our section 191 notices and therefore make use of information that was not available to RGL.

12.32 BT did not comment in relation to the adjustments that we make in the following sub-sections.

12.33 In the PPC Judgment, the CAT held that

> *"…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".*[301]

12.34 However, the CAT noted that in the case of the PPC 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*".[302]

12.35 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 Ethernet data to ensure that it can be relied upon for determining the Disputes.

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

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

[300] RGL Report, section 3.2
[301] PPC Judgment, paragraph 161.
[302] PPC Judgment, paragraphs 161.

12.36.2 the second replicates a series of cost adjustments that were identified in the 2009 LLCC Statement,[303] to the extent that they are applicable to these historic Disputes.

12.37 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.

12.38 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.

12.39 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.

12.40 For the purposes of resolving the 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.

12.41 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[304] with a view to publishing a consultation document in spring 2012.

<u>Corrections to the base data associated with volume errors</u>

12.42 We have made the following corrections to the base data:

12.42.1 correcting the 2006/07 and 2007/08 unit FACs and DSACs;

12.42.2 correcting for volume errors relating to WES services in 2006/07;

[303] The adjustments are explained in detail in Section 5 (paragraphs 5.42 to 5.76) and Annex 6 of the 2009 LLCC Statement.
[304] 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

12.42.3 correcting issues associated with volume errors for BES1000 rental and BES1000 connection in 2008/09; and

12.42.4 correcting for a revenue error associated with main link in 2008/09

Correcting the 2006/07 and 2007/08 unit FACs and DSACs

12.43 The restated 2006/07 RFS had incorrect unit FACs because there was an inconsistency between the volumes used to derive component unit costs and the volumes used to distribute component costs to services[305]. This means that when multiplying the unit FAC data from the RFS by volumes in the RFS the total calculated FAC is not correct. BT provided correct total FAC numbers in its response to the 22 October section 191 notice and we have used these in our analysis.

12.44 Similarly, the unit FAC data in 2007/08 does not reconcile exactly to the total FAC data provided by BT in its 15 November 2010 response, although the differences are small. BT explained that this was because the unit FACs in 2007/08 (as restated in the 2008/09 RFS) did not include the effects of restating the 21CN and Sales, General and Administration ("SG&A") components. We have used the total FAC data provided by BT in its response dated 15 November 2010 which include the effects of restating these components.

12.45 BT confirmed that the unit DSACs in 2006/07 and 2007/08 were affected by the volume error in the same way as the unit FACs.[306] In order to correct for this BT suggested applying the uncorrected DSAC/FAC ratio to the corrected FAC costs. We have adjusted the DSAC figures in line with BT's suggestion.

Correcting for volume errors relating to WES services in 2006/07

12.46 BT informed us that the restated 2006/07 RFS contained some errors relating to WES services. It explained that the published figures for WES services included Backhaul Network Services ("BNS") volumes and revenues and also incorrectly classified 973 internal WES circuits as being external circuits. In addition, 154 WES10 circuits had incorrectly been classified as WES100 circuits.[307] In terms of the services in dispute, only WES1000 rental is affected, as illustrated in Table 12.6.

Table 12.6: WES1000 rental volume and revenue corrections in 2006/07

	WES1000 rental		
	Per RFS	BT adjusted	Change
Internal volume, le	1,108	1,328	220
External volume, le	259	39	(220)
Total volume, le	1,367	1,367	0
Internal revenue, £m	35	42	7
External revenue, £m	8	1	(7)
Total revenue, £m	43	43	0

Source: BT email dated 27 June 2011 in response to follow up question 25 to the 22 October section 191 notice. le = local ends

305 BT's response of 28 March 2011 to follow up question 16 to the 22 October section 191 notice.
306 BT's response of 28 March 2011 to follow up question 16c to the 22 October section 191 notice.
307 BT response of 11 February 2011 to follow up question 12b to the 22 October section 191 notice.

12.47 We asked BT whether these revenue and volume corrections would have had an impact on reported costs. BT replied that as the adjustments were volume driven it is likely that costs would have been affected in a similar proportion to revenues.[308]

12.48 For WES1000 there is a reallocation of volumes between internal and external services. While total costs would therefore not be affected (because total volumes are unchanged), the split of costs between internal and external services would change since this split is based on the relative proportion of external and internal volumes. When estimating external costs for our assessment of overcharging for WES1000 rental we have used the adjusted internal/external volume split.

Correcting issues associated with volume errors for BES1000 rental and BES1000 connection in 2008/09[309]

BES1000 rentals

(i) Removal of EBD rental volumes and revenues

12.49 BT informed us that in 2008/09 the reported BES1000 rental service also included volume and revenue data relating to the Ethernet Backhaul Direct ("EBD") rental service. BT explained that the 6,695 local ends reported under BES1000 rentals in the RFS included 2,723 EBD rental circuits and of the £30m of external revenue £2m related to EBD rental.[310] We have removed these EBD rental volumes and revenues from the BES1000 rental dataset.

(ii) Correcting the costs associated with the EBD rental volume error

12.50 BT additionally informed us that the number of EBD circuits included in the RFS under BES1000 rentals in 2008/09 had been overstated. There should have been 147 EBD circuits rather than 2,723. Overall this means that the volumes used to estimate the unit FAC and DSAC data in the RFS for BES1000 rental were incorrect. BT informed us that correcting for this volume error would have an impact on the reported unit FAC and DSAC for BES100 and BES other bandwidth rentals as well as BES1000 rental. BT provided us with revised FAC and DSAC costs for these services as part of its response to question 29 of our follow up questions to the 22 October section 191 notice and we have reflected these figures in our analysis.

(iii) Removal of costs associated with EBD rental

12.51 Costs associated with EBD rentals were not separately estimated in the 2008/09 or 2009/10 accounts. This means that costs associated with EBD rentals were included within other services in these years. BT provided an estimate of EBD rental FAC costs in 2008/09 and 2009/10 based on the methodology it employed in the 2010/11 RFS.[311] These estimates of EBD FAC were [✂] in 2008/09 and [✂] in 2009/10. BT informed us that 70% of these FAC costs would have been reported within Ethernet main links in 2008/09 and 2009/10, with the remainder affecting PPC main links.

[308] BT's response to follow up question 12c to the 22 October section 191 notice.
[309] The volume errors identified in this section largely relate to "Ethernet Backhaul Direct" rentals and connections. In the 2010/11 RFS these services have been separately reported and costed.
[310] BT response dated 14 July 2011 to follow up question 26 to the 22 October section 191 notice.
[311] BT response to follow up question 29 to the 22 October section 191 notice. EBD rentals costs were separately identified for the first time in the 2010/11 RFS.

Consequently we have removed 70% of these EBD FAC estimates from main link rentals in 2008/09 and 2009/10[312].

BES1000 connections

(i) Removal of EBD connection volumes and revenues

12.52 BT informed us that the reported BES1000 connection service also included volume and revenue data relating to EBD and Backhaul Transport Link ("BTL") connection services.[313] In addition most of the volumes associated with EBD and BTL connections had been overstated. This meant that of the 1,555 local ends reported under BES1000 connections in the RFS, only 558 related to BES1000 connection. Similarly, of the reported £8m of revenue, only £3m related to BES1000 connection. We have used the correct volume and revenue data associated with BES1000 connection in our analysis.

(ii) Correcting the costs associated with the EBD connection volume error

12.53 As with BES1000 rentals, BT informed us that the volume error related to BES1000 connections in 2008/09 would have an impact on the reported unit FAC and DSAC for BES100, BES1000 and BES other bandwidth connections. BT provided us with revised FAC and DSAC costs for these services as part of its response to question 29 of our follow up questions to the 22 October section 191 notice and we have reflected these figures in our analysis.

(iii) Removal of costs associated with EBD connection

12.54 Similar to EBD rentals, costs associated with EBD connections were not separately estimated in the 2008/09 or 2009/10 RFS. This means that costs associated with EBD connections were included within other services in these years. BT provided an estimate of EBD connection FAC costs in 2008/09 and 2009/10 based on the methodology employed in the 2010/11 RFS.[314] These estimates were [✂] in 2008/09 and [✂] in 2009/10. BT informed us that in 2009/10 these EBD connection costs would have been included within the costs of other BES and WES connection services and we have assumed that this would also have been the case in 2008/09. BT's estimate of EBD connection FAC represents a small proportion of total BES and WES connection FAC in 2008/09 and 2009/10 ([✂]% in 2008/09 and [✂]% in 2009/10). Consequently we have made an adjustment to remove [✂]% of FAC costs from the BES connection services in dispute in 2008/09 and [✂]% in 2009/10[315].

[312] We have adjusted main link DSAC by the same absolute correction as FAC. This is consistent with how we have adjusted DSACs following our adjustments in line with the 2009 LLCC Statement later in this section.
[313] BT also informed us that in 2006/07 to 2008/09 WES2 rental was reported within the WES10 rental product. WES2 rental is an internal only service. This means that all external WES10 rental revenues relate to WES10 and not to WES2. Since FAC costs are allocated between external and internal services on the basis of relative external and internal volumes we estimate that WES10 external costs would be unchanged by the exclusion of the WES2 service.
[314] BT response to follow up question 29 to the 22 October section 191 notice.
[315] We have adjusted DSACs by the same absolute correction to FAC.

Correcting for a revenue error associated with main link in 2008/09

12.55 BT informed us that in 2008/09 external main link revenue was not properly split out from BES rental services[316]. As a result BES100 rental revenue was overstated by £2.4m while BES1000, BES other bandwidths and external main link rental revenues were understated by £0.3m, £0.5m and £1.6m respectively. We have used the correct revenue data in our analysis.

Corrected base data

12.56 Table 12.7 sets out the external revenue, external FAC and external DSAC for each service in dispute in the years 2006/07 to 2009/10 after making the corrections to BT's RFS data described above.

Table 12.7: Corrected revenue, FAC and DSAC data for disputed services in the period 2006/07 to 2009/10, £m

	2006/07	2007/08	2008/09	2009/10
BES100 rental				
Revenue	12	13	14	8
FAC	7	4	9	9
DSAC	7	5	11	9
BES1000 rental				
Revenue	13	27	28	17
FAC	3	3	6	8
DSAC	3	5	8	9
BES100 connection				
Revenue	10	5	2	0
FAC	2	2	1	0
DSAC	2	3	2	n/a
BES1000 connection				
Revenue	9	8	3	2
FAC	3	4	3	17
DSAC	4	9	5	32
WES10 rental				
Revenue	79	62	101	113
FAC	123	73	85	94
DSAC	131	94	113	125
WES100 rental				
Revenue	92	79	86	86
FAC	47	37	44	64
DSAC	52	49	57	86
WES1000 rental				
Revenue	43	27	32	32
FAC	6	5	6	12
DSAC	8	7	7	17
Main link rental				
Revenue	n/a	109	139	125
FAC	n/a	77	48	94
DSAC	n/a	193	155	297

Source: Ofcom, based on data provided by BT.

316 BT response to question 15 of a section 191 notice dated 22 December 2011, provided in relation to the Cable & Wireless dispute.

<u>Adjustments to the corrected base data consistent with the 2009 LLCC Statement</u>

12.57 We started by considering all the adjustments in the 2009 LLCC Statement and excluded those adjustments that we considered were not relevant to these Disputes. As noted at paragraph 12.31 this is also the approach put forward in the RGL Report.

12.58 The proposed adjustments generally reduce the FAC and therefore increase the rate of return being earned on Ethernet services. They also impact on the level of the DSAC and therefore potentially affect the level of any overcharge that we might determine.

12.59 The adjustments we have considered relate to:

i) transmission equipment costs;

ii) 21CN costs;

iii) ancillary services;

iv) payment terms;

v) treatment of holding gains/losses and current cost normalisation; and

vi) RAV adjustment

We discuss each of these adjustments below.

<u>Transmission equipment costs</u>

12.60 Transmission equipment costs are recovered through upfront circuit connection charges. The aim of this cost adjustment is to amend the timing mismatch between the revenues and costs reported in the RFS where:

12.60.1 the revenues associated with this equipment are all recognised in the circuit connection revenues that BT levied from customers upfront; but

12.60.2 for accounting purposes, the assets are capitalised and depreciated over the life of the underlying equipment.

12.61 In order to compare the revenues of these connection services to the underlying costs of provision we need to ensure that revenues and costs are recognised on the same basis, i.e. that the costs associated with the purchase of the equipment are matched against the revenues from connection of that equipment. In order to achieve this we asked BT to provide data for each year on:

12.61.1 the depreciation charge relating to transmission equipment;

12.61.2 the MCE asset relating to transmission equipment; and

12.61.3 the cost of expensing (i.e. writing off the full capital cost of the equipment in the year that the connection is made) the relevant transmission equipment to the Profit and Loss Account ("P&L").

12.62 For each year we have removed the depreciation and asset charges and replaced them with an estimate of the cost of expensing the equipment in the P&L in the year of purchase.

12.63 Figures relating to depreciation and MCE are available from BT's accounting systems. In addition BT provided an estimate of the cost of expensing the transmission equipment in the P&L each year[317]. It did this by taking the annual additions from the asset register and apportioning them between services based on the volume of connections in each year. This method appears to assume that the purchase price of equipment for each service is the same, which may not be the case in practice.

12.64 This apportionment methodology differs from how transmission equipment depreciation and MCE is apportioned to services in the RFS, which uses a weighted approach. Adopting BT's methodology would mean certain services attracting a level of P&L expenses relating to the write off of transmission equipment that bore little relationship to the level of depreciation and MCE they were attracting in the RFS (and ultimately the capital cost of purchasing the equipment).

12.65 Consequently we have estimated the cost of expensing the equipment in the P&L each year by apportioning BT's annual additions from the asset register on the same basis as depreciation and MCE in the RFS[318]. We consider that this approach is a more appropriate basis on which to estimate the annual P&L expense.

12.66 This adjustment only affects connection services. The annual impact on FAC in percentage and absolute terms is shown in Table 12.8.

Table 12.8: Impact of transmission equipment adjustment on BES100 and BES1000 connection FAC in the period 2006/07 to 2009/10

	06/07	07/08	08/09	09/10
BES100 connection	[✂]	[✂]	[✂]	[✂]
BES1000 connection	[✂]	[✂]	[✂]	[✂]
BES100 connection, £m	[✂]	[✂]	[✂]	[✂]
BES1000 connection, £m	[✂]	[✂]	[✂]	[✂]

Source: Ofcom, based on data provided by BT

<u>21CN network costs</u>

12.67 The capital and operating costs incurred by BT in relation to its next generation network ("21CN network") are currently attributed to legacy services. Of the total costs, a proportion is apportioned to Ethernet services. If BT does not use its 21CN network to provide Ethernet services then it could be argued that 21CN costs should not be recovered through Ethernet charges. BT confirmed to us that it has not used its 21CN network to deliver the disputed BES or WES services over the Relevant Period.[319]

12.68 We are proposing to make two adjustments in relation to 21CN costs:

12.68.1 An adjustment to remove costs directly attributable to 21CN; and

12.68.2 A further adjustment to remove certain indirect 21CN costs

[317] BT's response to the 22 October section 191 notice.
[318] BT's response of 28 March 2011 to follow up question 13 to the 22 October section 191 notice.
[319] Although BT uses its 21CN network to deliver its EBD service, this service is not part of these Disputes.

Removal of costs directly attributable to 21CN

12.69 The costs attributed to the 21CN network fall into two categories, namely direct costs and indirect costs. In the context of the 2009 LLCC Statement, BT argued that the indirect costs would have been incurred even in the absence of 21CN, and that services such as Ethernet should therefore make a contribution to their recovery. Ofcom accepted this argument in developing its leased line charge control proposals.

12.70 In the 2009 LLCC Statement we asked BT to provide us with an analysis for 2007/08 of its 21CN costs which identified which costs were truly specific to 21CN (e.g. equipment and software). Based on this 2007/08 analysis we eliminated:

12.70.1 22% of profit & loss costs, and

12.70.2 93% of MCE costs,

to reflect our objective of only removing avoidable 21CN costs.

12.71 In the PPC Final Determinations we applied these ratios to each year in dispute. For the purpose of resolving these Disputes we asked BT to replicate the 2007/08 analysis for 2006/07, 2008/09 and 2009/10. The resulting percentages, which we propose to use to make the 21CN adjustment, are shown in Table 12.9.

Table 12.9: Estimate of direct (specific) 21CN costs in the period 2006/07 to 2009/10

	06/07	07/08	08/09	09/10
P&L	22%	22%	[✂]	[✂]
MCE	93%	93%	[✂]	[✂]

Source: BT email dated 12 July 2011 in response to follow up question 21b to the 22 October section 191 notice

12.72 When providing the requested analysis BT explained that "*if Ofcom take out 21CN costs as per the leased lines charge control adjustment they would need to additionally consider the counter factual position in relation to likely increases in Ethernet costs that BT would likely have incurred during the period under investigation if BT had not had such 21CN plans in place*".[320]

12.73 We do not agree with BT's suggestion. The objective of the adjustment is not to reflect a scenario where BT's 21CN does not exist; it is to adjust for an incorrect allocation of 21CN costs. The direct costs of BT's 21CN should be recovered via the services which use it. Since the Ethernet services in dispute have not used BT's 21CN this adjustment removes those costs directly attributable to 21CN.

Further adjustment to remove certain indirect 21CN costs

12.74 The 2009 LLCC Statement was appealed by Cable and Wireless UK resulting in a CC determination on 30 June 2010 (the "CC determination").

12.75 In respect of the 21CN adjustment made in the 2009 LLCC Statement, the CC said 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*

[320] BT's response to Question 13 of the 22 October section 191 notice.

