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IN THE COMPETITION APPEAL TRIBUNAL

Case Nos. 1205-1207/3/3/13

Victoria House, Bloomsbury Place, London WC1A 2EB

6th November 2013

Before:

THE HON. MR. JUSTICE ROTH

(The President)

STEPHEN HARRISON PROFESSOR COLIN MAYER

(Sitting as a Tribunal in England and Wales)

BETWEEN:

BRITISH TELECOMMUNICATIONS PLC

Appellant

- and -

OFFICE OF COMMUNICATIONS

Respondent

AND BETWEEN:

(1) CABLE & WIRELESS WORLDWIDE PLC

(2) VIRGIN MEDIA LIMITED (3) VERIZON UK LIMITED

Appellants

- and -

OFFICE OF COMMUNICATIONS

Respondent

AND BETWEEN:

(1) BRITISH SKY BROADCASTING LIMITED (2) TALKTALK TELECOMMUNICATIONS GROUP PLC

Appellants

- and -

OFFICE OF COMMUNICATIONS

Respondent

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HEARING DAY SEVEN

APPEARANCES

- Mr. Rhodri Thompson QC, Mr. Graham Read QC, Ms. Sarah Lee, Mr. Ben Lynch and Ms. Georgina Hirsch (instructed by BT Legal) appeared on behalf of the Appellant, British Telecommunications PLC.
- Mr. Meredith Pickford and Mr. Julian Gregory (instructed by Herbert Smith Freehills LLP) appeared on behalf of the Appellants (1) British Sky Broadcasting Limited and (2) TalkTalk Telecommunications Group PLC.
- Ms. Dinah Rose QC and Mr. Tristan Jones (instructed by Olswang LLP) appeared on behalf of the Appellants (1) Cable & Wireless Worldwide plc, (2) Virgin Media Limited and (3) Verizon UK Limited.
- Mr. Pushpinder Saini QC, Ms. Kate Gallafent, Mr. Hanif Mussa and Ms. Emily Neill (instructed by the Legal Department, Office of Communications) appeared on behalf of the Respondent.

1 MR. GREG HARMAN (continued) 2 Cross-examined by Ms ROSE (continued) 3 THE PRESIDENT: Mr. Harman, just before Ms Rose resumes her questioning may I just clarify 4 that I have understood a bit of the evidence you gave yesterday. You remember being asked 5 about Mr. Dolling's witness statement and it was put to you? 6 Yes. Α 7 O I think perhaps there was a slight difference of emphasis in your approach. I am not sure 8 myself that it really matters, but that you were saying that where you had got a large piece 9 of capital expenditure like electronics then there would be two different approaches or 10 mindsets as to whether you should allocate them to connections or to rentals? 11 A 12 Q Each of those approaches can be seen as reasonable. 13 A Yes. 14 O So BT is not to be criticised, in your view, for having initially allocated electronics to 15 connections? 16 A Yes. 17 And equally, then for perhaps the evolving view, whatever the reason, later deciding that it Q 18 should be allocated to rentals? 19 A Yes, as I explained, I think that's a problem of the regulation of utilities generally where 20 there are fixed assets that have to be recovered. Regulators from time to time have seen 21 benefits of allowing a regulated company to front load those expenditures. It does that by 22 allowing them to receive a high depreciation charge in the early years. And on other times 23 they have decided that should be recovered over a longer period of time. I guess what I was 24 saying is that a judgment has to be made there, and if there was no lens to look through that, 2.5 then I think it is difficult for somebody to make a decision one way or the other way. If BT 26 had a philosophy that said something along the lines of, for example, all other things being 27 good when we look at these types of problem, it would be good to recover as much as we 28 can up front because that de-risks our investments. If a person was going through a cost 29 allocation exercise with that mantra in mind, then it may be sensible for him to think that 30 that is the best way of allocating a cost. Simultaneously, if that philosophy should change – 31 and I don't know what it is; I would have to be guessing – that it is perhaps more reasonable 32 now to align costs with the actual consumption of that asset, then you can see that there 33 would be a change from allocating it to up front to over time, to better reflect that the 34 electronics equipment is consumed just like fibre and duct are consumed, over a period of

- time. I would have to guess at what those philosophies were, but that is why I think that it
- 2 is not cut and dried, as you say.
- 3 Q Yes. So BT's approach, in your view, was a reasonable one?
- 4 A Yes.
- 5 Q Thank you.
- 6 MS ROSE: Mr. Harman, we looked yesterday at the 2007 pricing paper. Do you recall that?
- 7 A I do.
- 8 Q When we looked at that document you said that you had thought there was some conflict
- 9 between the costing and pricing teams in BT over the allocation of the electronics
- 10 component?
- 11 A That's correct. That's my understanding.
- 12 Q And that you were not sure if this was in Mr. Jones' witness statement. Do you remember
- 13 that?
- 14 A I stated that, yes.
- 15 Q As a matter of fact, there is no reference to any such conflict within any of the evidence of
- Mr. Jones. Will you accept that from me?
- 17 A I will. I mean, I point this out in I think it is my second report, so I hope in my second
- report there is a reference to where I've taken that from.
- 19 Q Can you show us where that is?
- 20 A I hope so. I might need a couple of moments. Could I have my report?
- 21 Q It is core bundle D tab 7.
- 22 A I just have to think where it is. To be honest, I'm having a little bit of trouble just
- remembering exactly where that is in my report. I know that I do state it in my report.
- 24 Perhaps that's something that could be given either in redirect, or in the recess I can just
- skim through my report just to make sure that I find it, if that would help.
- Q Thank you.
- 27 A But, you know, almost certainly, that aside, I have had that conversation with
- 28 representatives from BT; I've also had discussions with Mr. Coulson who has also indicated
- 29 that that was his understanding and I assume that when he gives evidence that could also be
- 30 put to him.
- 31 Q We agreed yesterday, did we not, that you are not a witness of fact?
- 32 A That's correct.
- None of the witnesses of fact that BT have put forward have given that evidence to this
- 34 Tribunal. Do you accept that?

1	A	I'd have to go back and check through all the witness statements. It's not a statement that I
2		would have just derived out of thin air.
3	Q	I want to return to the question of economic markets. We are concerned here with the
4		proper application and enforcement of Condition HH3.1, are we not?
5	A	Yes.
6	Q	That condition was imposed on BT as a result of the 2004 Leased Lines Market Review,
7		was it not?
8	A	That's my understanding.
9	Q	The relevant economic markets were defined by Ofcom in that market review, were they
10		not?
11	A	As I understand it.
12	Q	Ofcom defined wholesale AISBO services as a single economic market, did it not?
13	A	It did.
14	Q	We can see that. If you want to look at it, it is in BT volume 3 at tab 3.
15	THE	PRESIDENT: Do we need to look at it if Mr. Harman has agreed it?
16	MS I	ROSE: It may not be necessary.
17	A	That's my understanding, yes.
18	Q	Those wholesale services include connection, rental and main link, do they not?
19	A	You are now taking me to a point of law. As I understand it they define services, and as I
20		understand BT's legal case, is it that they define a BES 10, for example, as a service. I don't
21		think BT defines a connection and a rental as being a service. So I wouldn't be able to
22		provide any information on that because that's a legal point and I've not been asked to
23		consider that.
24	Q	Look at how BT relies on that market definition. It is in BT's Notice of Appeal core bundle
25		A tab 1. If you go to para.57:
26		"The AISBO market conditions with which this appeal is concerned were
27		originally set in accordance with the notifications at paragraphs 1(c), 2(a) and 3 of
28		the above notification, at pages 432 and 433 of the LLMR 2004"
29		And that refers to the analysis of the market provision of alternative interface symmetric
30		broadband origination. Then they talk about the scope of the AISBO market conditions,
31		yes?
32	A	Yes, I can see that.
33	Q	Then if you go to para.70:
34		"BT submits that imposing a cost orientation condition on each of the two
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1 categories of Ethernet services described at section 6 of the Decision, BES and 2 WES services, would be in accordance with the requirements of the legislation. 3 BES and WES are distinct AISBO services with specific demand characteristics in 4 respect of which it makes sense to consider whether BT might have engaged in 5 excessive pricing and/or margin squeeze." 6 By contrast at para. 71: 7 "(1) the imposition of individual cost orientation obligations for connections, 8 rentals and main link viewed individually, none of which is separately 9 identified as a relevant market or service in the LLMR 2004 or the BCMR 10 2008 and in relation to which no determination of SMP has been made ... 11 would not be a permissible of discretion." 12 Do you see that? 13 I do. Α 14 O So BT are relying on the fact that there is a single defined economic market which is 15 wholesale AISBO services and that none of connection, rental or main link is defined as a 16 separate economic market, do you see that? 17 Α I understand that's part of their arguments, yes. 18 Q Yesterday in your evidence you relied on Ofcom's approach in the 2009 Leased Lines 19 Charter Control, did you not? 20 Α Well, to define the word "rely" I have gone through a process of understanding the 21 economic and financial case for aggregation and, in doing that, I observe that in that review 22 Ofcom aggregated to determine initial starting charges. From that I gained some comfort 23 that my analysis is correct because Ofcom went through a similar process and decided in 24 that context it was feasible and reasonable to aggregate. 2.5 Q Could you please be shown a copy of the transcript of yesterday? It is tab 6. If you go to 26 p.87? 27 Yes. Α 28 Just before that you will see that I put it to you that your prime argument was the point Q 29 about the uncertainty in cost allocation? 30 Yes. Α 31 And you said: "It is not the prime point that I am pushing." I said: "Is it your principal Q 32 argument?" and you said: 33 "I have taken a balanced view. One significant argument, and I call it my primary 34 argument in the second one, is that the allocation of costs between rentals and