MCE".[321] The CC determined that the adjustment for 21CN should have been £3.5 million for the TI (Traditional Interface) basket of services.[322]

12.76 Although the CC determination only related to the TI (PPC) basket of services and not the AI (Ethernet) basket of services, we consider that the same reasoning applies to the services relevant to these Disputes because, as in the 2009 LLCC Statement, we are making an adjustment to 21CN costs which reduces the MCE allocated to the services in dispute. Therefore further adjustments should be made.

12.77 BT provided us with an estimate of the 21CN overhead costs within the AISBO market that are allocated on the basis of MCE.[323] Our 21CN adjustment eliminates the majority of these 21CN overhead costs, based on the proportion of MCE removed as being directly incurred as a result of 21CN (see Table 12.9 above). This adjustment reflects the reduction in the MCE base and consequently a reduction in the amount of overhead allocated as a result.

12.78 Table 12.10 shows the combined percentage impact on FAC of the two 21CN adjustments described in paragraphs 12.69 to 12.78.

Table 12.10: Impact of 21CN adjustments on the FAC of disputed services in the period 2006/07 to 2009/10

	06/07	07/08	08/09	09/10
BES100 rental	[✂]	[✂]	[✂]	[✂]
BES1000 rental	[✂]	[✂]	[✂]	[✂]
BES100 connection	[✂]	[✂]	[✂]	[✂]
BES1000 connection	[✂]	[✂]	[✂]	[✂]
WES10 rental	[✂]	[✂]	[✂]	[✂]
WES100 rental	[✂]	[✂]	[✂]	[✂]
WES1000 rental	[✂]	[✂]	[✂]	[✂]
Main link rental	[✂]	[✂]	[✂]	[✂]

Source: Ofcom, based on information provided by BT

Ancillary services (excess construction charges)

12.79 BT includes the cost (but not revenue) of providing ancillary services within the base data for Ethernet services (although it reports revenue in aggregate across all ancillary services from 2007/08 onwards)[324]. Ancillary services, such as excess construction charges, are not within the scope of the Disputes. We therefore propose to make an adjustment to remove the costs associated with these services.

12.80 The costs relating to excess construction charges were not identified separately in the RFS prior to 2009/10. In 2009/10, they were only identified as a total across all AISBO services in the RFS. In response to our 22 October section 191 request BT confirmed that excess construction costs were included within the cost data and provided an estimate of the total costs associated with excess construction charges (i.e. ancillary services)[325]. BT proposed to allocate these total costs between rental services on the basis of volumes. We have allocated total costs to rental services on

[321] Paragraph 4.130 of the CC determination.
[322] Paragraph 6.52 of the CC determination.
[323] The data we have relied on was provided by BT in response to question 19 of the section 191 notice dated 22 December 2011, sent in relation to the Cable & Wireless dispute.
[324] We assume that in 2006/07 revenues associated with excess construction charges were not included within the revenues of Ethernet services in the RFS.
[325] BT email dated 13 December 2010.

this basis using the volume adjustments described in paragraphs 12.42 to 12.56 and we propose to eliminate these costs, as set out in Table 12.11 below.

Table 12.11: Impact of excess construction charge adjustment on the FAC of disputed services in the period 2006/07 to 2009/10

	06/07	07/08	08/09	09/10
BES100 rental	[✂]	[✂]	[✂]	[✂]
BES1000 rental	[✂]	[✂]	[✂]	[✂]
BES100 connection	[✂]	[✂]	[✂]	[✂]
BES1000 connection	[✂]	[✂]	[✂]	[✂]
WES10 rental	[✂]	[✂]	[✂]	[✂]
WES100 rental	[✂]	[✂]	[✂]	[✂]
WES1000 rental	[✂]	[✂]	[✂]	[✂]
Main link rental	[✂]	[✂]	[✂]	[✂]

Source: Ofcom, based on information provided by BT

Payment terms

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

12.82 In its regulated accounts, 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.

12.83 In the PPC Final Determinations we replaced the 59 and 43 days assumptions with estimates which reflect the actual payment terms offered for each service. The periods used in the PPC Final Determinations were 16 days for rentals and 46 days for connections. We applied this adjustment to each year of the PPC Disputes. This had the effect of reducing PPC costs slightly because the working capital was reduced and therefore the financing costs were lower.

12.84 We propose to make the same adjustment in resolving these Disputes, as set out in Table 12.12 below. This is also consistent with the approach that we adopted in the 2009 LLCC Statement.

Table 12.12: Impact of payment terms adjustment on the FAC of disputed services in the period 2006/07 to 2009/10

	06/07	07/08	08/09	09/10
BES100 rental	[✂]	[✂]	[✂]	[✂]
BES1000 rental	[✂]	[✂]	[✂]	[✂]
BES100 connection	[✂]	[✂]	[✂]	[✂]
BES1000 connection	[✂]	[✂]	[✂]	[✂]
WES10 rental	[✂]	[✂]	[✂]	[✂]
WES100 rental	[✂]	[✂]	[✂]	[✂]
WES1000 rental	[✂]	[✂]	[✂]	[✂]
Main link rental	[✂]	[✂]	[✂]	[✂]

Source: Ofcom, based on information provided by BT

Treatment of holding gains/losses and current cost normalisation

12.85 Current cost accounting (“CCA”) requires the consideration of holding gains and losses. These are the changes in the replacement costs of an asset held during the year. Holding gains and losses can be caused by a variety of things such as changes to commodity prices, technical obsolescence and changes to valuation methods. For example, if the replacement cost of an asset increases during the year from £100 to £120 then there is a holding gain of £20. A holding gain in a given period would have the effect of decreasing costs (and increasing returns) for that period, while a holding loss would increase costs (reducing returns) for that period.

12.86 In the 2009 LLCC Statement we made an adjustment to forecast the changes to asset values that might arise from the CCA treatment of assets over the period of the charge control (we refer to this as “current cost normalisation”). A forecast value was included in the charge control model because historic CCA holding gains and losses are unlikely to provide a robust forecast for future years[326]. In the PPC Final Determinations we considered whether a similar adjustment was required when resolving the Disputes but concluded that, since we were considering historic charges rather than the forward looking charges considered in the 2009 LLCC, such an adjustment was not relevant[327].

12.87 In the PPC Final Determinations, we also discussed the treatment of holding gains and losses more generally and decided to use *“the actual holding gains and losses reported by BT in its regulatory financial statements”*. We considered replacing these with the holding gains and losses forecast by BT at the time that it set its prices but concluded *“Absent information that these actual gains and losses would not have been foreseen by BT, we have not made adjustments to the reported holding gains and losses”*. [328] We have followed this approach here, except for the 2009/10 holding gain associated with duct which we discuss further below.

12.88 BT’s RFS usually include all holding gains and losses within the reported market-level costs and also the unit costs for each service. However, BT’s 2009/10 RFS excluded a large holding gain relating to duct from the unit cost information and also presented market level returns with and without the duct holding gain.[329]

12.89 As explained in the RFS,[330] this large holding gain was a change in accounting estimate, reflecting BT’s revised estimate of how much it would cost to replace its duct network. It arose as a result of BT revising one of the input assumptions forming part of the asset valuation rather than, for example, a significant increase in the cost of labour or materials associated with building duct. BT’s RFS set out that “*whilst this large holding gain has been recognised in 2009/10 it does not represent a genuine periodic change in the valuation of the duct assets. BT believes that it results in an artificial upwards distortion of returns in the year*”.[331]

12.90 At a market level, BT reported two ROCEs in its 2009/10 RFS. The first ROCE of 25.4% included the holding gain in the profit and loss account (i.e. via a reduction in costs or increase in profit) and balance sheet (i.e. via a higher asset value). The second ROCE of 13.5% excluded the holding gain from the profit and loss account

[326] See Table A6.5 of the 2009 LLCC Statement, entry “#2”.
[327] PPC Final Determinations, paragraph 6.113.
[328] PPC Final Determinations, paragraphs 6.114 and 6.115.
[329] 2009/10 Current Cost Financial Statements, page 18. Details of the duct holding gain are on pages 17 and 18 of the 2009/10 RFS: http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2010/CurrentCostFinancialStatements2010.pdf
[330] RFS 2009/10, pages 17 to 18, http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2010/CurrentCostFinancialStatements2010.pdf
[331] 2009/10 Current Cost Financial Statements, page 18.

but continued to include it in the balance sheet. As set out in paragraph 10.93, Virgin considers that a large portion of the reduction in ROCE from 2009 to 2010 is due to the change in duct valuation and suggests that if similar adjustments are made to duct revaluation as are being proposed in Ofcom's Charge Control Review for LLU and WLR services, BT's ROCE in 2010 is likely to be more than 25.4%.

12.91 In its consultation on the charge control review for LLU and WLR services dated 31 March 2011[332] Ofcom has considered BT's estimate of the replacement cost of duct. For the purpose of these charge controls Ofcom has considered the RAV[333] of duct assets whereby pre-1997 assets are valued on a historical cost basis and post-1997 assets are valued on a CCA basis. In the consultation document Ofcom said that it did not consider that BT's CCA estimate of post-1997 duct assets was robust[334], although we made clear that we were not specifically challenging the valuation of total duct assets included in the audited RFS (which includes both pre-1997 and post-1997 duct assets and does not present figures on a RAV basis).[335] We noted that the methodology used by BT to determine the total CCA value of duct assets and the subsequent attribution to the post-1997 assets was sensitive to a large number of assumptions, which if varied, gave substantially different outcomes[336].

12.92 Virgin appears to suggest that if BT had not revalued its duct assets in 2009/10 then its reported ROCE would have been higher than 25.4%. We do not consider that this is mathematically correct. BT reported that the ROCE excluding the holding gain from the profit and loss account was 13.5%. If the impact of the holding gain is also removed from the balance sheet (i.e. the reported MCE figure) then the ROCE increases slightly to 15.4%. In other words, had BT not revalued its duct assets then the ROCE would have been lower than the reported 25.4%, contrary to what Virgin suggests (the holding gain increases returns (the numerator) and also increases capital employed (the denominator). The revaluation leads to a greater ROCE because the impact on the ratio of the increase in returns is significantly higher than the impact of the increase in capital employed).

12.93 Virgin also refers to Ofcom's LLU and WLR charge control review and implies that Ofcom might make adjustments to BT's 2009/10 valuation of duct based on proposals in this consultation document. We have summarised in paragraph 12.92 what Ofcom said in the LLU and WLR charge control consultation. Ofcom has not yet issued a final statement in this area, but notified a draft Statement to the European Commission on 3 February 2012[337]. Ofcom will also be publishing a consultation on its review of the Leased Lines charge control in early 2012 which will also consider the issue of BT's duct valuation in the context of setting a forward looking charge control for Ethernet services.

12.94 For the purposes of these draft determinations we have not made any adjustment to the duct valuation reported in BT's 2009/10 RFS. However we are considering whether we should, in these Disputes, make an adjustment to BT's reported duct valuation following what we said in the LLU and WLR charge control consultation and in anticipation of the Leased Line charge control consultation.

[332] *Charge control review for LLU and WLR services* ("2011 LLU consultation"): http://stakeholders.ofcom.org.uk/binaries/consultations/wlr-cc-2011/summary/wlr-cc-2011.pdf
[333] See also paragraphs 12.98 to 12.101.
[334] For example, 2011 LLU consultation, paragraph 3.58.
[335] 2011 LLU consultation, paragraph 3.81.
[336] 2011 LLU consultation, paragraph 3.81.
[337] http://stakeholders.ofcom.org.uk/consultations/llu-wlr-further-consultation/statement. The European Commission, the Body of European regulators for Electronic Communications and other EU Member State national regulatory authorities have one month to comment on the draft Statement.

12.95 In considering whether or not we should make an adjustment to the valuation of duct in 2009/10, we are mindful of the fact that an adjustment to reduce BT's duct valuation (say, for example, by removing the effect of the increase from the MCE) would have a small impact on the difference between revenue and DSAC for the BES services in dispute in the four months of 2009/10. We estimate that such an adjustment is unlikely to increase the difference between revenue and DSAC by more than £0.1m.

12.96 Given BT's revaluation of duct, we have also considered whether BT's exclusion of the associated holding gain from the unit cost information was appropriate. The duct holding gain (as reported at a market level in the RFS) results from a change in accounting estimate rather than, for example, an in-year change in the cost of labour or materials associated with building duct. This change in accounting estimate is an attempt to reflect in the 2009/10 RFS a change in the environment for building duct and the consequent replacement cost, which may have arisen at any point prior to the publication of the 2009/10 RFS. Therefore the gain through holding the asset may not actually all have arisen during 2009/10 but could have arisen during any year or over a number of years in the past. As a result, we consider that the combination of the nature and size of the holding gain would result in an artificial upwards distortion of returns in 2009/10 if it was reflected in the unit costs. We are therefore not proposing to change BT's reported treatment of the holding gain associated with duct in 2009/10.

RAV adjustment

12.97 Since 2005 Ofcom has determined charges for copper access products using Openreach's Regulated Asset Value ("RAV"), which is different from the asset value disclosed in the RFS. The difference relates to Openreach's Copper and Duct assets.

12.98 In the RAV, the assets which were purchased before 1997 are valued on a HCA basis indexed by inflation. This provides a lower valuation than the RFS where the same assets are valued on a CCA basis. The reduction to bring the RFS figure into line with the RAV figure is referred to as "the RAV adjustment".

12.99 In the 2009 LLCC Statement we concluded that we did not need to adjust Openreach's base year costs in the AI Basket to take into account the RAV, noting that:[338]

12.99.1 Ethernet services are provided entirely over fibre. Therefore the RAV adjustment in relation to the access copper cable is not relevant for services in the AI Basket; and

12.99.2 Ethernet services make less use of pre-1997 duct. Ethernet services were introduced post August 1997, and it is therefore likely that they will use pre-1997 access duct to a lesser extent than other services (for example TI services).

12.100 We believe that the same reasoning applies in relation to these Disputes and we do not consider it is appropriate to take account of the RAV adjustment for the purposes of assessing whether BT has been overcharging for the services in dispute.[339]

[338] 2009 LLCC Statement, paragraph 5.60.
[339] This is also consistent with our approach in the PPC Final Determinations where we did not take account of the RAV adjustment. PPC Final Determinations, paragraphs 6.117 to 6.123.

Additional adjustments to main link rentals in 2006/07 proposed by the Disputing CPs

Main link rentals in 2006/07

12.101 Sky and TTG are disputing main link rental charges associated with BES rental services in 2006/07. However, the original and restated 2006/07 RFS did not disaggregate financial information for main link rentals. Instead, revenues and costs associated with main link rentals were included within the revenue and cost information for BES and WES rental services.

12.102 In its analysis RGL attempted to disaggregate the revenues and costs for main link rentals in 2006/07 using publicly available data and making assumptions about how revenue and cost data for main link in 2006/07 might relate to following years where main link data was separately available. RGL's analysis suggested that main link revenues associated with BES rental services exceeded DSAC in 2006/07.

12.103 We asked BT for financial information on main link rentals for 2006/07. BT informed us that it did not have any separate information specifically for main link rentals relating to 2006/07.[340]

12.104 If main link revenues were below DSAC in 2006/07, aggregation of the main link and rental charges could suppress the extent of overcharging on BES rental services. However, if main link revenues were above DSAC, and BES rental revenues were also above DSAC, then aggregation of main link and rental charges would make no difference to the overall level of overcharging. We have reviewed the approach taken by RGL to disaggregating main link rentals from other rental services in 2006/07 and also considered a number of other approaches to splitting out the volumes, revenues and costs associated with these services. These approaches tend to point to main link revenues exceeding DSAC in 2006/07, although there is a wide range of potential outcomes reflecting the many variables that need to be estimated (i.e. volumes, revenues and costs). In the absence of data from BT there does not appear to us to be one approach that is more robust than other approaches. Consequently, while we consider it likely that main link revenues exceeded DSAC in 2006/07, we have concluded that there is not a robust way of disaggregating the main link data.

12.105 Because our analysis indicates that the revenue for both main link and BES rentals exceeded DSAC in 2006/07, the estimated overcharge based on disaggregated data would equal the total estimated overcharge using aggregated data. An example of this is shown in Table 12.13.

12.106 In Column A of Table 12.13 BES and WES services are reported separately but include data for main link. Each service reports an excess of revenue over DSAC. In this illustrative case the excess of revenue over DSAC is £12m. In Column B of Table 12.14 main link revenue and costs have been disaggregated - half of the main link revenues and costs have been included within BES rentals and half within WES rentals. After disaggregation main link revenues exceed DSAC by £2m while the BES and WES rentals are now potentially overcharged by £10m in total rather than £12m as in Column A. However, overall, the total potential overcharge remains £12m.

[340] BT's response of 10 May 2011 to follow up question 18 to the 22 October section 191 notice.

Table 12.13 Illustrative example of disaggregation where BES, WES and main link revenue is greater than DSAC, £m

	A. Services reported in aggregate					B. Services disaggregated			
	BES	WES	Main link	Total		BES	WES	Main link	Total
Revenue	10	20	-	30		6	16	8	30
DSAC	6	12	-	18		3	9	6	18
Difference	4	8	-	12		3	7	2	12

Source: Ofcom

12.107 We are proposing therefore to base our assessment of overcharging in 2006/07 on the aggregated data from the restated RFS in 2006/07 (as adjusted above). To the extent that the aggregated data for the BES rental services in dispute contains an embedded overcharge on main link, this will be captured within the data.