1 connections is subjective, which makes any discussion about distortions irrelevant 2 - well, not irrelevant but much less meaningful. The second point which I think is 3 fundamentally important is the fact that CPs whole life cost. The third fact that I 4 rely on, and I think is important, is that Ofcom had the opportunity to consider 5 these factors in the LLCC 2009 and then again later in the ISDN 30 price controls, where using very similar arguments to the ones that I am advancing in terms of 6 7 same economic markets, things are purchased together, difficult to understand the 8 right balance, decided that it was appropriate to make a starting charge based on an 9 aggregation of rentals and connections." 10 That was the third of your three principal arguments? 11 That third one mops up a whole load of subsidiary points that in my analysis I have A 12 considered, same economic markets consume together, and I am saying that the LLCC 13 confirmed my analysis to a degree. 14 You told us your understanding of the market definition in the LLCC yesterday, if we go to O 15 p.75 of the transcript. I put it to you (line 5) that Ofcom ----16 MR. THOMPSON: I am sorry, I do need to protect the witness slightly here, that was not correct. 17 It just said that they were both in the same market, it did not say that the market was defined 18 19 MS. ROSE: Sir, that is not correct and we will see exactly what he said in a moment. 20 THE PRESIDENT: What are you querying, Mr. Thompson? MR. THOMPSON: Well, partly we seem to be going back over the main link issue which, I 21 22 think, Mr. Harman made his position very clear about at the start, and partly I just want to 23 make sure that it is not put on the wrong basis, about market definition which I do not think 24 was really the issue at this point in the discussion yesterday. 2.5 MS. ROSE: Sir, that is not correct. 26 THE PRESIDENT: Well, let us just look at the transcript, which I think Ms. Rose is just putting 27 what the question was, and we can see that at line 5. 28 MS. ROSE: Yes. (To the witness): The context of this is that I was putting it to you yesterday 29 that one of your factors was saying that connections and rentals should be aggregated was 30 that you said they were in the same economic market. The point I was making to you was that you had not considered main link and main link was also in the same economic market. 31 32 Yes. A

And if we look at the way you answered that. This is at the top of p.75, I said:

"If we go back to 2004, which is when Ofcom conducted it Leased Lines market

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1 review and established the cost orientation provision for AISBO services, and 2 defined the market, that market definition included main link as well as 3 connections and rentals, did it not? 4 That is what I was putting? 5 Α Yes. 6 O And you replied: 7 "I would have to refamiliarise myself if that's what it said. I don't know. The point 8 that I'm picking up here very clearly is that in the LLCC 2009 it stated quite clearly 9 that rentals and connections were in the same market, and it had used that to 10 aggregate. I would have found it difficult to follow, because they did not 11 aggregate main link in that price control, so if they had said these are all in the 12 same economic market; they are all consumed together, they would have also made 13 an adjustment for main link, but I don't think they did. Yes. 14 A 15 So that was your evidence yesterday? Q 16 A Yes. 17 Q And does that remain your understanding of Ofcom's approach in 2009? 18 Α If I can just go to my first report I will just quote from where I am taking this. 19 Q So if we go to p.25 and from paras. 3.9 and 3.10, the point I was making yesterday was that 20 when Ofcom aggregated it was talking only about rentals and connections, it did not talk 21 about main link in this definition, and we can see in the quote at 3.9 it was acknowledging 22 that connections and rentals are only useful together and there is an initial period in which 23 they are purchased together. Then in 3.10 they go on to say that these are charging elements 24 that fall into the same economic market. So given that I have been instructed to look at 2.5 rentals and connections, when I looked at the LLCC my reference point is what they were 26 considering about rentals and connections, and this is what they say about rentals and 27 connections. They say they fall into the same economic market. That point alone is not 28 sufficient to aggregate but it falls within the matrix of factors that need to be considered, 29 and that was one of the factors that Ofcom itself considered. 30 Let us have a look at the LLCC, it is at BT7. It is tab 12. If you go to the beginning of this Q 31 document, p.1, you will see the executive summary, and at para. 1.1 it says: 32 "This Statement sets out our conclusions on the charge controls for wholesale 33 traditional and alternative interface leased lines services supplied by BT in markets

which it was found to have Significant Market Power ("SMP") in the Business

1		Connectivity Market Review ("BCMR") Statement."
2		So the market definitions are not included in the LLCC are they?
3	A	I suppose not, no.
4	Q	The market definitions are derived from BCMR statement in 2008, correct?
5	A	I think so, yes.
6	Q	So let us have a look at the BCMR statement. You will need to keep this volume with yo
7		Can you also now take BT 5, tab 4, you see there the BCMR statement?
8	A	Yes.
9	Q	And if you go to p.88, you see the conclusion of para.5.175:
10		"In light of the above discussion, we concluded that the following wholesale
11		product market definitions are appropriate."
12		And, do you see: "Alternative interface symmetric broadband origination" and then that it
13		split as low up to 1Gbit/s and then high above 1Gbit/s?
14	A	Yes, I see that.
15	Q	So the market remains AISBO services but split by bandwidth?
16	A	I see that.
17	Q	That includes connections, rentals and main link, does it not? They all fall within that
18		market definition?
19	A	I suppose they must but I think, as I point out in my report there is a difference between
20		services which are potentially substituted to each other and rentals and connections which
21		are complements to each other, and hence that is why I believe in the LLCC 2009 what
22		Ofcom is focusing on is that these two things are complements, they are consumed togeth
23	Q	It is right that in the main text of the LLCC we shall see in a minute that when it talks about
24		rentals it is using that as a shorthand which includes main link, were you aware of that?
25	A	When you go to the actual charge adjustment that they use, as I understand it, it is a
26		connections and a rental. Their assumption is one connection and three years of rental, as
27		understand that adjustment.
28	Q	Let us take a look at exactly what it says. Go back to BT 7, tab 12, and if you go to p.3 h
29		is a summary of the 2009 Leased Lines Charge Controls?
30	A	Okay.
31	Q	What you see is "AI" - that is the same as AISBO, is it not?
32	A	Yes.
33	Q	You see that talk about: "Wholesale low bandwidth AISBO – connection and rental", you
34	_	see that?

1	A	Yes.
2	Q	And we see the same language used in this statement, but, of course, what we need to look
3		at is the text of the actual charge control that Ofcom imposed under this statement?
4	A	Okay.
5	Q	That is not in the bundle, it was an annex to this statement, and can I just ask for an extract
6		to be handed up? (Same handed) What you see here is an extract of the annexes to the
7		Leased Line Charge Control statements, yes?
8	A	Okay.
9	Q	What you have here is Schedule 4 - yes?
10	A	Yes.
11	Q	On that it says: "AISBO up to and including 1Gbit/s"?
12	A	Okay.
13	Q	And this is the new SMP Services condition, HH4 - yes?
14	A	Yes.
15	Q	
16		"Condition imposed on BT under the 2003 Act as a result of the analysis of the
17		market for the provision of AISBO origination with a band of capacity up to and
18		including 1Gbit/s within the UK but not including the whole area. So, again there,
19		we see the market definition - yes?
20	A	Yes.
21	Q	"The following new SMP Condition shall be set by inserting it after Condition HH3". HH3
22		remains live, does it not?
23	A	Yes. I believe so, yes.
24	Q	So the cost orientation condition is imposed as well as this charge control, is it not?
25	A	Correct.
26	Q	Then, when we look at the charge control itself, you see the heading: "Controls of Main
27		Baskets"?
28	A	Yes.
29	Q	What that tells us is that the Dominant Provider shall take, without prejudice to HH3:
30		" shall take all reasonable steps to secure at the end of relevant year the
31		percentage change in the aggregate of charges for all the products and services in
32		the AI basket is not more than the controlling percentage."
33		Yes?
34	A	Yes.
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- 1 Q If you then move on in this bundle to p.179, you see the products and services that are
- 2 subject to this charge control yes?
- 3 A Yes.
- 4 Q You see Part 1A is connection services?
- 5 A Yes.
- 6 Q And that is talking about different bandwidths and also main link do you see at the
- 7 bottom?
- 8 A Yes.
- 9 Q Then if you go over the page, 181, Part 2A, "Rental and maintenance services in respect of
- the provision of wholesale extension services of WES in each of the product or service
- descriptions", and again we see all the different bandwidths?
- 12 A Yes.
- 13 Q Then at the bottom "main link". That is just one kind of rental charge, is it not?
- 14 A I don't know how you would characterise main link, but there is a distinction from the
- rentals we are talking about.
- 16 Q There is indeed, but that is how it is categorised here?
- 17 | A Yes.
- 18 Q Then we see the thing at 2B for BES main link. It is one of the rental charges identified
- 19 here?
- 20 A Yes.
- 21 Q Your argument that one of the factors supporting your case that it is appropriate to
- aggregate the costs of provision of connection and rental, because that is what Ofcom did in
- 23 this statement ----
- 24 A Yes.
- 25 | Q -- ought to apply to main link, just as it does to rental connection, should it not?
- 26 A Well, I'm going to say a couple of things. I will answer that question at the end of this.
- 27 Firstly, I don't take from this that when they made the starting control to BES 1000 that they
- included main link. That is not clear to me at all, because it makes the specific assumption,
- and I can go to my report and just quote from it, that there is one connection and three
- rentals. If you were going to include main link within that, you would have had to have
- made an assumption about how much main link, because I understand that that is more
- variable charge. So it is unclear to me that that is the case. Certainly when I advanced this
- argument Ofcom did not respond on it. I assumed that they would have responded on it if it
- was true that main link was in the calculation. I don't think that the documents that you

1		have shown me here shows me mechanically or arithmetically that that was the adjustment
2		that was made included main link.
3		To come to your question, it may or it may not suggest that main link should also be
4		aggregated. It's certainly suggesting that rentals and connections should be aggregated, and
5		I think that still supports my position.
6		There is a subsequent question as to whether main link should be included in that, and I
7		haven't addressed that part.
8	Q	So your first point is that you do not know whether main link was included. Have you
9		looked at the calculations?
10	A	I believe that my team, to the extent they had visibility, would have looked at them, yes.
11	Q	Your team looked at them?
12	A	Yes.
13	Q	But you did not?
14	A	It's not possible, as an expert, to look at every single calculation.
15	Q	You say if they included main link they would have had to make an assumption about the
16		average length of main link?
17	A	Yes.
18	Q	As a matter of fact they did that. Were you aware of that?
19	A	I'm just going to go to my paragraph where it states what they did.
20	Q	Where are you looking?
21	A	I'm just looking in my first report. I'm just trying to find it. In 3.60, the quote there says:
22		"we established the appropriate level of the starting charge for BES 1000 rental by
23		comparing the aggregate connection and rental prices over the contract life of an
24		AISBO circuit"
25		They are not talking there about different rentals, they are talking about a specific rental.
26		They would have had to have said a "main link" rental along the lines that you were just
27		arguing. So they are talking about a specific rental with respect to connections and rentals.
28		It doesn't mention main link.
29	Q	That is what you assume from that?
30	A	That's what I assume from that.
31	Q	Without looking at the underlying calculation?
32	A	I believe that my team did.
33	Q	So if, in fact, what the underlying calculation shows is that when doing that Ofcom did
34		assume an average main link length and took that into account, you would agree you were

1 mistaken? 2 Α That would obviously follow, but I don't think that affects my argument that rentals and 3 connections still can be aggregated. Your suggestion there would be that main link should 4 also be included, and that may or may not be the case, but I've not looked at main link. 5 Q You see the problem with your position, Mr. Harman, is this: that the whole of argument is 6 constructed on the thesis that aggregating connection and rental does not have adverse economic consequences and that therefore it is an appropriate economic way of looking at 7 8 the cost orientation. If, in fact, when you include main link in that aggregation you get 9 serious competitive distortions, that would undermine the whole basis of your report, would 10 it not? 11 No, I don't think that it does. I think that you can look at rentals and connections separately, A 12 and I would go on further to say that the ISDN review, which goes after this date again 13 looked at rentals and connections with no mention of main link, to the extent that main link 14 was relevant in that review. 15 Let us just stick with the 2009 LLCC for the time being. We have established, and I think Q 16 you would not disagree with this, that when Ofcom talks about rental it is including main 17 link? 18 Α I'm not sure that I can agree with that. I do not know. From the quote that I have just 19 shown you in 3.60 it says "rental". It does not say "rental main link", it says "rental". 20 Q Yes, but when we were looking at p.3, when it talked about the basket it just said 21 "connection and rental", did it not? 22 Α I understand that it made a specific adjustment to a rental charge, not a group of rental 23 charges that included main link. No, that wasn't my question. When you looked at p.3, at the table on p.3 ----24 O 2.5 THE PRESIDENT: Is it on BT7, tab 12? 26 MS. ROSE: BT7. 27 THE PRESIDENT: I think what Mr. Harman is saying is that he understood that their adjustment 28 was just to rental, and not including main link. That was his understanding, and he is not in 29 a position to say whether, in fact, as you are putting, "No, it includes some assumption 30 about main link". 31 MS. ROSE: We were just looking at the actual Leased Lines Charge Control conditions, and we 32 looked at HH4.1, the control of the main baskets. If you come back to that document and 33 go to p.175, there are separate conditions for controls of sub-baskets. Do you see that? 34 A I see that.

1	Q	For example, at HH4.8, in the case of the AI sub-basket:
2		"The Dominant Provider shall also and in any event take all reasonable steps to
3		secure that at the end of each relevant year the percentage change in each of the
4		charges for each and every product and/or service falling within the AI sub-basket
5		is not more than RPI increased by 5 percentage points."
6	A	Yes, I see that.
7	Q	That is a control that is being placed on the products that we were looking at under LXA at
8		p.179?
9	A	Correct.
10	Q	It is a control on each charge for each and every product within that basket - yes? Do you
11		see that?
12	A	Let me just re-read that.
13	Q	"Percentage change in each of the charges for each and every product or service
14		falling within the AI sub-basket."
15		Do you see that?
16	A	Yes, that's what it says.
17	Q	So that is talking about a separate control imposed on each of the services that we have
18		listed starting at p.179, including connection at each bandwidth, rental at each bandwidth
19		and main link at each bandwidth?
20	A	Yes.
21	Q	A separate sub-cap?
22	A	That's correct.
23	Q	That stance by Ofcom is not consistent, is it, with Ofcom taking the position that the
24		balance of charges between those separate charges in the basket did not have economic
25		meaning?
26	A	I don't understand the question.
27	Q	If Ofcom thought it did not matter what was the relevant pricing of the individual charges
28		within the basket, why would it have imposed this sub-cap?
29	A	Well, I think that - my understanding as I read through Ofcom's logic is that initially when
30		these products were being controlled by the cost orientation condition there was a focus on
31		dynamic efficiency, which allowed them to price in line with the cost orientation standard.
32		That position changed during the LLCC 2009 where they thought that the balance changed
33		from dynamic efficiency to one of allocative and productive efficiency. Therefore, what
34		this application is is an application of a price control to ensure greater alignment with
	•	

- allocative and productive efficiency. However, what remains is, in providing that they had a look at the opening charges and they made an adjustment to charges that they thought were likely to distort competition. They did that by aggregating rentals and connections and comparing that to DSAC as a first order test of cost orientation to ensure that those prices would also be aligned with a cost orientation standard, thereafter falling by 5 per cent to obviously try to promote greater allocative and productive efficiency, more along the lines of the productive efficiency in the initial years.
- 8 Q That does not answer the question: why did Ofcom put a separate cap on each of the charges in the basket including separately to connections and rental?
- A Because it wanted to incentivise all of those to move from potentially DSAC to a different cost standard so that they became more allocatively efficient over time, having already made an adjustment to something that would have been above DSAC, which they would have thought most obviously would distort competition.
- 14 Q The real reason Ofcom did this was that Ofcom was concerned not only with the overall
 15 level of the charges in this basket, but also in their relationship to each other is that not
 16 right?
- A If they were about the relationship with each other then I would have probably expected to see differential price controls on each of them moving them at different rates as opposed to all the same, because they are all going to stay the same. The differential doesn't change.
- Q Indeed, and that is what Ofcom is seeking to achieve, that there is not a rapid rebalancing of those charges is that not right?
- 22 A A rapid rebalancing to what?

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- 23 Q Their balance as against each other.
- 24 A That's preventing no rebalancing. If they all move at 5 per cent they do not rebalance at all.
- 25 | Q Indeed, and that is what Ofcom is seeking to achieve?
- 26 A That may be the case. I'm not sure if ----
- Q Ofcom's concern is that if the balance between those individual charges changes that is going to have economic effects which could be adverse?
- Well, that might be the case after they have made an adjustment to a starting charge that said, "This starting charge is above the aggregate DSAC", and we think about the distortion in those terms, and thereafter it decreases by 5 per cent. So I'm not sure that I see the relevance of this.
- 33 Q The relevance surely is that Ofcom is very clearly signalling here that it thinks it matters, 34 not only what is the overall cost of the circuit but also what is the relevant cost of

- 1 connection and rental within that circuit?
- 2 A Yes, and they did that by looking at an aggregate of rental and connections. I mean, that is how they did it.
- 4 Q At the risk of repeating it, they did not just do it that way, did they?
- But what they did not do, which I think would support your argument if you thought that
 what they did was relevant here, is that they would have looked at connections separately;
 they would have looked at rentals separately. If they thought that each of those charges had
 economic meaning alone they would have made a starting charge control to each of those
 individually, not in aggregation. That to me says that they did not think that connections
 and rentals, when they made that starting adjustment, were economically meaningful by
 themselves. They thought they were economically meaningful together.
- 12 Q Let us have a look at what Ofcom actually said it was doing. If we go back to A7 Tab 12.
- 13 THE PRESIDENT: Do you have A7 there?
- 14 A I think I do, yes.
- MS. ROSE: If you go to p.142, do you see the heading "Our response"? At 5.17 Ofcom explains the advantages associated with having a single AI basket. Yes?
- 17 A Yes.