Results and impact

12.108 We are proposing to make four adjustments to the corrected RFS data associated with transmission equipment costs, 21CN costs, ancillary service costs and payment terms. The size of the adjustments varies from year to year and the adjustments affect the individual Ethernet services differently. The total adjustments, as a percentage increase or decrease to the corrected FAC, are set out in Table 12.14 while Table 12.15 shows the impact in absolute terms.

Table 12.14: Percentage impact of the adjustments made on the corrected FAC for each disputed service in the period 2006/07 to 2009/10

	06/07	07/08	08/09	09/10
BES100 rental	(11%)	(21%)	(13%)	(9%)
BES1000 rental	(13%)	(26%)	(13%)	(19%)
BES100 connection	8%	(29%)	38%	(5%)
BES1000 connection	14%	(33%)	39%	(7%)
WES10 rental	(9%)	(12%)	(12%)	(8%)
WES100 rental	(10%)	(12%)	(12%)	(9%)
WES1000 rental	(12%)	(17%)	(15%)	(18%)
Main link rental	n/a	(22%)	(14%)	(29%)

Source: Ofcom, based on information provided by BT

Table 12.15: Impact of the adjustments in £m made on the corrected FAC for each disputed service in the period 2006/07 to 2009/10

	06/07	07/08	08/09	09/10
BES100 rental	(0.8)	(0.8)	(1.1)	(0.8)
BES1000 rental	(0.4)	(0.8)	(0.8)	(1.5)
BES100 connection	0.1	(0.4)	0.4	(0.0)
BES1000 connection	0.4	(1.4)	1.2	(1.2)
WES10 rental	(11.1)	(8.5)	(10.0)	(7.7)
WES100 rental	(4.7)	(4.5)	(5.4)	(5.9)
WES1000 rental	(0.8)	(0.8)	(0.9)	(2.2)
Main link rental	n/a	(16.7)	(6.9)	(27.4)

Source: Ofcom, based on information provided by BT

12.109 As set out above, on the basis of the information currently available to us, we believe that the adjustments proposed above are necessary and result in an appropriate set of data for resolving the Disputes.

Adjusting BT's DSACs

12.110 As discussed in Section 9 in assessing whether BT has overcharged the Disputing CPs for Ethernet services we place significant weight on whether BT's Ethernet charges were above their DSACs.

12.111 We therefore need to identify how the adjustments we have made to BT's FAC data translate into adjustments to BT's DSAC data. Converting Ofcom's FAC adjustments into consistent adjustments to BT's DSACs is, however, not a straightforward exercise.

12.112 RGL has adjusted DSAC data in the RFS pro rata to the adjusted FAC costs.[341]

12.113 The issue was discussed in some detail in the PPC Final Determinations.[342] We explained that in simple terms DSACs consist of two elements:

12.113.1 the LRIC for a service; and

12.113.2 an allocation of common costs.

12.114 DSACs are calculated from BT's LRIC model. We explained in the PPC Final Determinations that while, in theory, BT could produce revised DSAC estimates by re-running its LRIC model using the Ofcom-adjusted regulatory accounting information, such an exercise would be complicated and involve a significant amount of work.

12.115 Instead, we considered other options for making broad-based adjustments which appear reasonable and proportionate. We explained that it appeared reasonable to consider that the range within which an appropriate DSAC adjustment is likely to fall is bounded by no adjustment at one end, and by the same percentage adjustment as was applied to the FAC at the other end.[343]

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

12.116.1 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;

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

12.116.3 none of the Parties had provided compelling evidence to cause us to change the approach we had proposed.[344]

12.117 We have adopted the same approach in these Disputes and adjusted DSAC in line with the absolute adjustment made to FAC (see Table 12.15). Our approach to adjusting DSACs therefore differs from the pro rata approach adopted by RGL.

[341] RGL Report, page 28.
[342] PPC Final Determination, paragraphs 6.131 to 6.179.
[343] PPC Final Determinations, paragraph 6.142.
[344] PPC Final Determinations, paragraph 6.173.

12.118 Table 12.16 sets out the corrected and adjusted external revenue and external DSAC for the disputed services in the period 2006/07 to 2009/10. It also shows the difference between external revenues and external DSAC. A positive number indicates that external revenues were greater than DSAC. This is the dataset we are proposing to use to resolve the Disputes in the period 2006/07 to 2009/10. For the period 2005/06 we intend to use the data from Table 12.4.

12.119 It should be noted that the data for 2009/10 represents a full year while Sky and TTG are only disputing charges for part of that year i.e. from 1 April 2009 to 31 July 2009. We will take this into account in Section 13 when we assess whether overcharging has occurred.

Table 12.16 Corrected and adjusted external revenue and DSAC data for each disputed service in the period 2006/07 to 2009/10, £m

	06/07	07/08	08/09	09/10
BES100 rental				
External revenue	12.1	12.8	13.9	8.3
External DSAC	6.0	4.5	10.4	8.3
Difference	6.1	8.2	3.6	0.0
BES1000 rental				
External revenue	13.1	26.6	28.2	17.2
External DSAC	2.8	4.5	7.0	7.7
Difference	10.3	22.0	21.3	9.6
BES100 connection				
External revenue	10.2	4.8	1.5	0.0
External DSAC	2.6	2.8	2.1	n/a
Difference	7.6	2.0	(0.5)	-
BES1000 connection				
External revenue	8.7	7.5	3.0	2.4
External DSAC	3.9	7.7	6.5	30.7
Difference	4.8	(0.2)	(3.5)	(28.3)
WES10 rental				
External revenue	2.2	10.2	29.0	38.9
External DSAC	3.4	13.9	23.2	40.8
Difference	(1.1)	(3.7)	5.8	(1.9)
WES100 rental				
External revenue	4.2	13.5	20.8	27.8
External DSAC	2.2	7.6	12.6	26.4
Difference	2.0	6.0	8.2	1.4
WES1000 rental				
External revenue	1.2	3.1	6.4	8.4
External DSAC	0.2	0.7	1.4	4.0
Difference	1.0	2.4	5.1	4.4
Main link rental				
External revenue	n/a	40.4	64.8	60.9
External DSAC	n/a	65.6	68.2	132.4
Difference	-	(25.2)	(3.5)	(71.5)

Source: Ofcom, based on information provided by BT

n/a = data not available. For BES100 connections in 2009/10 no DSAC data was published. However, as set out above, revenue was less than FAC in 2009/10. For main link rentals in 2006/07 we explain above that we were not able to robustly disaggregate this data and will assess overcharging using the aggregate data available.

BT's revised DSACs

12.120 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.

12.121 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.

12.122 The data in Tables 12.18 and 12.19 below show only the results of the DSAC test, and do not take into account the other considerations outlined in Section 9. 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.

12.123 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 12.17– DSAC test using DSACs published in BT's RFS and including Ofcom's adjustments

	06/07	07/08	08/09	09/10	All Years
BES100 rental	£6.1m	£8.2m	£3.6m	£0.0m	£17.9m
BES1000 rental	£10.3m	£22.0m	£21.3m	£3.2m	£56.8m
BES100 connection	£7.6m	£2.0m	-	na	£9.6m
BES1000 connection	£4.8m	-	-	-	£4.8m
WES10 rental	-	-	£5.8	NiD	£5.8m
WES100 rental	£2.0m	£6.0m	£8.2m	NiD	£16.1m
WES1000 rental	£1.0m	£2.4m	£5.1m	NiD	£8.5m
Main link rental	n/a	-	-	-	-

Source: Ofcom based on BT data

Table 12.18– DSAC test using BT's revised DSACs and including Ofcom's adjustments

	06/07	07/08	08/09	09/10	All Years
BES100 rental	-	£7.0m	£1.1m	-	£8.2m
BES1000 rental	£5.6m	£21.3m	£18.6m	£2.4m	£47.8m
BES100 connection	£7.6m	£2.0m	-	na	£9.6m
BES1000 connection	£4.8m	-	-	-	£4.8m
WES10 rental	-	-	-	NiD	-
WES100 rental	-	£3.7m	£4.6m	NiD	£8.3m
WES1000 rental	£0.8m	£2.2m	£4.7m	NiD	£7.7m
Main link rental	n/a	-	£6.9m	-	£6.9m

Source: Ofcom based on BT data

Section 13

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

Introduction

13.1 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. In line with the methodology we set out in Section 9, we propose to carry out the following assessments in relation to each charge in dispute:

13.1.1 compare the relevant charges with their respective DSAC to see whether we have concerns about their compliance with Condition HH3.1 (i.e. we carry out the DSAC test referred to at paragraph 9.22); and

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

13.2 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

Results for 2005/06

13.3 As discussed in Section 11, BT's RFS for 2005/06 reported DSAC data for WES and BES services on a highly aggregated basis. Our DSAC test, however, is carried out at a more granular level, looking at individual charges. BT has been unable to provide us with disaggregated DSAC data for individual charges. We have therefore sought to estimate the disaggregated revenues and DSACs for each of the BES services in dispute in 2005/06. The charges for WES services were not in dispute in 2005/06.

13.4 In order to disaggregate revenues we have used BT's 2005/06 billing data provided in BT's 18 February e-mail. We have allocated the aggregated BES revenue from the RFS to individual BES rental and connection services pro rata to the billing data.[345] There are, however, a number of reasonable approaches that could be used to disaggregate the DSAC costs. We considered three options based on observable data. As described in Section 12, these different approaches generate a wide range of DSAC estimates. Although it is not clear which of these various methodologies is the most appropriate, they all result in revenues below DSAC. The results are summarised in Table 13.1 below. The revenues are presented as a percentage of their DSAC, with 100% reflecting where the average charge is set at its DSAC. Any figure above 100% would therefore indicate that the revenues are above DSAC, and that on average, the charge was above its DSAC.

[345] See paragraphs 12.16 to 12.24.

Table 13.1: Ofcom estimates of revenue as a percentage of DSAC under different apportionment assumptions, 2005/06

	Revenue to DSAC ratio (%)		
	Using revenue split	Using 06/07 DSAC split	Using average DSAC split 06/07 - 08/09
BES100 rental	60%	12%	15%
BES1000 rental	60%	26%	17%
BES100 connection	60%	38%	77%
BES1000 connection	60%	29%	32%

Source: Figures estimated from Table 12.4.

13.5 On this basis we propose to conclude that there was no overcharging for services in 2005/06. As a result of this conclusion, the analysis we present for each of the services in dispute later in this section focuses on the period from 2006/07 to 2009/10.

Results for 2006/07 to 2009/10

13.6 **Table 13.2** compares external average revenues with the external unit DSACs for the services in dispute, based on data provided by BT as adjusted by Ofcom.[346]

13.7 BT's reported and adjusted average revenues are in some circumstances different from the charges listed in the Openreach Price List. There are a number of areas where this is particularly relevant:

13.7.1 As discussed in paragraph 11.28, BT reported its average revenue in 2006/07 and 2007/08 on a per circuit, rather than per connection basis.

13.7.2 In 2006/07, BT's reported average revenues for rental services included some main link charges.[347]

13.7.3 BT reported average revenues in its RFS for a number of different service variants under each service heading.[348] For example, under BES100 services, data was reported in aggregate for 'daisy chain' and 'standard' variants which had different prices in the Openreach Price List.

13.8 As a result of the factors listed above, the average revenue per local end reported below may be materially different from the charge listed in the Openreach Price List, particularly in 2006/07.

13.9 As discussed in Section 7, we have only considered whether a service was overcharged if that service was genuinely in dispute. As the Virgin Dispute Submission refers to the period of 1 April 2006 to 31 March 2009, we consider that the WES services are not in dispute in 2009/10. On this basis, we do not reach a view as to whether WES services were overcharged in 2009/10. For WES10 services, the Virgin Dispute Submission does not refer to 2006/07 or 2007/08 and therefore we also do not consider these charges to be in dispute.

[346] The base data provided in BT's response to the 22 October section 191 notice (referred to as "BT's unadjusted base data"), as amended in line with the adjustments described in Section 12.
[347] See paragraphs 12.25 to 12.29.
[348] See paragraph 12.9.

Table 13.2: Comparison of BT's external Ethernet unit revenues with an estimate of external unit DSAC[349]

	2006/07	2007/08	2008/09	2009/10
BES100 Rentals				
Unit charge (per local end)	£4,459	£2,302	£2,293	£1,583
Unit DSAC (per local end)	£2,215	£817	£1,704	£1,576
Unit charge as a % of DSAC	201%	282%	135%	100%
BES1000 Rentals				
Unit charge (per local end)	£11,430	£7,586	£7,110	£4,199
Unit DSAC (per local end)	£2,464	£1,298	£1,752	£1,872
Unit charge as a % of DSAC	464%	584%	406%	224%
BES100 Connections				
Unit charge (per local end)	£2,750	£2,741	£2,370	na
Unit DSAC (per local end)	£699	£1,621	£3,193	na
Unit charge as a % of DSAC	393%	169%	74%	na
BES1000 Connections				
Unit charge (per local end)	£5,200	£5,525	£5,376	£2,014
Unit DSAC (per local end)	£2,347	£5,671	£11,677	£25,792
Unit charge as a % of DSAC	222%	97%	46%	8%
WES10 Rentals				
Unit charge (per local end)	£1,462	£1,146	£2,040	£2,006
Unit DSAC (per local end)	£2,210	£1,566	£1,631	£2,102
Unit charge as a % of DSAC	66%	73%	125%	95%
WES100 Rentals				
Unit charge (per local end)	£4,508	£2,936	£2,656	£2,273
Unit DSAC (per local end)	£2,328	£1,639	£1,613	£2,159
Unit charge as a % of DSAC	194%	179%	165%	105%
WES1000 Rentals				
Unit charge (per local end)	£15,736	£9,238	£7,569	£5,555
Unit DSAC (per local end)	£2,471	£2,195	£1,597	£2,643
Unit charge as a % of DSAC	637%	421%	474%	210%

[349] WES services in 2009/10 are not within the scope of the Disputes, but we provide the DSAC and revenue data for completeness. However, we reach no conclusion in relation to BT's WES charges in 2009/10. WES 10 rental services are also not in dispute in 2006/07 and 2007/08 and we reach no conclusion in relation to them.

	2006/07	2007/08	2008/09	2009/10
Main Link				
Unit charge (per km)	na	£533	£526	£394
Unit DSAC (per km)	na	£866	£555	£857
Unit charge as a % of DSAC	na	62%	95%	46%

Source: Ofcom based on BT data

13.10 As can be seen from **Table 13.2**, there were a number of services in dispute where external revenues exceeded external DSAC. Specifically these were:

13.10.1 BES100 Rentals in 2006/07, 2007/08, 2008/09, and 2009/10;

13.10.2 BES1000 Rentals in 2006/07, 2007/08, 2008/09 and 2009/10;

13.10.3 BES100 Connections in 2006/07, 2007/08;

13.10.4 BES1000 Connections in 2006/07;

13.10.5 WES10 Rentals in 2008/09;

13.10.6 WES100 Rentals in 2006/07, 2007/08, 2008/09[350]; and

13.10.7 WES1000 Rentals in 2006/07, 2007/08, 2008/09[351].

13.11 As discussed in Section 8, the aggregation of different service variants (such as ‘daisy chain’ and ‘extended reach’ variants) can distort the outcome of the DSAC test. This distortion is more likely to occur when the aggregated revenues are slightly above or below DSAC or where services with materially different underlying costs and/or unit prices are being aggregated. In these Disputes there is a higher risk of distortion for the following services/years:

13.11.1 BES100 Rentals in 2009/10 (aggregate revenues were marginally above DSAC); and

13.11.2 BES1000 Connections in 2008/09 (aggregate revenues were marginally below DSAC).

13.12 Main link services are bought in conjunction with BES and WES services. In 2006/07, revenues and costs associated with main link rental were not split out separately in BT’s RFS, but were instead included within the revenues and costs associated with BES and WES rental services. If main link revenues were below DSAC in 2006/07, aggregation of the main link and rental charges could suppress the extent of overcharging on rental services. However, if main link revenues were above DSAC, and other rental revenues were also above DSAC, then aggregation of main link and rental charges would make no difference to the overall level of overcharging

13.13 The RGL Report submitted by Sky and TTG suggested that main link revenues exceeded DSAC in 2006/07. As discussed in Section 12, while we consider it likely that main link revenues exceeded DSAC in 2006/07, we have concluded that there is no robust way of disaggregating the main link data.

[350] And 2009/10, although outside the scope of the disputes.
[351] And 2009/10, although outside the scope of the disputes.

13.14 Since our analysis indicates that the revenue for main link and the BES and WES rentals in dispute exceeded DSAC in 2006/07, any overcharging of main link should be captured by the overcharging that we have identified for the BES and WES rental services in 2006/07 and aggregation of data should not affect the total level of overcharges and subsequent repayment. We have therefore used the aggregated BES and WES rental data in 2006/07 to resolve the Disputes and as such do not report any financial measures for main link separately in this year.

Ofcom's assessment of the cost orientation of the charges in dispute

Introduction

13.15 Unless explicitly stated otherwise, the data reported within this section relates to the level of aggregation reported in the RFS and refers to external customers only. We include pricing data for services outside the scope of the Disputes as it is relevant context to the general path of pricing BT took with each of its services. All the data reported includes Ofcom's adjustments as described in Section 11. For each of the services listed in BT's RFS (which include a number of different service variants)[352] we set out the following information:

13.15.1 revenue as a percentage of DSAC;

13.15.2 revenue as a percentage of FAC;

13.15.3 ROCE;

13.15.4 Unit DSAC;[353] and

13.15.5 the price listed in the Openreach Price List for the service that makes up the majority of revenue in the service as listed in the RFS.[354]

13.16 We refer to this financial and pricing data in a number of different tables in this section. In each table, we highlight in grey where: the revenue/DSAC ratio is over 100% (i.e. where revenues are greater than DSAC); the revenue/FAC ratio is over 100% (i.e. where revenues are greater than FAC); and where the ROCE is greater than the "rest of BT" WACC (which was between 11% and 11.4% during the Relevant Period [355]). As we have explained above, a charge above FAC (and hence one where the rate of return is greater than the WACC) does not necessarily indicate that BT's charges are not cost orientated, but rather lends weight to a conclusion of overcharging where the charge is also above DSAC.

[352] See paragraphs 12.9 to 12.15 for a discussion of this issue.
[353] Unit DSACs, average revenue and prices are given per local end throughout the Relevant Period. BT's RFS data was generated per circuit in 2006/07 and 2007/08 and we have halved these results to give results per local end. Some WES circuits only require a single end so these figures may under-state the average charge and the DSAC per end for WES services, but the results per end are presented for comparative purposes only and would not affect the calculation of the extent of overcharging.
[354] E.g. In the BES100 Rental category, the standard one year minimum variant attracted the most revenue within the RFS category.
[355] The WACC referred to is the Rest of BT WACC which was 11.4% in 2006/07, 2007/08 and 2008/09, and 11% in 2009/10.

How do we take account of the specific circumstances of the AISBO market?

13.17 BT considers that we should take the developing nature of the AISBO market into account when considering whether its charges were cost orientated or not. BT argues that there are three ways in which we should take this into account[356]:

13.17.1 **Use of aggregated data**: BT considers that it should be able to use market level data in assessing cost orientation;

13.17.2 **Appropriateness of a higher ROCE**: BT argues that it is "*entitled to earn a higher ROCE given the developing nature of the market.";* and

13.17.3 **Difficulty in forecasting costs**: Due to a lack of historic data, BT cannot accurately forecast its future costs and therefore "*BT cannot confidently predict whether and how it needs to change its prices".*

13.18 We considered the first of these points in paragraphs 8.45 to 8.54, where we provisionally concluded that, notwithstanding the developing nature of the market, compliance with the cost orientation obligation in the AISBO market should be considered on the basis of each individual charge where data availability allows, rather than aggregated at the level of the market or sub-group within the market.

13.19 We considered BT's arguments about the appropriate ROCE benchmark to use in paragraphs 9.67 to 9.83 and 10.12 to 10.20. We considered that BT's ROCE analysis using aggregated data was not correct for the reasons set out in Section 10. We also explained that a return above BT's average WACC may be supportive of a finding of overcharging, but is not necessarily indicative of overcharging in and of itself.

13.20 As discussed in paragraphs 9.72 to 9.77, if BT considers that there is a higher than average systematic risk associated with Ethernet services, and therefore that a higher WACC than the "rest of BT" WACC is warranted in this case, it would need to supply us with specific evidence supporting this argument. BT has not yet provided this evidence. In any event, we have analysed BT's ROCEs where services revenue exceed DSAC in Table 13.3 and in all cases except BES100 Rental in 2009/10, the ROCEs are significantly above BT's WACC. Therefore, even if a higher WACC was appropriate due to higher than average systematic risk, it would not alter our conclusion that overcharging has occurred unless the risk led to a substantially higher WACC.[357]

13.21 In the case of BES100 Rental (where 13% ROCE is observed), revenues are only marginally above DSAC. If a higher WACC were used and this was reflected in a higher DSAC, this could alter the conclusion on overcharging for 2009/10. However, as the revenues for BES100 rental services only exceed DSAC by around [✂], this would not materially change the extent of overcharging.

[356] BT's 20 May Submission, paragraph 32.
[357] Although a higher WACC may affect the extent of overcharging.

Table 13.3 - ROCEs for services where revenues exceed DSAC

	2006/07	2007/08	2008/09	2009/10
BES100 Rental	44%	95%	36%	13%
BES1000 Rental	145%	345%	143%	70%
BES100 Connection	785%	411%		
BES1000 Connection	332%			
WES10 Rental			32%	
WES100 Rental	55%	53%	47%	27%
WES1000 Rental	277%	212%	160%	95%

Source: Ofcom analysis of BT data, crossed out boxes indicate charges were below DSAC in those years.

13.22 If "fair bet" considerations were relevant to Ethernet services (which BT has not yet evidenced) a ROCE above the WACC may not be evidence of overcharging. As discussed in paragraph 9.81, "fair bet" considerations are more likely to apply in the early years of a product's lifecycle. However, we note that BT's observed ROCEs for the services in dispute were typically significantly above the WACC, as shown in **Table 13.4**. Therefore, BT would need to establish that "fair bet" concerns were very substantial for the services in dispute to demonstrate that its charges did not give rise to overcharging.

13.23 We discussed the difficulty BT may have had in accurately forecasting its future costs and revenues in paragraphs 8.45 to 8.54. We noted that the extent to which this is relevant would depend on the specific circumstances of the services in question. To the extent that the developing nature of the market is relevant in these Disputes, we would expect this to have more relevance in the early years of the Disputes (i.e. 2005/06 and 2006/07) which were characterised by particularly strong growth rates than the latter years.[358][359]. We show below the revenue as a % of DSAC and the ROCE of each of the services in question in 2006/07. As explained above, disaggregated data is not available for 2005/06.

Table 13.4: Key financial measures for the services in dispute, 2006/07

	Revenue as a % of DSAC	Revenue as a % of FAC	ROCE
BES100 Rental	201%	191%	44%
BES1000 Rental	464%	473%	145%
BES100 Connection	393%	533%	785%
BES1000 Connection	222%	286%	332%
WES10 Rental	66%	71%	1%
WES100 Rental	194%	217%	55%
WES1000 Rental	637%	758%	277%

Source: Ofcom analysis of BT data

13.24 As can be seen from **Table 13.4**, where revenues are above DSAC (which is in the majority of cases), the revenues are between 194% and 637% of DSAC. This shows that revenues were typically substantially (not marginally) above DSAC (and FAC).

[358] For example, in 2005/06 and 2006/07, the AISBO market was growing at 103% and 84% per annum respectively. By 2007/08, this growth rate had slowed to around 28%.
[359] We note it could be argued that it is the predictability of the growth rate as opposed to the actual growth rate *per se* that is more relevant to the forecasting of costs. However it seems plausible, if not likely, that growth rates are less predictable at times of significant growth than during periods of greater stability.

Even if BT had difficulty in accurately forecasting its DSACs, it seems unlikely that all of the excess of revenues above DSAC could be attributed to these forecasting difficulties.

13.25 We do not, however, rule out the possibility that BT may have experienced difficulties in forecasting costs and revenues for individual services in dispute and that these difficulties may have contributed to it failing the DSAC test. Should BT wish us to take the specific circumstances surrounding a charge into account when assessing overcharging, it needs to provide us with an explanation of the specific reasons why it encountered such difficulties. It should also provide supporting evidence of its original forecasts and the factors that it considered at the time. BT would need to demonstrate that its unit DSACs were lower than it reasonably expected. If, for example, this was a consequence of an error in forecasting volumes, it would need to provide us with details of the volume forecasts it used in setting prices, together with an explanation of why it considered these to be reasonable forecasts and why the deviation from forecast led to the failure of the DSAC test. A second possibility is that unit DSACs could be lower than expected due to unexpected movements in costs. If this were the case, BT would need to explain why the cost movements could not have been reasonably forecast and evidence of its original cost forecast, together with the supporting reasoning for that forecast at the time. We would typically expect BT to include, at a minimum:

13.25.1 a detailed description of which specific cost category (or categories) contributed to the change in unit costs;

13.25.2 an explanation of the underlying reason for these cost changes;

13.25.3 an explanation of why BT therefore considered the level of the costs to be different to the level it had reasonably expected; and

13.25.4 if the actual unit volumes that occurred were not expected, the volumes that BT used in setting its prices.

13.26 While BT's 20 May submission provides at a high level its views on forecasting difficulties in the AISBO market over the Relevant Period,[360] it does not provide any specific evidence of the type discussed above. Where it provides forecasts,[361] these relate to the Ethernet market as a whole and are those produced by "independent analysts", rather than BT's own forecasts upon which it based its pricing decisions. In other words, BT has not provided evidence of its own original forecasts used to make the pricing decision at the time.

13.27 While BT has not provided us with sufficient evidence to date to allow us to place significant weight on its arguments in relation to its forecasting difficulties in our assessments below, we do not rule out that it could provide such evidence in response to these Draft Determinations. If specific evidence were provided by BT, it could lead us to revise our proposed conclusions below in relation to the affected services.

BES100 Rental

13.28 **Table 13.5** below shows the relevant comparisons of external DSAC, FAC and ROCE for BES100 Rental over the Relevant Period. **Figure 13.1** shows the charge

[360] e.g. Section 3.5 of BT's 20 May submission.
[361] e.g. Figure 1 of BT's 20 May submission.

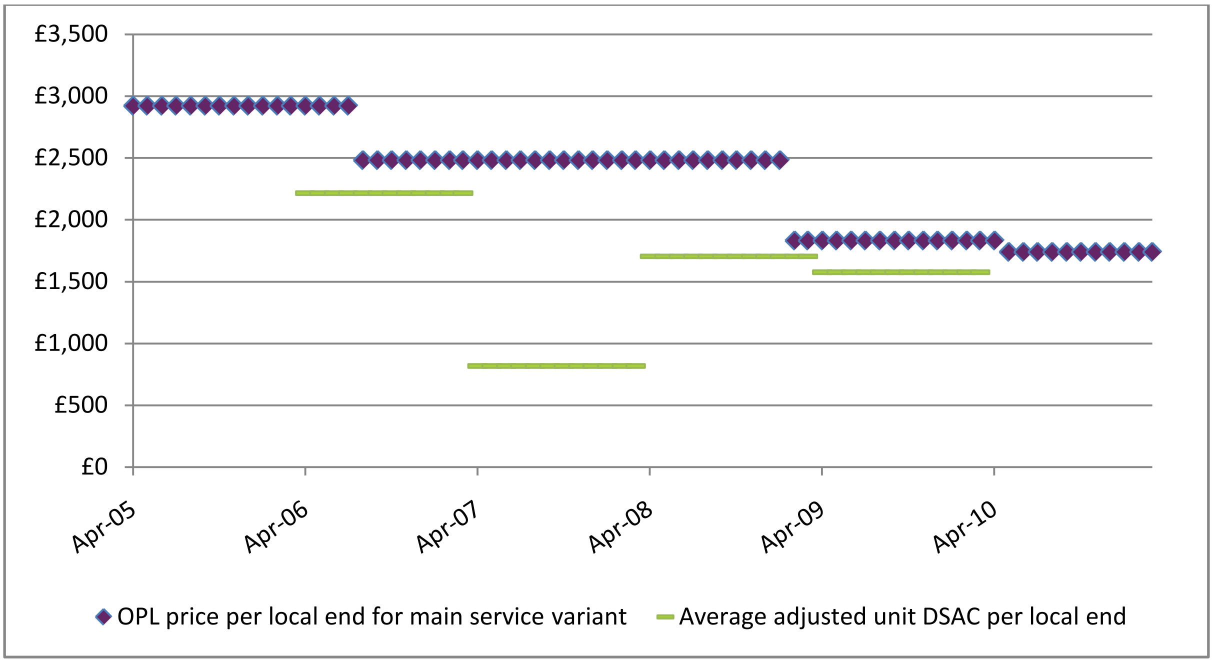
per local end for the standard service and the DSAC per local end for BES100 Rental. As discussed above, the average revenue per local end can materially vary from the price listed in the Openreach Price List, particularly in 2006/07 where the average revenue per local end included main link charges (whereas for other years it did not).

Table 13.5: Key financial measures for BES100 Rental, 2006/07 to 2009/10

Years	Revenue as % of DSAC	Revenue as % of FAC	ROCE
2006/07	201%	191%	44%
2007/08	282%	427%	95%
2008/09	135%	182%	36%
2009/10	100%	107%	13%

Source: Ofcom based on BT data

Figure 13.1: BES100 Rental, OPL price and unit DSAC per local end



Note: DSACs are calculated on an annual basis, so monthly unit DSACs are the same throughout the financial year.

Source: Ofcom based on BT data

13.29 As can be seen from **Table 13.5** above: revenues exceeded DSAC for each of 2006/07, 2007/08 and 2008/09; they also exceeded DSAC in 2009/10, albeit by less than 0.5%; revenues were substantially above FAC in 2006/07, 2007/08 and 2008/09, and BT's ROCE was well in excess of BT's WACC in each of those three years. In 2009/10 revenues also exceeded FAC but by considerably less than in the earlier three years. Consistent with this, BT's ROCE was above its WACC for this year but also by a significantly lower amount than in the earlier years. As discussed at paragraph 8.44, the aggregation of variants (i.e. 'standard' rentals, along with 'daisy chain' and 'term' rentals) may distort the outcome of the DSAC test, such that the extent of overcharging in 2009/10 is higher than has been calculated. The lower priced term rentals may be "offsetting" the higher price standard variants and reducing the overall level of overcharge. However, given the lack of robust data for disaggregation, we have not considered this further in our analysis.

13.30 On this basis, we consider that BT's charges were persistently above DSAC for the majority of the Relevant Period. As we explain in Section 11, we would normally expect charges above DSAC for this length of time to indicate that BT had failed to take action to alter its charges appropriately.

13.31 In 2006/07, the unit DSAC was below the unit FAC. As discussed in Section 9, this is not what we would typically expect. However, BT's charges are substantially above both unit DSAC and unit FAC as can be seen from Table 13.6 below. Consideration of the evidence on FAC as well as DSAC does not therefore change our findings of whether BT has overcharged for BES100 rentals.

Table 13.6 – Unit average revenue per local end, unit DSAC and unit FAC per local end (includes main link costs and revenues in 2006/07)

Years	Average unit revenue (per local end)	Average unit DSAC	Average unit FAC
2006/07	£4,459	£2,215	£2,328
2007/08	£2,302	£817	£540
2008/09	£2,293	£1,704	£1,257
2009/10	£1,583	£1,576	£1,478

Source: Ofcom based on BT data

13.32 BT's price reductions in February 2009 brought charges more in line with DSACs for 2009/10, but were not substantial enough to bring charges below DSAC for that year. Indeed, had they been implemented earlier, they would still not have been sufficient to bring charges below the level of DSAC in either 2007/08 or 2008/09. Even if BT's charges had been reduced in November 2008, as BT initially proposed[362], its revenues in 2008/09 would still have exceeded DSAC. Given the degree to which revenues exceeded DSAC, the reductions in BT's charges would be unlikely to indicate overcharging had not taken place.

13.33 Using the DSAC test, there may have been a small degree of overcharging in 2009/10, as BT's external revenues for BES100 rental services were £1,583 per local end, with an external DSAC of £1,576 per local end.[363]

13.34 BT's charges were slightly above DSAC in 2009/10, despite the fact that it had reduced them in February 2009. We note that BT would have known in 2009/10 that its rental charges had been above DSAC in 2006/07, 2007/08 and (from July 2009 onwards) 2008/09. However, BT did not reduce the charges quite far enough to bring them below DSAC. BT has not provided us with any specific evidence to demonstrate that it reasonably expected the unit DSACs in 2009/10 to be high enough that the charges would not exceed DSAC. If it were able to do so in response to these Draft Determinations, this could lead us to conclude that there was no overcharging in 2009/10.

Conclusion on BES100 Rental

13.35 Our provisional view is that it is clear that BT overcharged for BES100 rental in 2006/07, 2007/08 and 2008/09, with revenues well in excess of DSAC and FAC and associated high rates of return. In 2009/10, the case is less clear cut, but the pattern of overcharging in previous years, and the fact that the price reductions were not quite substantial enough to reduce prices to below the previous years' DSACs,

[362] See paragraphs 10.89 to 10.90.
[363] A total external revenue of £8.34 million compared to a total external DSAC of £8.31 million.

suggest that a small degree of overcharging also took place in 2009/10. Unless BT is able to supply us with any specific evidence as to why it expected its charges in 2009/10 to be below DSAC, we propose to conclude that there was also overcharging in 2009/10.

13.36 In summary, we provisionally conclude that BT overcharged for BES100 rental in 2006/07, 2007/08, 2008/09 and 2009/10 on the basis that:

13.36.1 revenues exceeded DSAC in each year;

13.36.2 revenues substantially exceeded FAC in the first three years, and were also above FAC in 2009/10;

13.36.3 ROCEs were substantially above the WACC in the first three years, and were also above the WACC in 2009/10;

13.36.4 BT's 2009 price reductions were insufficient to reduce charges below DSAC; and

13.36.5 although DSAC was below FAC in 2006/07, revenues were substantially above both DSAC and FAC.