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18 Q Then at 5.18 it goes on:

"However, in order to ensure that Openreach does not use its pricing freedom in a discriminatory manner we are implementing a number of safe-guard caps which do not impact the value of X for the AI Basket.

We are implementing sub-caps which will cap price increases on each charge in the AI basket to RPI +5% in any given control year. Openreach argued we proposed too many overlapping controls which would unduly limit its pricing freedom. In light of those responses, we have reconsidered our proposals for sub-caps on the sub-baskets of rentals and connections".

Pausing there, of course those sub-baskets also include main link, though it is not separately mentioned, is it?

- 29 A Strange, I would say.
- 30 Q It is throughout the statement they do not mention main link.
- 31 A I know.
- 32 Q It is only referred to in the annex.
- 33 A It is very strange.
- 34 Q It is not that strange. They just regard main link as a form of rental.

- 1 A Is there a definition of "rental"?
- 2 Q Yes, the list of products is the definition of "rental services".
- 3 A Okay.

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4 Q That we just looked at.

"However, other respondents continue to be concerned about the risk of rapid rebalancing of charges (offsetting increases and reductions) within the main AI Basket. Having considered these two conflicting views, we are no longer proposing RPI -0% ... instead we have concluded that we impose a cap of RPI +5% on each individual charge. This will give Openreach increased flexibility to make some changes in the balance of charges (up to a maximum RPI +5% in each year) but this is then balanced by the application of a sub-cap for each charge rather than to a basket, thereby preventing very large changes in individual charges. It is our view that this is, on balance, a more appropriate way forward which takes all stakeholder concerns into account".

- 15 A Yes.
- 16 Q So Ofcom was concerned about the effects on competitors of the change in the balance 17 between connection and rental charges, was it not?
 - A It was but it does so in two steps. It makes a starting charge adjustment first and it was not concerned about the balance between rentals and connections at that stage. It aggregated connections and rentals to come up with a single adjustment to rentals, and thereafter it applies this sub-cap. So my position is, is that Ofcom was concerned about things at first in aggregate terms and, having made the adjustment down to something to a level that it thought was no long distortive, it applies the second part of the control. That is all that I am saying, is that when we come back to look at cost orientation before this is applied, it is relevant to combine the two.
 - Q You rely, as I think you have said several times today, on the fact that when setting the starting charges in the LLCC Ofcom aggregated the costs of connection and rental.
- 28 A That is what they say they do.
- Q We can debate whether that included main link, but the bottom line is that you do not know.
 When Ofcom did that exercise it did so expressly on the basis that it was without prejudice to the proper approach to cost orientation, did it not?
 - A It says that but it says, "This is our provisional view on cost orientation", point one. It then talks about making an adjustment if it thinks it has a material distortion and it does that with reference to DSAC. From what I understand, it says, "This is our preliminary view".

"Preliminary view means that we should aggregate". It is interesting that when you get on 1 2 to the ISDN it says the same thing, though actually the initial determinations on this dispute 3 have already come out, so actually in this dispute they are saying, "We are going to take a 4 connections and rentals only approach", but in the ISDN they are still applying this 5 aggregated approach. That does not make much sense to me. 6 Let us look at what Ofcom says in the LLCC. The paragraph you rely on is para.3.235 on Q 7 p.65. 8 Sorry, which paragraph again? Α 9 Q 3.235. 10 Α Yes. That is the paragraph that you have quoted in your report. 11 Q 12 Α For the economic justification? 13 Yes, that is right. Q 14 That is right. A 15 If you go over the page, to 66, you see the heading: "Issues regarding cost orientation are Q 16 not within the scope of the LLCC". Yes? 17 A Yes. 18 Q "For the leased lines charge controls we have focused on those services where 19 stakeholders have raised specific concerns and where we can see a clear case for 20 starting charge adjustments rather than a glide path. However, the onus rests with BT 21 to ensure that each of its individual charges is cost orientated". 22 A Yes. 23 Q "In formulating the starting charge adjustments for AI services, we have taken an 24 initial view of how BT would be required to comply with its cost orientation 2.5 requirements. This is not a definitive position in relation to BT's compliance with its 26 cost orientation obligation but it does reflect our interpretation of the requirement 27 based on the information currently available". 28 Α Yes. 29 So it is made very clear that what they are saying is not their final position, is it not? Q 30 Α But I find this -- you know, I am not going to interpret the facts of the law. I find it slightly 31 odd that you come up with a standard which is DSAC, which is the standard that is 32 subsequently used to determine cost orientation. Your provisional position is that you 33 should combine rental and connections based on a set of economic arguments. In my

reports I have pointed out that it is unclear why Ofcom thinks it is relevant in one case but

not in the other and the second thing is that Ofcom does not explain, what is this additional information which has changed their mind? What additional fact has made them go from one position of aggregation to disaggregation? That is not clear anywhere. So I say that absent understanding what that information is, it seems to me that aggregating was a sensible way of thinking about the cost orientation, and it was applied again in the ISDN 30 case, which in date terms kind of post-dates Ofcom coming up to a conclusion on cost orientation.

- 8 Q Before we leave this document, if you go to para.5.94 on p.158, in the middle of that paragraph you see ----
- 10 A Sorry, which one again?
- 11 Q 5.94. The statement:
- 12 "These adjustments are without prejudice to BT's cost orientation obligations".
- Do you see that?
- 14 A Yes.
- Of course the condition that this Tribunal is concerned with is a condition that was imposed in 2004, is it not?
- 17 A Yes.
- 18 Q I want to come on to a different topic now, which ----
- 19 A Can I put this one away?
- 20 | Q Yes, you can put that away and make a fresh start.
- THE PRESIDENT: We need to have a file for these documents because they are coming up and they then get lost or misfiled and so on. There was a suggestion that we would have some more tabs for the additional documents bundle, but I think if we could be given another six or seven tabs then we can give it a document number. I think if we make this, I think I can say it can be AD2 Tab 26. I think that will work but that is on the assumption that we have had some already that are waiting tab numbers.
- 27 MS. ROSE: I would suggest that if the parties liaise perhaps over the short adjournment.
- THE PRESIDENT: Yes, but I would like that done as soon as possible because we now have, I think, two additional documents and another one here that has not been referred to yet.
- 30 MS. ROSE: I do not know where we have got to.
- 31 THE PRESIDENT: I have said 26 because I think there have been two others already.
- 32 MS. ROSE: I think you may be a little over-optimistic, Sir. I think it might be number 31.
- 33 THE PRESIDENT: 31?
- 34 MS. ROSE: Yes.

- 1 | THE PRESIDENT: I only go up to 22 in my note.
- 2 MS. ROSE: We were given a revised index this morning which goes up to 30.
- 3 | THE PRESIDENT: I see. Whatever you tell me it is, but let us give it a number. 31.
- 4 MS. ROSE: Yes.
- 5 MR. READ: I do not know whether it will help but there is a new index that has actually been
- 6 prepared, but obviously we have gone beyond it now with the extra documents, Sir.
- 7 THE PRESIDENT: I am not sure what all the intervening documents are anyway. If you can
- 8 liaise with ----
- 9 MR. READ: Yes, we will sort it out at the short adjournment.
- THE PRESIDENT: -- over lunch that will be helpful, but we need to get a grip of it as soon as possible.
- MS. ROSE: I want to look at a different topic now, which is circuits which migrated from the old
- LES system to WES. LES was an older product sold by BT, was it not?
- 14 A I understand that.
- 15 Q There were a number of communications providers who were already in this market as at
- 16 2005/2006, who had purchased LES circuits in order to supply their customers.
- 17 A I understand.
- 18 Q Typically large business users requiring a single dedicated line.
- 19 A Sure.
- 20 Q When the WES product came in the LES circuits were migrated over to WES?
- 21 A Correct.
- 22 Q The migration did not incur a connection charge, did it?
- 23 A No, it incurred a migration charge of £36/37.
- Q = £36/37, so a nominal charge on comparison with the connection charge?
- 25 A Yes.
- 26 Q You make the point that connection had previously been paid for under the LES circuit.
- 27 A Yes, correct.
- 28 Q Of course what had been paid for was connection of a different product, was it not?
- 29 A It was a different product but, as I understand it, it is essentially the same thing in terms of
- 30 the same infrastructure that is being used.
- 31 Q The connection charges for LES products was significantly higher than the connection
- charges for WES products, were they not?
- 33 A I do not know that.
- 34 Q You do not know that?