BES1000 Rental

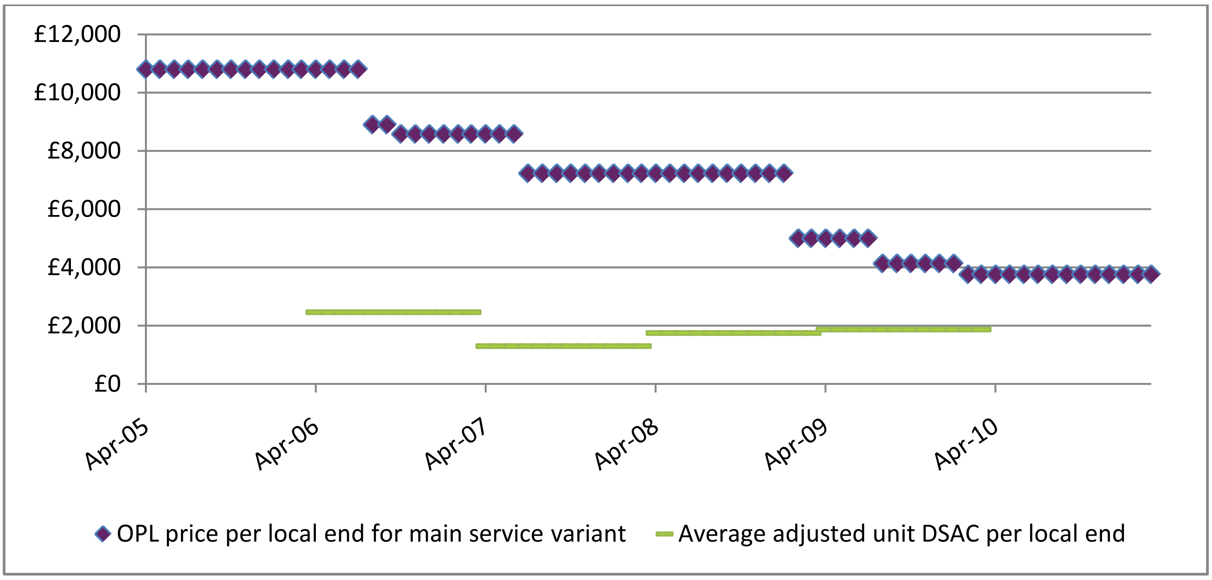
13.37 **Table 13.7** below shows the relevant comparisons of external DSAC, FAC and ROCE for BES1000 Rental over the Relevant Period. **Figure 13.2** shows the charge per local end for the standard service and the DSAC per local end for BES1000 Rental.

Table 13.7: Key financial measures for BES1000 Rental, 2006/07 to 2009/10

Years	Revenue as % of DSAC	Revenue as % of FAC	ROCE
2006/07	464%	473%	145%
2007/08	584%	1085%	345%
2008/09	406%	545%	143%
2009/10	224%	268%	70%

Source: Ofcom based on BT data

Figure 13.2: BES1000 Rental, OPL price and unit DSAC per local end



Source: Ofcom based on BT data

13.38 As can be seen from **Table 13.7** above: revenues significantly exceeded DSAC for each of the four years; revenues were also substantially above FAC in each year; and BT's ROCE was well in excess of its WACC in each of the four years.

13.39 On this basis, we consider that BT's charges were persistently above DSAC for the majority of the Relevant Period. As we explain in Section 11, we would normally expect charges above DSAC for this length of time to indicate that BT had failed to take action to alter its charges appropriately.

13.40 Although BT did reduce its rental charge over time, the rate of reduction was insufficient to take account of the fact that its charges were substantially above DSAC for a number of years.[364]

Conclusion on BES1000 Rental

13.41 We provisionally conclude that BT overcharged for BES1000 Rental in 2006/07, 2007/08, 2008/09 and 2009/10 on the basis that:

13.41.1 revenue significantly exceeded DSAC in all years;

13.41.2 revenue substantially exceeded FAC in all years; and

13.41.3 ROCEs were substantially above the WACC in all years.

BES100 Connection

13.42 **Table 13.8** below shows the relevant comparisons of external DSAC, FAC and ROCE for BES100 Connection over the Relevant Period. **Figure 13.3** shows the charge per local end for the standard service and the DSAC per local end for BES100 Connection.

[364] We note that, even if BT's reductions to its BES1000 charges had been introduced in November 2008 rather than in February 2009, BT's charges for BES1000 services would still have remained substantially above DSAC.

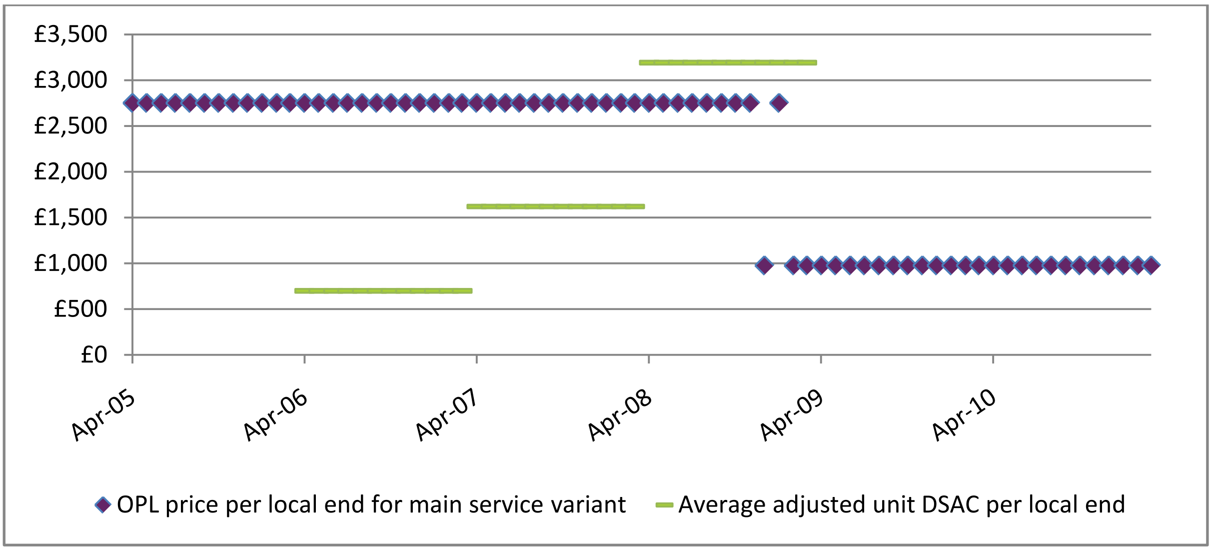
13.43 Connection services typically have low levels of mean capital employed ("MCE"), and can thus show very high levels of ROCE even when charges are below DSAC. Given the volatility of ROCEs, we place less weight on this measurement when considering whether BT's charges were cost orientated.

Table 13.8: Key financial measures for BES100 Connection, 2006/07 to 2009/10

Years	Revenue as % of DSAC	Revenue as % of FAC	ROCE
2006/07	393%	533%	785%
2007/08	169%	443%	411%
2008/09	74%	110%[365]	38%
2009/10	No Data	17%	-226%[366]

Source: Ofcom based on BT data

Figure 13.3: BES100 Connection, OPL price and unit DSAC per local end[367]



Source: Ofcom based on BT data

13.44 BES100 connection revenues exceeded DSAC for 2006/07 and 2007/08. As discussed in Section 11, when revenues exceed DSAC for less than three years, consideration of the circumstances of the charges is necessary. Revenues were also above FAC in both years and substantially so in 2006/07. This evidence supports a finding of overcharging in 2006/07 and 2007/08.

13.45 BT's revenues were below DSAC in 2008/09 primarily as a consequence of a significant increase in unit DSAC, rather than as a result of a reduction in prices (notwithstanding the price reduction at the end of the year) [368].

[365] Between 2007/08 and 2008/09, there was a decrease in volume of over 60%, whilst total FAC costs increased, leading to a substantial decrease in unit FAC in this year.
[366] There were very low volumes associated with BES100 connection services, so the service was loss making (on a FAC basis) - the total revenue associated with the service was around £30,000 with FAC costs of around £190,000.
[367] BT temporarily reduced its charges for connections before making the reduction permanent in February 2009.
[368] This increase in unit DSAC was driven by a reduction in volumes from 1,746 local end connections in 2007/08 (this assumes that there were two local ends to each of the 873 connections reported in the RFS in 2007/08) to 649 local end connections in 2008/09.

13.46 BT's charges were above DSAC for two consecutive financial years, and by a considerable margin in the first of those years. If BT was able to demonstrate that it could have reasonably expected its unit charges to be below unit DSAC, it could be possible to conclude that it did not overcharge its external customers. However, given the extent to which BT's charges exceeded DSAC, BT would need to demonstrate that it reasonably expected that its unit DSACs would be substantially higher than they were. Given that the rate of increase in unit DSAC was high, it seems unlikely that BT expected unit DSACs to grow even faster than they did.

13.47 BT was unable to provide DSAC data for 2009/10, although it did provide FAC data. We understand that DSACs were not produced because very few BES100 connections were purchased in 2009/10. Although the absence of DSAC data means we are unable to apply the DSAC test in this year, **Figure 13.4** shows that BT significantly reduced the price of BES100 Connections just before the beginning of 2009/10. The level of this revised charge is below the DSAC for the previous two years. Given the decline in BES100 Connection volumes over the Relevant Period, all other things being equal, we would expect the loss of scale economies to lead to increases in unit DSACs over the Relevant Period. We observe this for the three years where DSAC data was available. Additionally, revenues were only 17% of FAC. Given the range of plausible relationships between DSAC and FAC, it is very unlikely that revenues exceeded DSAC. It therefore seems unlikely, given the scale of BT's price cut, and the relationship of revenues to FAC, that it would have overcharged for BES100 Connections in 2009/10.

<u>Conclusion on BES100 Connection</u>

13.48 We provisionally conclude that BT overcharged for BES100 Connection services in 2006/07 and 2007/08 (but not in 2008/09), on the basis that:

13.48.1 revenues exceeded DSAC in both years; and

13.48.2 revenues exceeded FAC in both years.

13.49 Although we cannot apply the DSAC test to 2009/10 due to a lack of DSAC data, we consider the reduction in price implemented by BT towards the end of 2008/09 and the fact that revenues were substantially below FAC are sufficient to conclude that it did not overcharge for BES100 Connection services in this year.

BES1000 Connection

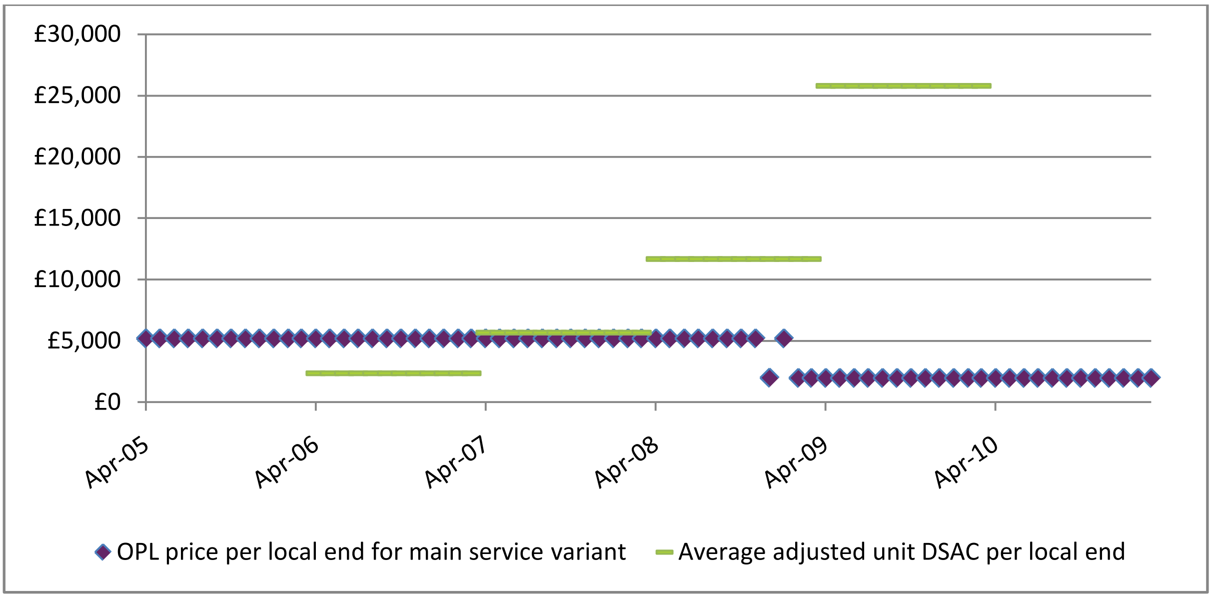
13.50 **Table 13.9** below shows the relevant comparisons of external DSAC, FAC and ROCE for BES1000 Connection over the Relevant Period. **Figure 13.4** shows the charge per local end for the standard service and the DSAC per local end for BES1000 Connection.

Table 13.9: Key financial measures for BES1000 Connection, 2006/07 to 2009/10

Years	Revenue as % of DSAC	Revenue as % of FAC	ROCE[369]
2006/07	222%	286%	332%
2007/08	97%	265%	504%
2008/09	46%	69%	-83%
2009/10	8%	15%	-133%

Source: Ofcom based on BT data

Figure 13.4: BES1000 Connection, OPL price and unit DSAC per local end



Source: Ofcom based on BT data

13.51 While BES1000 Connection revenues were close to DSAC in 2007/08, they only exceeded DSAC in one year: 2006/07. Revenues also significantly exceeded FAC in this year. This evidence would tend to support a conclusion of overcharging in 2006/07 but not in any of the later years. Aggregate revenues were very close to DSAC in 2007/08 and the aggregation of standard, daisy chain and extended reach variants may be "masking" some charges that were above DSAC. However, as we do not have robust disaggregated data for 2007/08 we are unable to determine if this is the case and have therefore concluded that BT did not overcharge in 2007/08.

13.52 The primary reason why BT's charges exceeded DSAC in 2006/07 but not the latter years is that that unit DSACs increased over the period from 2006/07, while charges remained constant or fell[370]. We have not seen any evidence of other factors which would support a finding that BT did not overcharge for BES1000 connection in 2006/07. In order for us to find that there was no overcharge, BT would need to

[369] As discussed at paragraph 13.43, the ROCEs for connection services tend to be volatile as connection services have low levels of MCE. This can result in high ROCEs even where charges are below DSAC, as occurred in 2007/08.

[370] This increase in unit DSAC was driven by an eight-fold increase in the total amount of DSAC being allocated to BES1000 connection between 2006/07 and 2009/10. The increase was particularly marked in 2009/10 and reflected the increase in total FAC being allocated to BES1000 connection in this year. BT said that the reason for this increase was due to changes in cost allocation methodologies and increases in the amount of depreciation being allocated to BES1000 connection (BT response to question 10 of our follow up questions to the 22 October section 191 notice).

supply us with specific evidence that demonstrates, for example, that it reasonably expected its unit DSAC to be higher in 2006/07 than was actually the case (e.g. the increase in unit DSACs over time was slower than expected). We would also consider any other evidence BT might put to us to show that the circumstances of the 2006/07 charges did not in themselves amount to an overcharge.

Conclusion on BES1000 Connection

13.53 In summary we provisionally consider that BT overcharged for BES1000 connections in 2006/07, but not in 2007/08, 2008/09 or 2009/10, on the basis that:

13.53.1 revenues exceeded DSAC in 2006/07, but not in any of the other years;

13.53.2 in 2006/07 revenues were substantially above FAC; and

13.53.3 in 2006/07 ROCEs were substantially above the WACC.

13.54 BT has not provided us with specific evidence as to why, despite its 2006/07 revenues for BES1000 connections being above DSAC, these charges were nonetheless cost orientated. If BT were able to provide us with this evidence, we may conclude that despite exceeding the DSAC ceiling its charges were nevertheless cost orientated.

WES10 Rental

13.55 **Table 13.10** below shows the relevant comparisons of external DSAC, FAC and ROCE for WES10 Rental over the period of the Disputes. **Figure 13.5** shows the charge per local end for the standard service and the DSAC per local end for WES10 Rental. As we note above, WES services in 2009/10 are not in the scope of these Disputes. We therefore do not draw any conclusions in relation to WES10 Rental services in that period.

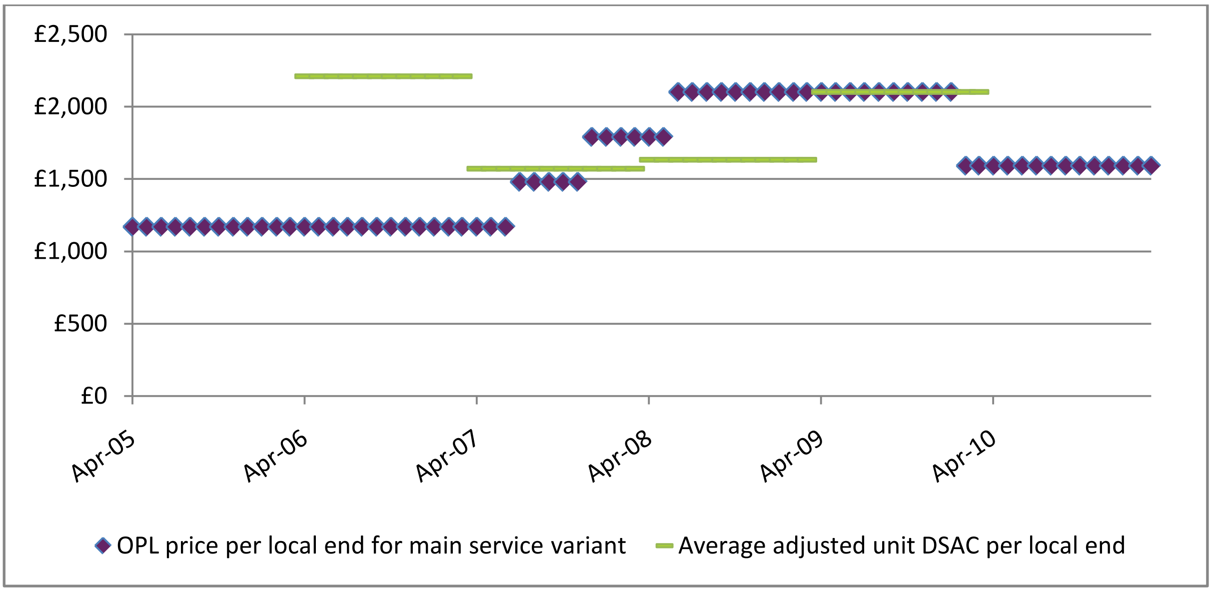
Table 13.10: Key financial measures for WES10 Rental, 2006/07 to 2009/10

Years	Revenue as % of DSAC	Revenue as % of FAC	ROCE
2006/07	66%	71%	1%
2007/08	73%	97%	10%
2008/09	125%	170%	32%
2009/10[371]	95%	131%	22%

Source: Ofcom based on BT data

[371] 2009/10 is not in dispute, but we have included it for reference. We have not reached a conclusion as to whether there was overcharging in 2009/10.