- 1 A I will take your word on that.
- 2 Q In 2007 BT significantly raised the price of WES rental, did it not?
- 3 A I understand that it was higher, yes.
- 4 Q And lowered the price of connection by comparison with rental, rebalanced the charges?
- 5 A Yes.

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- 6 Q This was advantageous, was it not, to communications providers who had migrated their circuits from LES to WES?
 - A I think that we just have to pause there for a second because we are talking about whether a higher charge is an inconvenience to somebody. Everybody likes lower charges, let's be clear on that. The first starting point we have to remember is, is that rental charge, the subsequent rental charge, above an economically meaningful calculation of DSAC. If, once we have considered the cost allocation, so, for example, we allocate electronics, as we have been discussing yesterday, and we find out that the rental charge is above that DSAC, then I agree, one should have an overpayment associated with that. So my approach does not rely on the fact that there was a connection charge before, because under approach 3 it says: once you have taken in the cost allocation argument, we're asking ourselves is the rental price the new rental DSAC? That's under approach 3.
- 18 THE PRESIDENT: I am not sure you are being asked about DSAC.
 - A No, but it's just a question that I was being asked in terms of is that inconvenient, is that unhelpful, does my client suffer because of that.? I think that you can only answer that question -
- 22 | Q When you say "your client" you mean who?
 - A Sorry, I was talking about not my client but the CPs generally. I apologise for that. But my general point is that it's only an economic bad if it's above cost. I want to come on to the point that it's only bad if it's above DSAC, and my approach 3 deals with that. But also, the question of aggregation is one of that you are aggregating a connection and a rental, so for these CPs who migrate there was no connection charge. So my calculation under approach 2 takes that into account. If it is determined that the rental charge is above DSAC, then they would get a repayment. So I'm just trying to reorient it.
 - MS ROSE: I do not think there is any disagreement between us if we are all happy that if the rental charge is above DSAC everyone gets a repayment. But I thought that the reason we were here is that your thesis was that you cannot meaningfully consider the rental charge in separation from connection?
 - A I think that is true.

- 1 Q So you accept that is not correct?
- A There are a small number of circuits that, due to these undertakings, have changed. So the question that we have to ask ourselves is what do we do with that minority? I'm not taking connections into account, so I'm on common ground with Ofcom on this.
- 5 THE PRESIDENT: So for that minority you are saying it should be regarded as an overcharge if 6 the rental charge considered in isolation is above DSAC?
- 7 A Yes, correct.

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- 8 Q Which then has to be a DSAC calculated for rental?
- Yes, absolutely, taking into account that there is a judgment for things like electronics between them. So, when we have a network of fixed costs there is no one thing fits all, so I've tried to take some of these other things into account.
 - MS ROSE: OK. It may be there is nothing between us on this, but just to clarify, the reason why it is a problem if the rental is above DSAC is it is going to cause an economic distortion as between those CPs who have migrated a substantial number of circuits and those who are new start-ups and have only got new circuits, right?
- 16 A That may well be the case.
- And the reason for that is that you have got one provider who has paid a high connection charge and is now on top being required to pay a high rental charge; and you have got another provider in competition with them who has paid a much lower connection charge and then the same rental charge?
 - A Yes, absolutely. What I'm saying is that my methodologies take that into account. There is a second way that you could do it. You could actually go back in time and understand what they actually paid on their LES contracts and properly take that into account. I accept if they got overcharged on those then that would have to properly figure into the calculation.
 - THE PRESIDENT: Just following through what you said a moment ago, if for that minority the rental level above which they should be regarded as being overcharged is disaggregated, looking at rental and you therefore do a DSAC calculation to determine what the rental should be, how does that affect your approach to the rental being charged for everyone else at the same time as the majority who did not migrate from LES?
 - A The ones that don't migrate would have had a connection charge within this period. To the extent that they have paid over DSAC, then they would be credited by the fact that they were charged a connection charge that was under the connection DSAC. So if anybody is starting new, you get into the whole life costing debate between the two: the CP considers connections and rentals together and we aggregate for those purposes.

- 1 Q So you might end up, might you not, with a different rental charge for those who migrated?
- A No, the rental charge is always the same for everybody. The rental charge is the same for everybody, so you go through a calculation that says --
- 4 Q That rental charge, you say for those who migrated, must not be above the DSAC for rental on a disaggregated basis, in isolation?
 - A Sir, to summarise, those who migrated don't have a connection charge, so you consider the rental charge that they actually paid, which is the same as the rental charges for everybody else, versus the DSAC, and that is the same DSAC as everybody else. In that case, if the price was above the cost there would be an overpayment to that CP. The CPs who are new and took out a connection charge, you would do exactly the same calculation on the rental aspects, you get the same number and then you say: but they did actually connect, so they got an advantage from that lower connection, so we're going to reduce that rental by that.
 - I can see you can bring that in to bear when you are calculating an overpayment, the amount they are to get back, but if you go back to what BT should have done, which is not to have been a situation of overcharging in setting its charges, is not the logic of your position that then BT should have set a different rental charge for those who migrated because obviously BT should not have overcharged?
- 18 A I can see the point.

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- Q Do you follow my question?
 - A I think that I do. In essence, if we go back to my primary argument here, that is one of the rentals cost is not known with certainty for everybody. Anybody on the circuit, it's not known with certainty. If we had allocated the electronics component to rentals right at the beginning of the period when the undertakings came in, the rental DSACs for everybody would have been higher. Therefore the gap between what BT actually paid and what this new DSAC is would have reduced. The extent to which there is still an excess above that is obviously an overcharge payment. But what I'm getting at is that fundamentally when we're talking about these things we don't know what the underlying DSAC is. I think my basic premise is that the underlying DSAC for rental should have been higher throughout the entire period because of the electronics component.
 - Q I follow that point, but just going back to my perhaps simplistic question, is not the end point and logic of your answer to the previous question that BT, if it was seeking to comply with the condition, should have set a lower rental for those who migrated, or a different one, because that is a rental which does not become cost oriented on an aggregated basis with connection?

- A I see the point that you make, but these things unwind over time.
- 2 | Q Never mind what happened then, is that where you start?
 - Α I think that is right. I can understand the thread of logic. You will remember that I say that generally if you lower the connection charge the rental charge will be slightly higher, either over a year or a number of years. What my analysis shows under this period of time, over the period of interest to us, is that most of the connection surplus (if I can use that terminology) is aggregated out by the DSAC in one year, i.e. any surplus of connections, any benefit of connections is primarily offset against the rental charge in that one year. That kind of makes sense to me that that would happen. So if I go back to the LES position, what I would expect is that if there was a high connection charge in the first year, that that high connection charge probably offset the rental charge in the other direction in that first year. Thereafter, the rental charges would be a function of the number of connections and rentals, but I think that you exhaust any benefit of the flexibility of pricing up and down very quickly, such that once you get into this period that we are talking about, the rental cost of a CP – whether he migrated or not – is the same rental cost. I can't say that with absolute confidence. One way that you could address that if you needed to address that would be to go back in time and work out what the aggregation of rentals and connections over those periods would have been. But I think that my position is that because we're not bringing connection charges in for these migrated services, all other things being equal, we make sure that you get the right overcharge for those migrating CPs. I don't think that you end up with an undercharge for them, I think that you come up with the right number for them. I think it goes in that direction. Does that make sense?
 - Q Yes. So you bring it in to calculate the overcharge?
- 24 A Yes.

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- Q I am not quite sure I understand how you say BT should have priced its rentals when they migrated, as opposed to the price it charged new customers who were being connected.
- A But I think the essence of this is that it was the same piece of infrastructure. They are using the same fibre, the same duct, and the same electronics charge. So all other things being equal, once it has migrated my assumption is that they should be facing the same rental charges as everybody else. That is my understanding. Were there any issues prior to that? BT wasn't subject to a condition prior to those terms, so I guess it was able to do something slightly different. It's only from the point of the undertaking coming in, do we actually have a concern? I understand that this is a smaller proportion. Could you do something separately and differently with these? I suspect that you could. My reduction in the

1		overcharge from Ofcom's 1s, as I said yesterday, circa £12 million or £13 million. It is in
2		relation to pretty much everybody else who didn't migrate across. So I hope that if there is
3		any issue it's an isolated and small one.
4	MS	ROSE: The situation that we have just been discussing is not just a theoretical issue, is it? It
5		was actually a complaint that was made at the time. Are you aware of that?
6	A	You'll have to remind me.
7	Q	One of the communications providers that was adversely affected by the increase in rental
8		on the WES services in 2007, having migrated their circuits from LES, was THUS. Are you
9		aware of that?
10	A	I'm vaguely aware of that, yes.
11	Q	Were you aware that THUS made a complaint about this in 2007?
12	A	I think I understand that.
13	Q	Can we take up BT bundle 13 tab 33. Do you have one that says this is the confidential
14		version of this document?
15	A	Where would I see it, if it did say that?
16	Q	Mine has that as the frontispiece.
17	THE	E PRESIDENT: Tab 33 is a letter from Richard Sweet, or I am in the wrong place?
18	MS	ROSE: Yes, that is right. Mine has a front piece that says this is the confidential version of
19		this document. I was not sure if the witness has that.
20	A	I don't.
21	Q	It may not matter. If you go to p.1 you do indeed see a letter dated 11th May 2007 from
22		THUS to Ofcom, yes?
23	A	Yes.
24	Q	"I am writing to make a formal complaint about the pricing and price structure of BT's
25		WES/WEES Ethernet product portfolio, which we believe is discriminatory and non-cost
26		oriented in breach of SMP conditions HH1, HH2 and HH3"?
27	A	Yes.
28	Q	Then, if you move on in this document to p.9 - they make a number of complaints here -
29		you see the heading: "Failure to rebate LES main-link related connection charges"?
30	A	Yes.
31	Q	The:
32		"In the transition to the new pricing structure BT has failed to take account that the
33		previous pricing structure for LES.
34		LES circuits were subject to a relatively high connection charge and low ongoing

1 rental. Connection charges for LES were levied on each 'local end' ... on a per 2 meter basis for the main link after the first 5000m." 3 Then there is a table showing connection charges for LES circuits compared with WES, and 4 we see that the connection charges for LES circuits were much higher than WES. 5 Α Yes. 6 Q 7 "In BT's revised price structure ... reduced connection charges are offset by 8 increased annual rentals. This is illustrated in the figure below ... We suspect this 9 rebalancing from connection to rental has been achieved in part by recovering cost 10 elements through rental which were previously recovered through the connection 11 charge." 12 And then they talk about main link as an obvious example. 13 "There may be other examples. BT will, in effect, be recovering these cost 14 elements twice, first through the LES connection charge and second through the 15 WES... rental." 16 They ask Ofcom to investigate? 17 Yes. Α 18 Q So that is a concrete example, is it not, of the rebalancing of costs between connection and 19 rental causing an actual problem - competitive economic problem - for a communications 20 provider. Do you accept that? 21 I mean in this example I can see that. As I said, I do not think there is any difference Α 22 between us because to the extent the disaggregated approach and the aggregated approach 23 do not address this, either of them. 24 Q The reason I am spending some time on this is because there were two things that you said 2.5 yesterday, one was that you thought having a low connection charge by comparison with 26 rental was generally a good thing, because it encouraged new entry - do you remember saying that? 27 28 Yes. A 29 Secondly, you said that there was a lack of empirical evidence of actual economic distortion Q 30 being caused by the improper balance between connection and rental charges, do you 31 remember saying that? 32 I think that I said that of a lower connection charge being offset by a higher rental charge A 33 there wasn't 34 Q Yes, but this is evidence of that situation?

- 1 A I think that this arises because there is a change in undertakings and I accept on this change
- of undertakings there may be an issue and, as I say, both approaches disaggregated and
- aggregated come up with the same result. My main point is that when you are whole life
- 4 costing for new circuits there is much less distortion, or less potential for distortion.
- Can we go to your first report, tab 6, para. 3.22? In fact at 3.20 you start talking about the
- 6 migration issue?
- 7 A Yes.
- 8 Q At the bottom of 3.22 you say that you note that the number of circuits that were migrated
- 9 over the period was small. That is talking about migration between bandwidth, is it not, not
- migration from LES?
- 11 A Yes.
- 12 Q As a matter of fact, for some communications providers significant numbers of circuits
- migrated from LES, were you aware of that?
- 14 A I was not, no.
- 15 Q If we take up the factual witness statement bundle, core bundle C, tab 19. This material is
- 16 confidential, and I am not sure if you go to para. 20 ----
- 17 | THE PRESIDENT: Which tab, which statement?
- 18 MS. ROSE: I am so sorry, tab 19, it is the statement of Mr. Parker.
- 19 A Yes, I have numbers in that table.
- 20 Q So Cable & Wireless. You have numbers in the table at tab 20?
- 21 A I do.
- 22 | Q And you see there the figures for the number of circuits that migrated to WES, and also the
- 23 total number of circuits purchased from BT at para. 21 and then the percentage of cases
- 24 where connections were purchased separately for rental, both in relation to migration from
- WES, a change in bandwidth and transfers from other communications providers?
- 26 A Yes.
- 27 Q Of course, the extent to which different communications providers are affected, not just by
- 28 the migration from LES, but migration from different bandwidth, transfers from
- communications providers, differs as between different CPs, does it not?
- 30 A Yes.
- 31 Q Some will have a substantial number ----
- 32 A Yes.
- 33 | Q -- some much fewer?
- 34 A Yes.

- Q So the extent to which they are disadvantaged by a disproportionately high rental charge will differ between CPs?
- 3 A You are talking about in the migration from LES to WES here? Is that the specific?
- Well, he identified a number of categories there migration from LES to WES, different bandwidth and transfers from other CPs. Those are all situations where you are not going to pay the standard connection charge, are they not?
- A As I understand it, when there is a change in bandwidth you do pay a connection charge which is reflecting the higher connection charge of the higher bandwidth.
- 9 Q But it is not the same as the connection charge that you pay on connection of the service?
- 10 A No, but it is a connection charge.
- 11 Q Yes, but it is a different figure a significantly different figure?
- 12 A But it is a material matter, it's not the 37 that we were talking about.
- 13 Q No, it is about £400?
- 14 A Yes.
- On transfer from another communications provider again, you do not pay a connection charge you pay a nominal figure?
- 17 A Say that again.
- 18 Q Yes, if circuits are transferred from one communications provider to another BT will permit 19 the transfer for a fee, again significantly less than the connection fee?
- 20 A I don't have that fact to hand to be able to agree or disagree with that.
- 21 Q But whichever types of transfer you are talking about, even if we just talk about LES/WES, 22 the principle is the same, is it not, that some CPs will have a profile of circuits which means 23 that they are more exposed to that situation than others?
- A No, but I think that you have to step back, as I said before. Everybody prefers a different connection and rental trade-off, that's absolutely clear. Everybody would prefer it to be lower, and the question that we are asking ourselves is whether, when you face these new charges, are they distorted? Are you paying something above the DSAC.
- 28 | THE PRESIDENT: I do not think that is the question ----
- 29 A Is it not?
- Q -- Mr Harman, you are being asked. I think the question you are being asked is: yes,
 everyone prefers it to be lower, but that different CPs are affected in different ways
 according to which one is lower ----
- A That is absolutely the case, but when we say "affected in different ways", that is the piece I just want to caveat. There are "affected in certain ways" which are not distortive because

they can be justified by cost, i.e. when they move on to the new service if that higher rental or lower rental, can be supported by cost that is not a distortion in our terms. What I am saying is that if there are these transfers then the extent to which they have distorted can only take place after you have considered whether the costs which you are comparing them to are economically reasonable. That is why I say when you look at connections and rentals separately you cannot be sure, with certainty - and I would say actually it is highly uncertain that you are doing the correct calculation because you have gone down to a level of granularity which means the underlying costs are not economically meaningful. What I am saying here is that when somebody puts to me a proposition that you have a higher rental, or a higher connection and that is going to affect you, yes, it will but only under the premise that once you have switched it cannot be reasonably supported by the cost. What my approach wants to do is to control for that factor. After you have controlled for that factor, and I have to tell you again that it is a very small adjustment - if the overcharge is 95 it goes down to circa 82 million - and most of that is in the first year when you take out a connection and WES charge. For all of these other transfers, where there is not a connection charge, my methodology accepts that if it is above DSAC there is an overcharge.

So I would agree with you; the question is I agree ----

- MS. ROSE: So you agree that in all of these cases if the rental charge is above DSAC that is going to cause a competitive distortion between a CP, who is in this situation and another CP who does not have any circuits that have transferred or migrated?
- 22 A What I am saying is ----

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- 23 Q If the rental charge is above DSAC?
 - A If a rental charge is above a properly constituted DSAC, which is the fundamental issue that I am trying to address in all of this then, yes, there could be a distortion I have not seen any evidence of an actual distortion. We talk about it distorting behaviour in some way in terms of changing provider but I have not seen any evidence or examples of that actually happening. In that case, if you have a strong belief in the underlying DSACs then it could distort. I don't say anywhere in my report that I disagree with that. I say that prices can be economically meaningful but for that to happen they have to be above DSAC and you have to have a reasonable certainty that you know what that DSAC is. If you do not then the only thing that you can do is aggregate.
- 33 Q Circuits are rented, initially for a minimum period of a year, are they not?
 - A I understand that's ----

- 1 Q But then the period of rental is indefinite, is it not?
- 2 A I think until a CP decides not to carry on, yes.