Figure 13.5: WES10 Rental, OPL price and unit DSAC per local end



Source: Ofcom based on BT data

13.56 In the year relevant to the Disputes, 2008/09, BT's charges exceeded DSAC. Revenues were also substantially above FAC in this year, resulting in a ROCE of 32%. This evidence would tend to support a conclusion of overcharging in 2008/09.

13.57 As **Figure 13.6** shows, BT increased its charges three times for the standard variant WES10 rentals in June 2007, December 2007, and June 2008 from £1170 per local end to £2,100 per local end. This had a significant bearing on BT failing the DSAC test in 2008/09. Specifically, if BT had not increased its prices from the level in June 2007 then it would have passed the DSAC test for the whole period. This again appears to support a finding of overcharging in 2008/09.[372]

13.58 However, as charges only exceeded DSAC for one year, if BT were able to supply us with specific evidence that demonstrates that it reasonably expected its charges in 2008/09 to be below unit DSAC, we may conclude that there was not overcharging in this year. As yet it has not provided such evidence.

<u>Conclusion on WES10 Rental</u>

13.59 We have reached no conclusion in relation to 2006/07, 2007/08 and 2009/10 as those years were not in dispute between the Parties. We propose to conclude that BT has overcharged for WES10 rental services only in 2008/09 on the basis that in that year:

13.59.1 revenues exceeded DSAC;

13.59.2 revenues substantially exceeded FAC;

13.59.3 BT's ROCE substantially exceeded its WACC; and

13.59.4 BT breached its maximum cost ceiling as a result of increasing its charges three times.

[372] In its November 2008 price change proposal, BT proposed no changes to WES 10 rental charges.

13.60 BT has not provided any specific evidence as to why, despite its revenues exceeding DSAC, its charges were nonetheless cost orientated. If BT were able to provide us with this evidence, we may conclude that despite exceeding the DSAC ceiling its charges were nevertheless cost orientated.

WES100 Rental

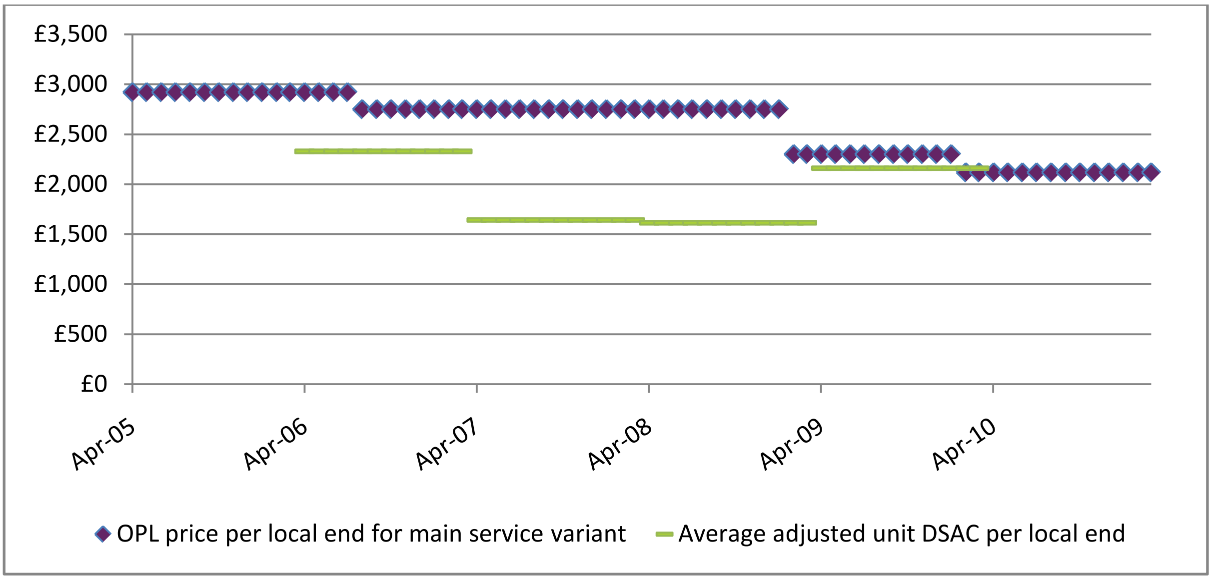
13.61 **Table 13.11** below shows the relevant comparisons of external DSAC, FAC and ROCE for WES100 Rental over the Relevant Period. **Figure 13.6** shows the charge per local end for the standard service and the DSAC per local end for WES100 Rental. As we note above, WES services in 2009/10 are not in the scope of these Disputes. We therefore do not draw any conclusions in relation to these services in that year.

Table 13.11: Key financial measures for WES100 Rental, 2006/07 to 2009/10

Years	Revenue as % of DSAC	Revenue as % of FAC	ROCE
2006/07	194%	217%	55%
2007/08	179%	244%	53%
2008/09	165%	221%	47%
2009/10	105%	146%	27%

Source: Ofcom based on BT data

Figure 13.6: WES100 Rental, OPL price and unit DSAC per local end



Source: Ofcom based on BT data

13.62 Revenues exceeded DSAC in each of the three years in which the services were in dispute (i.e. 2006/07 to 2008/09). BT's revenues also substantially exceeded FAC, resulting in ROCE at least four times its WACC in each of these three years.

13.63 On this basis, it appears that BT's charges were persistently above DSAC for the majority of the Relevant Period. As we explain in Section 11, we would normally expect charges above DSAC for this length of time to indicate that BT had failed to take action to alter its charges appropriately.

13.64 BT did reduce the rental prices of both its standard service and its more expensive local access managed service in February 2009. However, these reductions were not sufficient to bring charges for 2008/09 below DSAC.[373]

Conclusion on WES100 Rental

13.65 We have reached no conclusion in relation to charges for WES100 rental in 2009/10 as BT was not in dispute with any of the Disputing CPs. We provisionally conclude that BT overcharged for WES100 rental services in 2006/07, 2007/08 and 2008/09 on the basis that in each of those years:

13.65.1 revenues exceeded DSACs in each of the years;

13.65.2 revenues exceeded FACs in each of the years;

13.65.3 BT's ROCE was more than twice its WACC in all years; and

13.65.4 BT's price reductions over the period were insufficient to bring its charges below unit DSAC.

WES1000 Rental

13.66 **Table 13.12** below shows the relevant comparisons of external DSAC, FAC and ROCE for WES1000 Rental over the Relevant Period. **Figure 13.7** shows the charge per local end for the standard service and the DSAC per local end for WES1000 Rental. As we note above, WES services in 2009/10 are not in the scope of these Disputes. We therefore do not draw any conclusions in relation to these services in that year.

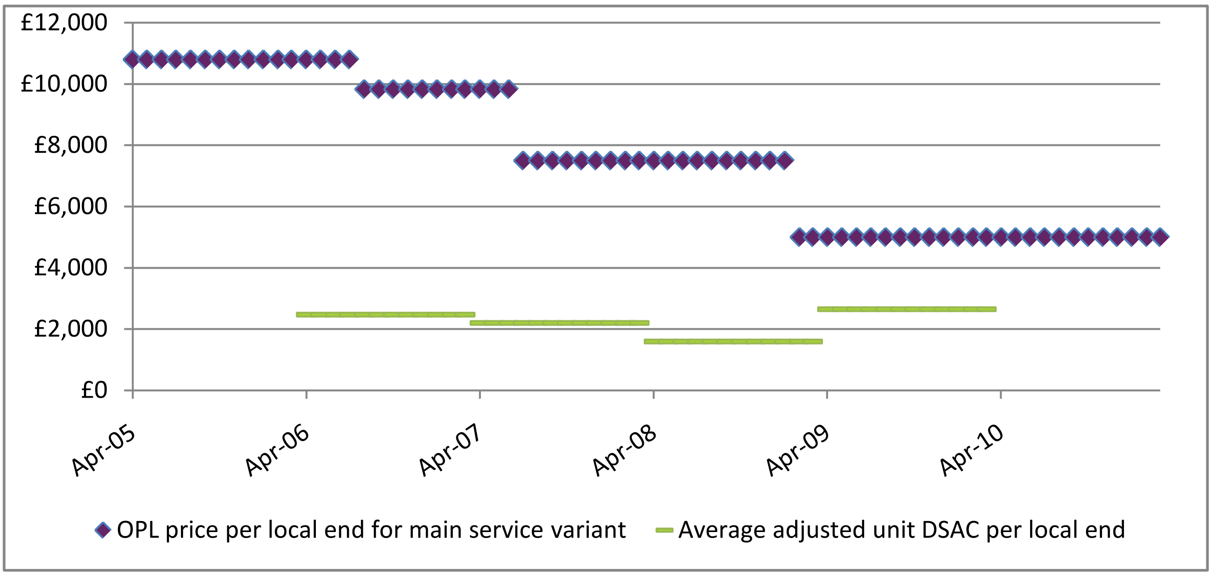
Table 13.12: Key financial measures for WES1000 Rental, 2006/07 to 2009/10

Years	Revenue as % of DSAC	Revenue as % of FAC	ROCE
2006/07	637%	758%	277%
2007/08	420%	675%	212%
2008/09	474%	616%	160%
2009/10	210%	325%	95%

Source: Ofcom based on BT data

[373] Even if these reductions had been introduced in November 2008, BT's charges would still have remained above DSAC over the year.

Figure 13.7: WES1000 Rental, OPL price and unit DSAC per local end



Source: Ofcom based on BT data

13.67 Revenues exceeded DSAC in each of the three years in which the services were in dispute (i.e. 2006/07 to 2008/09). BT's revenues also substantially exceeded FAC, resulting in ROCE substantially above its WACC in each of these three years.

13.68 On this basis, it appears that BT's charges were persistently above DSAC for the majority of the Relevant Period. As we explain in Section 11, we would normally expect charges above DSAC for this length of time to indicate that BT had failed to take action to alter its charges appropriately.

13.69 Although BT did decrease its rental prices over time, it did not reduce prices sufficiently to bring them below DSAC.[374] This would appear to further support a finding of overcharging, particularly given the relative stability of unit DSACs over the Relevant Period.

Conclusion on WES1000 Rental

13.70 We have reached no conclusion in relation to charges for WES1000 rental in 2009/10 as BT was not in dispute with any of the Disputing CPs in that year. We provisionally conclude that BT has overcharged for WES1000 rental services for 2006/07, 2007/08, 2008/09 on the basis that:

13.70.1 revenues exceeded DSAC in each of those years;

13.70.2 revenues substantially exceeded FAC in each of those years;

13.70.3 ROCEs were substantially above the WACC in each of those years; and

13.70.4 BT's price reductions over the Relevant Period were insufficient to bring its charges below unit DSAC.

[374] Even if BT's proposed price reductions had been introduced in November 2008, it is likely that BT's charges for 2008/09 would still have remained above DSAC.

Main link

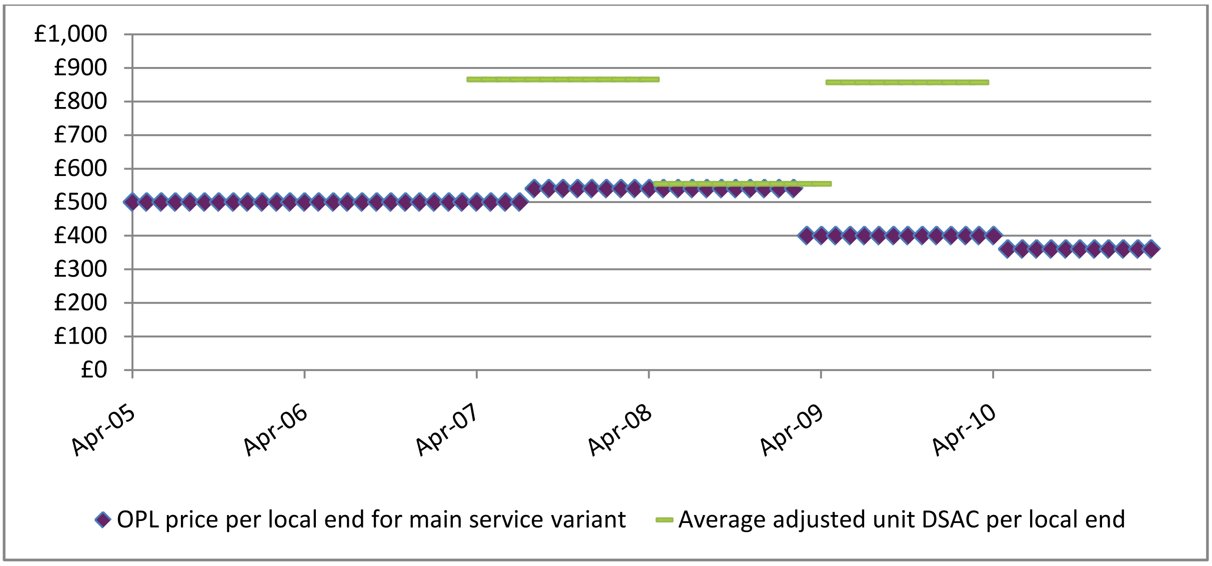
13.71 **Table 13.13** below shows the relevant comparisons of external DSAC, FAC and ROCE for main link over the Relevant Period. **Figure 13.8** shows the charge and the DSAC per km for main link. As we have explained in paragraphs 12.104 to 12.108 above, BT was unable to provide any information for main link in 2006/07 so we are unable to report any key financial measures in this year. Sky and TTG's claim for overcharging of main link services appears to cover all the financial years, and so we have analysed the data in all years.

Table 13.13: Key financial measures for main link, 2006/07 to 2009/10

Years	Revenue as % of DSAC	Revenue as % of FAC	ROCE
2006/07	No Data[375]	No Data	No Data
2007/08	62%	180%	34%
2008/09	95%	339%	56%
2009/10	46%	185%	32%

Source: Ofcom based on BT data

Figure 13.8: Main link, OPL price and unit DSAC per km



Source: Ofcom based on BT data

13.72 Revenues did not exceed DSAC for any of the years in question. Although revenues were only 5% below DSAC in 2008/09, this was caused by DSAC falling around 35% in that year before returning in 2009/10 to a level similar to that observed in 2007/08.

13.73 BT's revenues were substantially above FAC in each of the years where data is available. Consistent with this, BT's ROCE for main link was also substantially above its WACC. However, as we have explained in Section 9 we do not consider that FAC should be used as the primary indicator for overcharging, but rather as a cross-check on the outcome of the DSAC test. Given that BT's charges did not exceed DSAC for the years for which we have data, we propose to conclude that BT did not overcharge for main link in any year in dispute.

[375] As discussed above, main link revenues and costs were aggregated with rental services in 2006/07

Summary of proposed overcharging conclusions

13.74 In **Table 13.14** below we summarise our proposed conclusions on overcharging.

Table 13.14: Summary of proposed overcharging finding

	05/06	06/07	07/08	08/09	09/10
BES100 rental	No	Yes	Yes	Yes	Yes
BES1000 rental	No	Yes	Yes	Yes	Yes
BES100 connection	No	Yes	Yes	No	No
BES1000 connection	No	Yes	No	No	No
WES10 rental				Yes	
WES100 rental		Yes	Yes	Yes	
WES1000 rental		Yes	Yes	Yes	
Main link rental		n/a	No	No	No

Source: Ofcom based on BT data

Key – Yes = Provisionally conclude overcharging, No = Provisionally conclude no overcharging, n/a = no data available because aggregated with other services. Crossed out cells indicate services not in dispute.

Establishing the level of overcharge

13.75 Having provisionally established the years in which BT overcharged for specific services, we go on to consider the extent of that overcharging.

13.76 We establish the level of overcharge by comparing actual charges with the maximum charge under which we would have considered BT not to have overcharged for its services. The maximum charge that would have been permissible is normally at the level of DSAC, and where we conclude that BT has overcharged for a service, we consider that the extent of overcharging is the extent to which BT's charges exceeded DSAC.

13.77 In the case of BES100 Rental services in 2006/07, the unit DSAC was below the unit FAC. We have considered whether this unusual result means that we should deviate from viewing DSAC as the maximum permissible charge, and hence the benchmark against which we assess the extent of overcharging, in this case. For example, we have considered whether FAC may be a more appropriate ceiling for this specific charge. However, we consider that it is appropriate to consistently use DSAC as the benchmark for all charges, including for BES100 Rental in 2006/07. As we explain in Section 11, although BT's existing DSAC data is characterised by some limited cases of DSACs being below FAC for individual services, it is still an appropriate basis upon which to resolve these Disputes. We also note that:

13.77.1 charges for BES100 Rental were substantially above both FAC and DSAC in 2006/07 (and for the years in dispute following 2006/07), so the choice of benchmark (i.e. FAC or DSAC) is irrelevant to the finding of overcharging; and

13.77.2 the difference in the level of overcharge between using DSAC and FAC is very small.