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- And the CP may not be able to predict with any accuracy the duration of the circuit at the outset when they are first seeking to purchase it from BT?
- I think that is a factual point. When I read through the witness statements, pretty much all of the witness statements from the CPs say that when they do their initial whole-life cost they factor in the expected duration. That expected duration is based on ultimately a customer's requirement. So whilst it might not be known with certainty I think that there is a general expectation that it is going to be over a number of years.
- 10 Q The CPs also cannot anticipate with any degree of certainty the level of future price rises in the rental charge, can they?
- 12 A No, and in fact there have been price decreases, there have not been price increases 13 generally, there have been decreases in connections and rentals over time.
- 14 Q It depends which year you look at, in 2007 there were three price increases?
- As an economist if you ask me where the trend was, whether it was upwards or downwards

 I think the trend is downwards.
- 17 Q And the other point, of course, is whether it is downwards in absolute terms, or downwards 18 by comparison with DSAC, but I do not think we need to engage with that.
- Q So there is a limit to the certainty with which a CP can cost a circuit at the outset, is there not?
- I think that's right. I think that exists whether you are thinking about things in disaggregated terms or aggregated terms, and it is also true that of all of the comparators that you bring in as to whether you build or buy, or go with a different CP, all of those forecasting issues are contained whether you are thinking about things on a disaggregated basis, or an aggregated basis.
 - Q If, at the end of whatever was the anticipated period, in fact the customer wants to extend the duration circuit, at that point the CP is only interested in the rental charge, correct?
 - A that point in time they would only be interested in the rental charge but, as my report sets out, any initial benefit of a lower connection charge has already been extinguished by that time. As I said, two-thirds of the benefit of aggregation happens in the first year. The remaining vast proportion happens in the second year. So, by the third year then the rental price is a meaningful indicator but, in my calculations, that would be treated by itself, and if there was an overcharge there would be an overcharge.
 - Q It may be that at the end of that period it is not simply a question of a communications

provider and their customer agreeing to roll the contract over, the customer may want a fresh competitive tender at that point, might they not?

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A Yes, and if there was a competitive tender at that point in time then what the CP would take into account is that any alternative that that end customer would have would be facing a connection and a rentals charge compared to actually only a rental charge in this scenario. My general point is about these distortions, and I agree that there are potentials for distortion, why I think it is limited in this case is that at the beginning you compare a connection and a rental to alternatives - alternative connection and rentals. If BT is selected it means that that combination of connection and rentals was cheaper than the alternative connection and rentals. In the second year or the third year, it's likely that that rental charge is still going to be lower than the comparison of a rental and a connection charge because initially the rental and connection was lower. So all other things being equal, the other provider would have had to have had a very significant change in prices for it to suddenly be cheaper. What we actually observe is that BT, itself, is becoming cheaper over time. This is why perhaps there haven't been many examples of this actual distortion because a rental charge by itself is going to be cheaper than the connection rental alternative.

Q Obviously it is only one charge within the multitude of charges that you are considering when you tender for a contract. If that charge is disproportionately high because it's above DSAC then it's going to handicap you when you're tendering against other parties, is it not?

Α Let's just be clear what we mean when we say by DSAC. What we're talking about is the extra flexibility that pricing low in connections and rentals gives you. That may allow you to price a little bit above the rental price above DSAC. If outside of that BT prices up rentals well above DSAC then clearly that's going to be distortive and clearly there should be a repayment. I just want to caveat that, but when you have a bit of aggregation, my example yesterday when I said I could charge out DSAC 10 for connections and 10 at rental. The alternative is that I could price down in connections, say to 7, and expect to recover that through other rentals over three years, 11, 11, 11. What I say that whole life costing tells us is that there is no distortion there because when you enter into this agreement you consider that offset, that trade-off, a lower connection and a higher rental. In this example, when you get to year four, if BT continued to charge 11 then I would say that that 11 in year four is a distortion, it has recovered more costs than it is permitted to do. In both of my methodologies, approach two and approach three, that would be an overpayment in that year because BT has now recovered more from the pricing flexibility than it ought to. It only happens after a duration, after, in my example, year four. But what

- I say is that when I look at aggregation in actual terms, most of the benefit comes in the first
- 2 year when you consume these two things together. That's when it exhausted, so pretty much
- in year two, year three, year four, if rentals are higher than DSAC there is no added benefit
- 4 from aggregation.
- 5 Q The point here is that at the re-tendering point you have one communications provider who
- 6 is already in year four?
- 7 A Yes.
- 8 Q They are being overcharged for rental?
- 9 A Well, no, they may not be.
- 10 Q Let us assume that rental is above DSAC?
- 11 A Okay, in year four.
- 12 Q As per your example.
- 13 A Okay.
- 14 | Q They are already in year four?
- 15 A Yes.
- 16 Q They have had this circuit for four years?
- 17 A Yes.
- 18 Q They are being overcharged for rental?
- 19 A Yes.
- 20 | Q They are competing in this tender against another CP who wants to compete by starting a
- 21 new circuit and is looking at the whole life cost of that circuit?
- 22 A So he has got a cost and a rental he has to factor in.
- 23 Q Yes, but he is looking at the whole life cost of the circuit.
- 24 A But he still has a cost. He still has that connection cost which is ----
- 25 Q Are there may be other differences between them in terms of their costs as well. You are
- 26 not just comparing those costs in isolation, are you?
- 27 A No, but you have to limit the argument down to things that you can compare, so on a like
- for like basis ----
- 29 | Q When you are comparing, the first CP is being overcharged at that point, even on your
- argument, in his competition with the other CP?
- 31 A Yes, and so I would say two things: firstly, under my approach that would be picked up.
- There would be an overpayment in that year, because you have extinguished the benefit of
- your lower connection charge upfront. Thereafter, if BT continues to overcharge on rentals,
- then that falls out of the calculation. You do pay an overcharge.

- THE PRESIDENT: One can see that you can use the aggregation when, *ex post*, you are looking back and trying to calculate CP by CP overpayments. If that is all, the end of the exercise
- would be the start of the exercise. What I struggle with is this: one is looking at a condition
- 5 A Yes.

6 Q As with the migration case, is not the implication of your approach that BT should have

that has to be complied with, and should have been complied with, by BT?

- 7 charged a lower rental charge for someone in year three than in year one, because that
- 8 would be the way to comply with the cost orientation?
- 9 A Yes, I think ----
- 10 Q If they did not do that, if they charged the same rental charge in year three as in year one,
- 11 that would put them in breach?
- 12 A Yes, and I think that's what ----
- 13 Q Is that right?
- 14 A Yes, Sir.
- 15 Q So the only way they could not comply with that would be by different rental charges
- according to what year of contract you are in?
- 17 A Yes.
- 18 Q That is right, is it?
- 19 A Yes, I think that's right. I think what I'm saying is that if BT can use its flexibility to lower
- 20 connections, and there may be benefits to that. As I explained yesterday, CPs would
- 21 potentially prefer not to pay high start-up costs. So having some flexibility to lower
- connections and increase rentals may be a good thing to do. But the moment that it over-
- recovers down the line then that would be a breach. I am just saying that there isn't a breach
- 24 if you get the calculation right and you assume that connections is going to be lower and
- rentals is going to offset it over three years. Once you get into year four, if that rental hasn't
- come down then that's a breach.
- 27 MR. HARRISON: But that would be done for each individual customer?
- 28 A You can do that for each customer.
- 29 Q What happens is you go along, you get to year four because a customer happens to go into
- year four in your 20/20 example ----
- 31 A Yes.
- 32 | Q It goes into year four, so for that particular customer you drop the rental charge because he
- has gone into year four?
- 34 A Yes.

- 1 Q That is what you were saying, is it?
- 2 A The problem is that you have got a fixed network and you're charging the same rental and the same connection to everybody.
- 4 Q I have got that.
- 5 A That's what you should ----
- What you are saying, therefore, is because at the very outset contractually it is up to the CP how long this contract works. If a particular CP keeps extending and extending, you will differential prices for rentals depending exactly when that CP first took out their contract with BT? In your example 20/20 a CP that takes out in year one, by the time it gets to year four, will be experiencing a lower charge than someone who took it out in year two, and so on?
- A So you could do it in that way. You could do it in that way. Because you don't do it in that way it means that those CPs, once they get to year four, face a higher rental charge than they should have done under their own basis, and that triggers a repayment to them because they've been charged too much.
- THE PRESIDENT: But BT should not be charging them too much. It is seeking to comply with the regulatory obligation and the only way it can do it on this approach is by, as

 Mr. Harrison said, charging a lower rental charge in year four?
- 19 MR. HARRISON: Or rebating is what you were saying?
- 20 A Yes.
- 21 | THE PRESIDENT: Or building in a rebate?
- 22 A Yes.