13.78 Therefore, the level of overcharging we calculate for each service is:

13.78.1 zero if charges were lower than DSAC;

13.78.2 zero if charges were above DSAC, but we nonetheless consider that they were cost orientated; or

13.78.3 the difference between charges and DSAC, if charges were above DSAC and we consider that they were not cost orientated.

13.79 We summarise the levels of overcharging in **Table 13.15** below. We calculate the level of overcharging with respect to all of BT's external customers.

Table 13.15: The degree of overcharging to BT's external customers[376]

	06/07 (£m)	07/08 (£m)	08/09 (£m)	09/10[377] (£m)	All Years (£m)
BES100 rental	6.1	8.2	3.6	0.0	17.9
BES1000 rental	10.3	22.0	21.3	3.2	56.8
BES100 connection	7.6	2.0	-	n/a	9.6
BES1000 connection	4.8	-	-	-	4.8
WES10 rental	-	-	5.8	n/a	5.8
WES100 rental	2.0	6.0	8.2	n/a	16.1
WES1000 rental	1.0	2.4	5.1	n/a	8.5
Main link rental	n/a	-	-	-	-

Source: Ofcom based on BT data

[376] Figures are rounded to the nearest £100,000
[377] 2009/10 covers 1 April 2009 to 31 July 2010; any overcharging that may have taken place after this period is not included in this table.

Section 14

Repayments

Structure of assessment

14.1 In the preceding sections, we have considered whether on the facts BT has overcharged for WES and BES services and have provisionally concluded that BT has overcharged for the services set out in Table 14.1 below:

Table 14.1: Ethernet services where overcharging has been identified

	05/06	06/07	07/08	08/09	09/10*
BES100 rental	No	Yes	Yes	Yes	Yes
BES1000 rental	No	Yes	Yes	Yes	Yes
BES100 connection	No	Yes	Yes	No	No
BES1000 connection	No	Yes	No	No	No
WES10 rental				Yes	
WES100 rental		Yes	Yes	Yes	
WES1000 rental		Yes	Yes	Yes	
Main link rental		n/a	No	No	No

Source: Ofcom based on BT data

Key – Yes = Provisionally conclude overcharging, No = Provisionally conclude no overcharging, n/a = no data available because aggregated with other services. Crossed out cells indicate services not in dispute.

14.2 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.

14.3 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.

14.4 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 and comments made to us by the Parties.

14.5 We have split our analysis of the question of repayments into two parts:

14.5.1 first, we consider whether we should require payment by BT to the Disputing CPs; and

14.5.2 second, we go on to consider what the level of any repayment should be.

Should we require any payment by BT to the Disputing CPs?

Views of the Disputing CPs

14.6 In the Joint Dispute Submission, Sky and TTG have asked that Ofcom give a direction requiring BT:

- "*to repay to the Purchaser Parties a sum equal to the difference between the amounts paid by them in respect of the Relevant Charges, and the amounts which they would have paid had those charges been no higher than if they had been set in accordance with Condition HH3.1, together with interest on that sum at such rate and for such period as may be appropriate and just; or alternatively,*

- *to repay to the Purchaser Parties such other amounts as Ofcom may determine to be appropriate and just.*"

14.7 In Sky and TTG's view, BT should pay compound interest at a commercial rate on the amounts by which it has overcharged, to properly remedy its breach of Condition HH3.1 and to ensure that it is required fully to disgorge the benefit it has obtained by the breach.

14.8 Sky and TTG note that there is a clause in BT's standard BES Agreement which appears to have the effect of imposing a contractual bar on BT having to pay interest on an order/direction from Ofcom requiring BT to repay an overpayment:

> "*12.3 ….If any charge is recalculated or adjusted with retrospective effect under an order, direction, determination or requirement by Ofcom …the Purchaser Parties agree that interest will not be payable on any amount due to either party as a result of that recalculation or adjustment.*"

14.9 Sky and TTG consider that BT is not properly entitled to rely on this clause for two reasons. Firstly, Ofcom's powers to set the sum to be repaid cannot properly be limited by a contractual exclusion which has effectively been imposed by one CP on its customers. Secondly, the contractual exclusion is invalid and/or cannot be relied upon by BT, because it is in breach of Condition HH1.2, which requires BT to provide Network Access on "fair and reasonable terms".

14.10 In its submission Virgin has asked that Ofcom give a direction requiring BT to make a repayment to Virgin of £[✄] plus interest by way of adjustment of the overpayment, or of such other amount as Ofcom may determine, plus interest.

14.11 Virgin considers that a direction for an overpayment is appropriate given that BT is subject to an SMP obligation which requires it to charge cost oriented prices and which was imposed in order to resolve competition problems in the relevant market. Virgin believes that resolving the Disputes in this way would be fair as between BT and Virgin, reasonable from the point of view of Ofcom's regulatory objectives and consistent with Ofcom's Community requirements under the Act.

BT's views

14.12 BT argues that "*the way that the Disputing CPs have put their claims for a remedy under section 190(2)(d) is misconceived in that it confuses different remedies and moreover seeks remedies that Ofcom cannot grant*". BT considers that the use of the word "repay" by the Disputing CPs is incorrect and indicative of their misconception about the nature of section 190(2)(d).[378]

14.13 BT argues that "*the section 190(2)(d) regime cannot be both compensatory and restitutionary at the same time* […]". BT considers that "*compensation means providing the claiming party with a monetary award for the loss and damage it has actually suffered as a result of the breach; in contrast restitution means reimbursing the claiming party for the enrichment that the defendant has received at the expense of the claiming party in circumstances where it is unjust for the defendant to retain that enrichment*". (emphasis in original)[379]

14.14 BT argues that if the regime is compensatory, then "*actual loss must be demonstrated by the CPs before any payment should be ordered […] by Ofcom against BT*". BT notes that Virgin asserts in its dispute submission that there is no cause of action before the civil courts in this case. BT contends that Virgin is "*implicitly admitting that it cannot demonstrate that it has suffered any loss or damage as a result of the alleged breach*" and Ofcom therefore cannot order any repayment.[380]

14.15 BT argues that if the nature of section 190(2)(d) is restitutionary, it is necessary to take account of the benefits that the Disputing CPs have received from BT so that they are not unjustly enriched at the expense of BT. BT maintains that it is "*blindingly clear that overall the CPs have not been disadvantaged*" (emphasis in original) and so, applying restitutionary principles, Ofcom should not order payment.[381]

14.16 BT argues that section 190 of the Act does not allow Ofcom to impose punitive sanctions on BT for any alleged breaches. It asserts that punitive regimes are unusual in civil law and require clear language, but there is no such clear language in section 190(2)(d) or elsewhere in the Act.[382]

14.17 BT argues that, in the PPC Judgment, the CAT asserted in error that Ofcom has a "hard' discretion under section 190(2)(d) which requires it to follow through on the conclusions it has drawn in resolving a dispute, and that this entails a "restitutionary approach" whereby BT has to pay the full amount of the difference between its actual charges and DSAC. BT contends that in doing so, the CAT failed to consider whether the payment ordered by Ofcom satisfied the proportionality requirements and the specific duties in Article 8 of the Framework Directive.[383]

14.18 BT argues that Ofcom is obliged to take account of the fact that the Disputes concern an alleged breach of a cost orientation obligation rather than a price control cap, as cost orientation implies there can be a range of prices that can be cost orientated. BT argues that Ofcom must consider whether full repayment would go beyond what is necessary to resolve the Disputes and constitute a windfall which distorts competitive relationships and fails to secure sustainable competition, efficiency or investment in the long term. Further, it may unfairly discriminate against BT's retail business and therefore compromise BT's ability to compete downstream. BT argues that Ofcom should also take account of the countervailing benefits which the Disputing CPs enjoy as a result of purchasing WES and BES products from BT. In addition, the amount of

[378] BT's 20 May submission, paragraph 122.
[379] BT's 20 May submission, paragraph 127.
[380] BT's 20 May submission, paragraphs 129 to 130.
[381] BT's 20 May submission, paragraphs 148 to 149.
[382] BT's 20 May submission, paragraph 142.
[383] BT's 20 May submission, paragraph 132.

any payment ordered should not be higher than the amount of any sanction that could be imposed on BT for contravention of an SMP condition.[384]

14.19 BT contends that if it is right to conduct a historic investigation into alleged breaches of SMP conditions, then any payment regime under section 190(2)(d) is compensatory. It argues that this follows from the parallel enforcement regime for breach of statutory duty under section 104(2)(a) of the Act which is compensatory in nature. BT argues that there is no logical or legal basis for Ofcom being able to award a CP greater sums through the dispute resolution regime than a CP could obtain pursuant to an action for breach of statutory duty under section 104.[385]

The Disputing CPs' views in response to BT's submission

14.20 Virgin argues in its 16 June response to BT's 20 May submission that BT's arguments are based on semantics and take individual paragraphs of the Parties' dispute submissions and distort them to make its own legal argument.

14.21 Virgin notes BT's argument that Virgin's use of the phrase "*there is no cause of action before the civil courts*" in its dispute submission means that Virgin admits that it cannot demonstrate actual loss or damage as a result of the breach. Virgin states that it makes no such admission and clarifies its argument, stating there is no cause of action before the civil courts unless the consent of Ofcom is obtained. Virgin does not believe Ofcom would have granted consent, so in its view there were no alternative means for resolving the dispute.

14.22 Virgin also argues that it is clear that its claim is directed towards Ofcom directing BT to adjust any overpayment when the prices charged are compared with the prices that should have been charged. Virgin notes that although it does not use the word 'repay' it is clear that the word repay could be used to describe the act of requiring BT to make a payment of the difference between the charges actually paid and the charges that should have been paid.

14.23 Virgin considers that BT's argument that Ofcom should not order a payment by way of adjustment unless there has been proof of loss or economic harm has been dismissed by the CAT in the PPC Judgment.

Ofcom's views

14.24 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.

14.25 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*." The CAT further held that:

> "*Had BT carefully sought to apply Condition H3.1, 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*

[384] BT's 20 May submission, paragraphs 137 to 138.
[385] BT's 20 May submission, paragraph 144.

> *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*.[386]
>
> *"…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*".[387]

14.26 As set out in Section 9, we do not consider that BT has demonstrated to us that it carefully sought to apply Condition HH3.1 in its charges 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 PPC Final Determinations, which is to base the level of repayments on the difference between the level of the charge and DSAC.

14.27 Given Ofcom's conclusion in the PPC 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*."[388] The CAT described its approach as restitutionary.

14.28 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*." 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*".[389]

14.29 In the PPC Final Determinations[390] we also assessed what the impact of repaying the overcharged revenue to its external customers would be on BT's rate of return for PPCs over the period of overcharging to 30 September 2008. In the PPC Judgment, the CAT commented that it had some misgivings about this approach.[391] We have therefore not carried out a similar assessment of the impact of any repayments on BT's rate of return in these Disputes.

14.30 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.

[386] PPC Judgment paragraph 338(2).
[387] PPC Judgment paragraph 338(3).
[388] PPC Judgment, paragraph 338(2)
[389] PPC Judgment, paragraph 338(3)
[390] PPC Final Determinations, paragraph 9.30.
[391] PPC Judgment, paragraph 338(5).

Calculating the level of individual repayment

14.31 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 to each Disputing CP.

14.32 Sky and TTG consider that repayments should be assessed by reference to FAC. They set out proposed repayments calculated:

14.32.1 using DSAC as the maximum charge in every situation;

14.32.2 using FAC as the maximum charge in every situation; or

14.32.3 using FAC as the maximum charge when the actual charge was above DSAC.[392]

14.33 We explained in paragraphs 9.49 to 9.63 why the use of FAC as a cost benchmark for calculating the degree of overcharging was not appropriate. We therefore provisionally conclude that the appropriate method to calculate the level of repayment is relative to DSAC, not to FAC.

14.34 We propose to use the same approach to quantifying the level of repayment for each Disputing CP that we adopted in the PPC Final Determinations.[393] To calculate repayments to each Disputing CP for each year, we propose to use BT's 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.

14.35 On the basis of this proposed methodology, we set out in Table 14.2 below the total refunds for each of the Disputing CPs in each year (rounded to the nearest £1000). In Table 14.3 we show the total repayments split by Disputing CP, Ethernet service and year.

Table 14.2: Summary of repayments due to the Disputing CPs in £, split by year

Year	Sky	TTG	Virgin	Total
2006/07	[✂]	[✂]	[✂]	[✂]
2007/08	[✂]	[✂]	[✂]	[✂]
2008/09	[✂]	[✂]	[✂]	[✂]
2009/10	[✂]	[✂]	[✂]	[✂]
	[✂]	[✂]	[✂]	64,753,000

Source: Ofcom – based on data supplied by BT

392 See Annexes 3 and 4 to the Joint Dispute Submission.
393 PPC Final Determinations, paragraphs 8.70 *et seq*.

Table 14.3: Repayments due to the Disputing CPs in £, split by service

Disputed service	Sky	TTG	Virgin	Total
BES100 rental	[✂]	[✂]	[✂]	[✂]
BES1000 rental	[✂]	[✂]	[✂]	[✂]
BES100 connection	[✂]	[✂]	[✂]	[✂]
BES1000 connection	[✂]	[✂]	[✂]	[✂]
WES10 rental	[✂]	[✂]	[✂]	[✂]
WES100 rental	[✂]	[✂]	[✂]	[✂]
WES1000 rental	[✂]	[✂]	[✂]	[✂]
Main link rental	[✂]	[✂]	[✂]	[✂]
	[✂]	[✂]	[✂]	64,753,000

Source: Ofcom – based on data supplied by BT

Interest on repayments

14.36 From 2004 until 30 March 2009, BES and WES were provided under separate contracts; for the remainder of the Relevant Period, BES and WES were provided under a consolidated contract. The Disputing CPs have requested that an appropriate level of interest be paid on any repayment. However, clause 12.3 of each of the three relevant contracts excludes interest on any repayments due to either party as a result of recalculation or adjustment of a charge with retrospective effect under a direction (or other requirement) of Ofcom:

> *"12.3. If any charge is recalculated or adjusted with retrospective effect under an order, direction, determination or requirement of Ofcom, or any other regulatory authority or body of competent jurisdiction, the Purchaser Parties agree that interest will not be payable on any amount due to either party as a result of that recalculation or adjustment."*

14.37 Ofcom proposes to direct that interest should be paid on the repayments in accordance with the contractual provisions entered into by the Parties. This is consistent with our previous Determinations. In this case, the relevant contractual provisions provide that interest will not be payable.

Ofcom's statutory obligations and regulatory principles

14.38 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.

14.39 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.

14.40 Accepting the Disputes for resolution fits with Ofcom's regulatory principle to intervene where there is a specific regulatory duty to do so.

14.41 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.

14.42 Requiring BT to make repayments for the Relevant Period, as set out in Table 14.2, 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.

14.43 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, Ethernet services) for the purposes of securing efficiency and sustainable competition, for the benefit of consumers.

14.44 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.

14.45 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

14.46 Based on the analysis set out in **Sections 12 and 14**, Ofcom proposes to determine that :

14.46.1 BT has overcharged for the services which are the subject of these Disputes;

14.46.2 BT has overcharged the Disputing CPs a total of £64.8 million during the Relevant Period; and

14.46.3 BT should refund the Disputing CPs the amounts overpaid

(a) Sky: £[✂];

(b) TTG: £[✂]; and

(c) Virgin: £[✂].

Next steps

14.47 Stakeholders are invited to comment on Ofcom's proposed resolution of these Disputes by **5 pm on 5 April 2012.**

Annex 1

Responding to this draft determination

How to respond

A1.1 Ofcom invites written views and comments on the issues raised in this document, to be made **by 5 pm on 5 April 2012**.

A1.2 Ofcom strongly prefers to receive responses using the online web form at http://stakeholders.ofcom.org.uk/consultations/charges-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 Paul.Dean@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.

Paul Dean
4th Floor
Competition Group
Riverside House
2A Southwark Bridge Road
London SE1 9HA

Fax: 020 7783 4109

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 Paul Dean on 020 7981 3626.

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 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 TTG

Determination under sections 188 and 190 of the Communications Act 2003 (“2003 Act”) for resolving a dispute between TalkTalk Telecom Group plc (“TTG”) and British Telecommunications Plc (“BT”) concerning BT’s charges for wholesale Ethernet services.

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”394 (the “2004 LLMR Statement”) which found that BT held significant market power (“SMP”) in a number of markets, including the wholesale alternative interface symmetric broadband origination (“AISBO”) market at all bandwidths within the United Kingdom but not including the Hull Area;

[394] See: http://www.ofcom.org.uk/consult/condocs/llmr/statement/state_note.pdf.

(D) In the 2004 LLMR Statement, Ofcom imposed a series of SMP conditions on BT in the AISBO market under section 45 of the Act, including a basis of charges obligation which requires:

> "*HH3.1 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 HH1 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.*
>
> *HH3.2 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition.*";

(E) 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").[395] Ofcom concluded that two separate markets should now be defined for AISBO services: a low bandwidth AISBO market for services with bandwidths up to and including 1Gbit/s and a high bandwidth AISBO market for services with bandwidths above 1Gbit/s. Ofcom concluded that BT continued to have SMP in the market for low bandwidth AISBO services outside the Hull area but that no communications provider had SMP in the high bandwidth AISBO market.

(F) In the 2008 BCMR Statement, Ofcom imposed SMP conditions on BT in relation to the low bandwidth AISBO market (services with bandwidths up to and including 1Gbit/s), including a basis of charges obligation. Ofcom additionally concluded that BT should in principle be subject to a charge control in relation to low bandwidth AISBO services, the scope and form of which was considered in a separate consultation published alongside the BCMR Statement. The basis of charges obligation requires:

> "*HH3.1 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 HH1 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.*
>
> *HH3.2 For the avoidance of any doubt, where the charge offered, payable or proposed for Network Access covered by Condition HH1 is for a service which is subject to a charge control under Condition HH4, 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 HH3.1.*
>
> *HH3.2 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition.*";

[395] See http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr08/summary/bcmr08.pdf.

(G) On 27 July 2010, TTG and British Sky Broadcasting Ltd ("Sky") jointly referred a dispute with BT to Ofcom for dispute resolution requesting a determination that BT has overcharged them for certain wholesale Ethernet services, known as Backhaul Extension Services ("BES"), provided to them between 24 June 2004 and 31 July 2009 (which depends on whether or not BT's charges for those services were cost orientated during that time) and, if so, by how much they have been overcharged and should therefore be reimbursed;

(H) On 10 August 2010, Virgin Media Ltd ("Virgin") referred a similar dispute to Ofcom for dispute resolution requesting a determination that BT has overcharged Virgin for certain wholesale Ethernet services, known as BES and Wholesale Extension Services ("WES"), provided to them between 1 April 2006 and 31 March 2009 (which depends on whether or not BT's charges for those services were cost orientated during that time) and, if so, by how much they have been overcharged and should therefore be reimbursed;

(I) Having considered the submissions of all the parties to the disputes referred by TTG, Sky and Virgin, Ofcom set the scope of the issues in dispute to be resolved as follows-

> "*The scope of the disputes is to determine whether, during the Relevant Period:*
>
> *i. BT has overcharged the Parties for the BES and/or WES products concerned and, if so;*
> *ii. by how much the Parties were overcharged during the Relevant Period; and*
> *iii. whether and by how much BT should reimburse the Parties in relation to the overcharge.*"

The Relevant Period was defined as being from 24 June 2004 to 31 July 2009.

(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, etc.

1. BT has overcharged TTG for the provision of the services which BT calls BES100 rental, BES1000 rental, BES100 connection and BES1000 connection in the period between 24 June 2004 and 31 July 2009.

2. The level of that overcharge is determined at £[✂].

3. Ofcom gives a direction to BT to pay to TTG, by way of adjustment of an overpayment for BES100 rental, BES1000 rental, BES100 connection and BES1000 connection in the period 24 June 2004 to 31 July 2009, 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 TTG 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 contract for Backhaul Extension Services and the contract for Backhaul and Wholesale Extension Services that TTG 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) “Ofcom” means the Office of Communications;

e) “TTG” means TalkTalk Telecom Group plc, whose registered company number is 07105891, 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.

Neil Buckley
Director of Investigations

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

[Date]

Annex 4

Draft Determination to resolve the dispute between BT and Sky

Determination under sections 188 and 190 of the Communications Act 2003 ("2003 Act") for resolving a dispute between British Sky Broadcasting Limited ("Sky") and British Telecommunications Plc ("BT") concerning BT's charges for wholesale Ethernet services.

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"[396] (the "2004 LLMR Statement") which found that BT held significant market power ("SMP") in a number of markets, including the wholesale alternative interface symmetric broadband origination ("AISBO") market at all bandwidths within the United Kingdom but not including the Hull Area;

[396] See: http://www.ofcom.org.uk/consult/condocs/llmr/statement/state_note.pdf.

(D) In the 2004 LLMR Statement, Ofcom imposed a series of SMP conditions on BT in the AISBO market under section 45 of the Act, including a basis of charges obligation which requires:

> "*HH3.1 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 HH1 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.*
>
> *HH3.2 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition.*";

(E) 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").[397] Ofcom concluded that two separate markets should now be defined for AISBO services: a low bandwidth AISBO market for services with bandwidths up to and including 1Gbit/s and a high bandwidth AISBO market for services with bandwidths above 1Gbit/s. Ofcom concluded that BT continued to have SMP in the market for low bandwidth AISBO services outside the Hull area but that no communications provider had SMP in the high bandwidth AISBO market.

(F) In the 2008 BCMR Statement, Ofcom imposed SMP conditions on BT in relation to the low bandwidth AISBO market (services with bandwidths up to and including 1Gbit/s), including a basis of charges obligation. Ofcom additionally concluded that BT should in principle be subject to a charge control in relation to low bandwidth AISBO services, the scope and form of which was considered in a separate consultation published alongside the BCMR Statement. The basis of charges obligation requires:

> "*HH3.1 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 HH1 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.*
>
> *HH3.2 For the avoidance of any doubt, where the charge offered, payable or proposed for Network Access covered by Condition HH1 is for a service which is subject to a charge control under Condition HH4, 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 HH3.1.*
>
> *HH3.2 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition.*"

[397] See http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr08/summary/bcmr08.pdf.

(G) On 27 July 2010, TalkTalk Telecom Group plc ("TTG") and Sky jointly referred a dispute with BT to Ofcom for dispute resolution requesting a determination that BT has overcharged them for certain wholesale Ethernet services, known as Backhaul Extension Services ("BES"), provided to them between 24 June 2004 and 31 July 2009 (which depends on whether or not BT's charges for those services were cost orientated during that time) and, if so, by how much they have been overcharged and should therefore be reimbursed;

(H) On 10 August 2010, Virgin Media Ltd ("Virgin") referred a similar dispute to Ofcom for dispute resolution requesting a determination that BT has overcharged Virgin for certain wholesale Ethernet services, known as BES and Wholesale Extension Services ("WES"), provided to them between 1 April 2006 and 31 March 2009 (which depends on whether or not BT's charges for those services were cost orientated during that time) and, if so, by how much they have been overcharged and should therefore be reimbursed;

(I) Having considered the submissions of all the parties to the disputes referred by TTG, Sky and Virgin, Ofcom set the scope of the issues in dispute to be resolved as follows-

> "*The scope of the disputes is to determine whether, during the Relevant Period:*
>
> *i. BT has overcharged the Parties for the BES and/or WES products concerned and, if so;*
> *ii. by how much the Parties were overcharged during the Relevant Period; and*
> *iii. whether and by how much BT should reimburse the Parties in relation to the overcharge.*";

The Relevant Period was defined as being from 24 June 2004 to 31 July 2009.

(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, etc.

1. BT has overcharged Sky for the provision of the services which BT calls BES100 rental, BES1000 rental, BES100 connection and BES1000 connection in the period between 24 June 2004 and 31 July 2009.

2. The level of that overcharge is determined at £[✂].

3. Ofcom gives a direction to BT to pay to Sky, by way of adjustment of an overpayment for BES100 rental, BES1000 rental, BES100 connection and BES1000 connection in the period 24 June 2004 to 31 July 2009, 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 Sky 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 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 contract for Backhaul Extension Services and the contract for Backhaul and Wholesale Extension Services that Sky has entered into with BT;

c) “BT” means British Telecommunications plc, whose registered company number is 01800000, 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) “Ofcom” means the Office of Communications;

e) “Sky” means British Sky Broadcasting Limited whose registered company number is 02906991, 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.

Neil Buckley
Director of Investigations

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

[Date]

Annex 5

Draft Determination to resolve the dispute between BT and Virgin

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 wholesale Ethernet services.

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*"[398] (the "2004 LLMR Statement") which found that BT held significant market power ("SMP") in a number of markets, including the wholesale alternative interface symmetric broadband origination ("AISBO") market at all bandwidths within the United Kingdom but not including the Hull Area;

[398] See: http://www.ofcom.org.uk/consult/condocs/llmr/statement/state_note.pdf.

(D) In the 2004 LLMR Statement, Ofcom imposed a series of SMP conditions on BT in the AISBO market under section 45 of the Act, including a basis of charges obligation which requires:

> "*HH3.1 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 HH1 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.*
>
> *HH3.2 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition.*";

(E) 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").[399] Ofcom concluded that two separate markets should now be defined for AISBO services: a low bandwidth AISBO market for services with bandwidths up to and including 1Gbit/s and a high bandwidth AISBO market for services with bandwidths above 1Gbit/s. Ofcom concluded that BT continued to have SMP in the market for low bandwidth AISBO services outside the Hull area but that no communications provider had SMP in the high bandwidth AISBO market.

(F) In the 2008 BCMR Statement, Ofcom imposed SMP conditions on BT in relation to the low bandwidth AISBO market (services with bandwidths up to and including 1Gbit/s), including a basis of charges obligation. Ofcom additionally concluded that BT should in principle be subject to a charge control in relation to low bandwidth AISBO services, the scope and form of which was considered in a separate consultation published alongside the BCMR Statement. The basis of charges obligation requires:

> "*HH3.1 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 HH1 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.*
>
> *HH3.2 For the avoidance of any doubt, where the charge offered, payable or proposed for Network Access covered by Condition HH1 is for a service which is subject to a charge control under Condition HH4, 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 HH3.1.*
>
> *HH3.2 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition.*"

[399] See http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr08/summary/bcmr08.pdf.

(G) On 27 July 2010, TalkTalk Telecom Group plc ("TTG") and British Sky Broadcasting Ltd ("Sky") jointly referred a dispute with BT to Ofcom for dispute resolution requesting a determination that BT has overcharged them for certain wholesale Ethernet services, known as Backhaul Extension Services ("BES"), provided to them between 24 June 2004 and 31 July 2009 (which depends on whether or not BT's charges for those services were cost orientated during that time) and, if so, by how much they have been overcharged and should therefore be reimbursed;

(H) On 10 August 2010, Virgin referred a similar dispute to Ofcom for dispute resolution requesting a determination that BT has overcharged Virgin for certain wholesale Ethernet services, known as BES and Wholesale Extension Services ("WES"), provided to them between 1 April 2006 and 31 March 2009 (which depends on whether or not BT's charges for those services were cost orientated during that time) and, if so, by how much they have been overcharged and should therefore be reimbursed;

(I) Having considered the submissions of all the parties to the disputes referred by TTG, Sky and Virgin, Ofcom set the scope of the issues in dispute to be resolved as follows-

> "*The scope of the disputes is to determine whether, during the Relevant Period:*
>
> *i. BT has overcharged the Parties for the BES and/or WES products concerned and, if so;*
> *ii. by how much the Parties were overcharged during the Relevant Period; and*
> *iii. whether and by how much BT should reimburse the Parties in relation to the overcharge.*";

The Relevant Period was defined as being from 24 June 2004 to 31 July 2009.

(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, etc.

1. BT has overcharged Virgin for the provision of the services which BT calls BES100 rental, BES1000 rental, BES100 connection, WES10 rental, WES100 rental and WES1000 rental in the period between 1 April 2006 and 31 March 2009.

2. The level of that overcharge is determined at £[✂].

3. Ofcom gives a direction to BT to pay to Virgin, by way of adjustment of an overpayment for BES100 rental, BES1000 rental, BES100 connection, WES10 rental, WES100 rental and WES1000 rental in the period between 1 April 2006 and 31 March 2009, 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 Virgin 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 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 contract for Backhaul Extension Services, the contract for Wholesale Extension Services and the contract for Backhaul and Wholesale Extension Services that Virgin has entered into with BT;

c) “BT” means British Telecommunications plc, whose registered company number is 01800000, 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) “Ofcom” means the Office of Communications;

e) “Virgin” means Virgin Media Limited, whose registered company number is 02591237, 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.

Neil Buckley
Director of Investigations

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

[Date]

Annex 6

Relevant cost standards for Ofcom's analysis

A6.1 As set out at **paragraph 2.11**, the cost orientation obligations imposed on BT in the AISBO markets require BT to secure that "*each and every charge offered, payable or proposed for Network Access covered by Condition HH3.1 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).

A6.2 This obligation requires Ethernet 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.

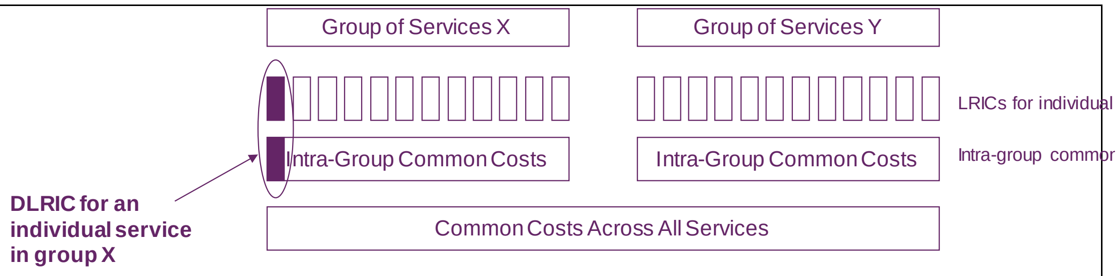
Incremental cost is the cost of producing a specified additional product, service or increment of output over a specified time period. In many cases, the relevant increment may be the entire output of a particular service or group of services. The incremental costs of a service are then those costs which 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.

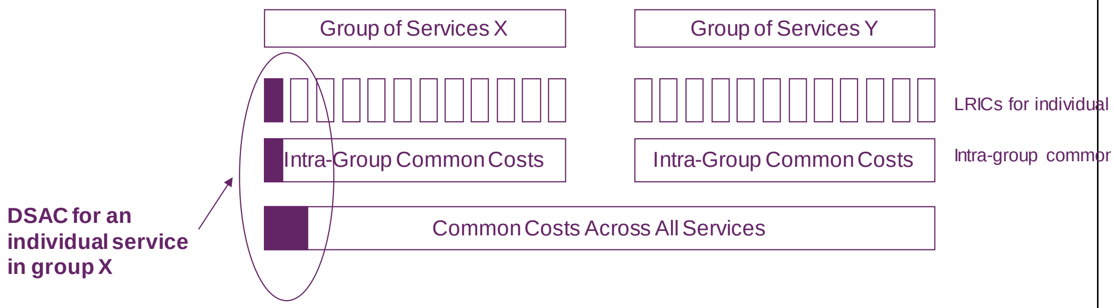
Common costs are those costs which arise from the provision of a group of services but which are not incremental to the provision of any individual service. Common costs may be identified in the following way: if the incremental costs of each service are removed from the total cost of providing all services, 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") is 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 (EPMU) 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 whilst maintaining the operating or financial capital of the business entity.

Weighted average cost of capital ("WACC"): a company's WACC measures the rate 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 7

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).

Backhaul Extension Services (BES) A wholesale Ethernet service which provides high speed, point-to-point data circuits. Each one provides a secure link from a customer's premises, to a Communications Provider's Digital Subscriber Line Access Multiplexer and the Communications Provider's site.

Common Costs See Annex 6.

Communications Provider (CP) A person who provides an Electronic Communications Network or provides an 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 6.

Customer Premises Equipment (CPE) Sometimes referred to as customer apparatus or consumer equipment, being equipment on consumers' premises which is not part of the public telecommunications network and which is directly or indirectly attached to it.

Distributed LRIC (DLRIC) See Annex 6.

Distributed SAC (DSAC) See Annex 6.

Equi-Proportionate Mark Up (EPMU) A method of allocating Fixed and Common Costs in proportion to the LRICs.

Ethernet Access Direct (EAD) A wholesale Ethernet product which offers permanently connected, point-to-point high speed data circuits that provide a secure and un-contended access service for Communications Providers. EAD is a next generation network compatible service designed to complement Openreach's Ethernet Backhaul Direct (EBD) and Bulk Transport Link (BTL) products already offered within the Connectivity Services portfolio.

Ethernet Backhaul Direct (EBD) A wholesale Ethernet product which offers permanently connected, point-to-point high speed data circuits that provide a secure and un-contended backhaul service for Communications Providers.

Electronic Communications Network (ECN) A transmission system for the conveyance, by the use of electrical, magnetic or electro-magnetic energy, of signals of any description.

Fixed and common costs (FCC) See Common costs.

Fully allocated cost (FAC) See Annex 6.

Gbit/s Gigabits per second. A measure of speed of transfer of digital information.

HCA (historical cost accounting) depreciation The measure of the cost in terms of its original purchase price of the economic benefits of tangible fixed assets that have been consumed during a period. Consumption includes the wearing out, using up or other reduction in the useful economic life of a tangible fixed asset whether arising from use, effluxion of time or obsolescence through either changes in technology or demand for the goods and services produced by the asset.

kbit/s kilobits per second. A measure of speed of transfer of digital information.

LAN Extension Service (LES) A communications service that enables the connection of two Local Area Networks together.

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 6.

LLU (Local Loop Unbundling) The process where the incumbent operators make their local network (the copper cables that run from customers' premises to the exchange) available to other companies. CPs are able to upgrade individual lines using DSL technology to offer services such as always on high speed Internet access, direct to the customer.

Mbit/s Megabits per second. A measure of speed of transfer of digital information.

Next Generation Network (NGN) A Network utilising new technology such as Ethernet and IP to provide an array of services to end-users.

Openreach Price List (OPL) The price list published by BT for services provided by Openreach.

Partial Private Circuit (PPC) A generic term used to describe a category of private circuits that terminate at a point of connection 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.

Points of Connection (POC) A point where one communications provider interconnects with another communications provider for the purposes of connecting their networks to 3rd party customers in order to provide services to those end customers.

Regulated Asset Value (RAV) The RAV relates to the valuation of Openreach's access assets deployed before August 1997 on a historic costs accounting (HCA) basis, and assets deployed since August 1997 on a current costs accounting (CCA) replacement cost basis.

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 6.

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 6.

Wholesale End-to-End Service (WEES) A type of Ethernet product which allows a CP to provide its customers with a dedicated fibre optic high bandwidth data circuit between two different sites.

Wholesale Extension Service (WES) A wholesale Ethernet product that can be used to link a customer premises to a node in a communications network.