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- 23 Q In the contract, which is another way of doing the same thing.
- 24 A These are general problems of recovering a fixed cost over people of different durations.
- aggregated charges, there will always be some winners and losers in the process, so that has to be taken as a starting point. Let me give you an example of that because I think it's important. When BT sets a connection charge it has an understanding that somebody will

You have to think that there are, irrespective of whether you have separate charges or

- connect to it for a duration of time. So some of these charges are connection charges. If a
- piece of electronics fails in year two it has to be replaced. So it has to think about my
- 31 connection charge. I'm going to think that somebody is going to be connected to me for,
- let's say, five years, and that's what I think it's going to cost over that five year period.
- Anybody who is renting for two years ends up paying a higher average connection charge to somebody who connects for ten years because they pay a connection charge that assumes

that you'll only be The same thing happens with rentals, but in the other direction. A 1 2 person who rents for much longer ends up paying more of network than somebody who can 3 just dip in and dip out and rent for a year. 4 It's interesting that those two things go in opposite directions, that a short term person ends 5 up paying a high connection charge but a relatively low connection [sic] charge just based on these disaggregated averages, but the person who takes it for a long time ends up paying 6 7 a relatively higher rental charge but a lower connection charge. In that way you can see that 8 aggregating the two actually makes some sense because you're offsetting those two effects. 9 But that is a problem of a network of averages. 10 MR. HARRISON: I understand that. That is not what BT does. It does not flex its pricing for 11 different lengths of contracts, or does it? 12 No, it doesn't, but it has to have an average in its mind. Α 13 Q So your proposal would be, one, that this is a way that BT could price? 14 Α Yes. 15 But in reality your methodology is to try and assess the repayment or the overcharge that is Q 16 due? 17 Yes. Α 18 Q And this is interesting, but it does not actually apply in practice to BT? 19 No, and don't forget, this discussion of distortions is a second order point to my main point, Α 20 which is that we do not know with certainty what the underlying costs were. So if we had 21 gone back to this example and said, "Actually, I think it is reasonable for BT to have 22 allocated electronics costs to rentals throughout the whole period, that would have lowered 23 the overpayment. It just turns out that you get a very similar result if I aggregate". It's two 24 different ways of looking at it. One is through the cost allocation lens and the other way is 2.5 that there is whole life costing, and I shouldn't really be ----26 Q I understand. 27 MS. ROSE: I have no further questions. 28 THE PRESIDENT: Yes, Mr. Pickford 29 Cross-examined by Mr. PICKFORD 30 Q Mr. Harman, I am going to ask you some questions on behalf of Sky and TalkTalk. 31 Ms. Rose has obviously covered a substantial number of areas and I apologise if my 32 questions seem a little disjointed, because I am simply going to pick up on a few points that 33 Ms Rose did not address or to try and seek some clarification of some of your earlier

answers. I am not going to take you through it in a particularly structured fashion. That is

the nature of coming second. Also I am going to ask you a few questions simply to contextualise some of the points so that you understand the context in which I am asking the question. Very often they are areas that you have touched on with Ms Rose already and you do not have to repeat the full answers that you have given already to Ms Rose. You can take it as read that if something has said to her it is obviously on the transcript and understood by the Tribunal.

So the first point I would like to consider is a proposition in the joint statement, and we can turn it up if necessary, but I am not sure you will find it necessary. You asked yourself the question whether an assessment of prices at the connection and rental level leads to greater uncertainty in assessing costs, and you say that it does?

A I think that it does, yes.

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- 12 Q Again you say that that uncertainty arises because you could have different choices in terms of common cost allocations?
 - A Just to be clear, common cost is one argument. That is an argument that Dr. Maldoom focused on. Mine is not really about what we would all think about as being a common cost, perhaps, with the sharing of the CEO or the finance department. We are talking about here some specific elements of components. You could call them common, but they are but at a particular level. They are common between rentals and connections as opposed to at some other level.
- Q Obviously you have gone over in some detail with Ms. Rose about how BT gets to decide that allocation itself in its own financial statements.
- 22 A It does decide, yes.
- 23 | Q Your case is that there is considerable subjectivity in that cost allocation?
- Yes. I mean, as I say, subjectivity is a difficult word but I think that there are certain costs; that there are genuine difficulties in terms of their allocation, and it may well be that there are more than one way of doing it. Obviously for reporting purposes you have to make a choice, a choice based on judgement and therefore you may deem that to be subjective, but it is a choice that has to be made but other choices could have been made and may be equally reasonable.
- You gave an example, and again you do not have to repeat it but just again so we are clear where I am going, you gave the particular example of the allocation of electronic components ----
- 33 A Yes.
- 34 Q -- that have a switch from connections to rentals.

I	А	Yes.
2	Q	Ofcom did not seek to interfere with that judgement, did it?
3	A	No, not that I know of. No.
4	Q	Indeed, in the present case Ofcom did not interfere with any of BT's judgements about how
5		it should allocate costs between rentals and connections?
6	A	I have not gone through this in detail. I know that it makes a number of adjustments to the
7		accounts for errors and it did make an adjustment, for example, in terms of connections by
8		taking the depreciation charges and the number of years and bringing them forward so that
9		costs matched prices. So it did make some adjustments to these things. It did not just take
10		the RFSs as stated and run the calculations.
11	Q	No, but what it did not do is make any adjustments in relation to the cost allocation issue,
12		which is your concern, as between connections and rentals?
13	A	I think that is fair to say apart from, as I said, one of the connection costs. Instead of
14		treating them as period costs, they rolled them back up so that they could compare a
15		connection price and a connection cost, because the way in which BT actually takes So,
16		for example, with
17	THE	PRESIDENT: That is between connection and rental?
18	A	No, it is within connections it made an adjustment. Yes.
19	MR.	PICKFORD: That is somewhat different. You said that you did not look at this, although
20		footnote 120 of your second report says:
21		"Ofcom has not challenged cost allocations in this case".
22		So obviously if it was not you, someone in your team looked at this?
23	A	I think that I was agreeing with you that there was not a change in allocation between
24		rentals and connections, but adjustments were made, adjustments to how you capture costs
25		within each of those two brackets.
26	Q	Given the subjectivity which you have suggested, certainly in your earlier reports, attaches
27		to the cost allocation position, Ofcom is not going to be in any position to second guess
28		those cost allocations unless they are obviously inappropriate, is it?
29	A	I think that you are right there. It would address them if they were obviously inappropriate.
30		The flip side of that means that any change in cost allocation must have been deemed to be
31		reasonable by Ofcom, hence that goes to my point that electronics could have been allocated
32		to rentals in earlier periods.
33	Q	So just so we are clear, even if we accept that there is the subjectivity in cost allocation that
34		you say, BT has little to worry about any uncertainty that arises from that because that

- uncertainty is not going to harm BT, is it, unless its decisions are obviously inappropriate ones and obviously if it is obviously inappropriate it could expect to have that decision challenged?
 - A I do think there is uncertainty because quite clearly BT cannot do anything. If it could allocate costs in any way that it chose then it could game the system and support prices to the best of its ability, and therefore if that was the case, if BT thought that that was the game and that was the incentive of this regime, then clearly I think there is a much higher risk that Ofcom would intervene and say, "I now have to look at this because I have given you *carte blanche* to do whatever you like". I think that BT proceeds on the premise that it will do its best to allocate costs to the RFS, but it expects simultaneously that if there was a dispute then there would be a sensible discussion about whether those cost allocations were sensible or not.
 - Q But as you, I think, agreed, they are not going to be re-visited unless what it did was obviously inappropriate?
 - A Yes, but I do not think that BT knows with certainty whether something is going to be completely inappropriate, would be my point. So BT may decide on an approach that, for example, allocates all costs to rentals and none to connections, and Ofcom may decide that that is inappropriate. It may be decide that.
 - Q I am not suggesting ----

- THE PRESIDENT: I do not think that is this case so I do not think we need to spend time on that, because they have not done that in this case.
- MR. PICKFORD: No, indeed. I think your case, and indeed the case of the other economists we have heard, is that BT's expectations about how the regime will work are based on its historical experience, are they not?
- 25 A I am not sure that I followed the question.
- Q In terms of the incentives that are set for BT, one of the things that BT will obviously react to is how Ofcom has dealt with in the past. So in order to be concerned about a particular risk in the future, if that risk has never materialised in the past that is obviously going to indicate to BT that that is less of a risk to it?
 - A But I still think that there is a problem here in that when you are facing a situation where there are potentially different ways of allocating costs, it is meaningful, when there is a dispute, that those are considered because BT legitimately has a difficulty in allocating costs at the disaggregated level. I think that there would always be an expectation that that would be considered. I think it has to be considered otherwise you may end up with a situation

- where Ofcom just relies on a set of numbers which are not economically meaningful.
- 2 | Q | I am not suggesting obviously that BT can eliminate all risk. Plainly it cannot know exactly what Ofcom is going to do. But given the combined factors of the fact ----
- 4 A Let me give a ----
- 5 Q I am sorry, let me just ----
- 6 A I am so sorry.
- Q If I could just ask the question. Given the following two combined factors, firstly, that the cost allocations you say are subjective in many ways ----
- 9 A Yes.

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- O -- secondly, that the threshold that Ofcom sets itself for intervention is only if the decision by BT is obviously inappropriate, notwithstanding there is some risk, it is a relatively low risk, is it not, that whatever decisions BT makes they are going to be re-visited by Ofcom?
 - A I cannot say. Ofcom has gone through a process where they have looked at cost allocations, the costing in general, and where there have been errors they have made corrections for them. It may be in the future that there are problems. I can remember in one of the expert's reports where there was this discussion that potentially a greater disaggregation of tariffs would be beneficial so that tariffs could be more aligned to consumers' needs. That would be beneficial because it would eat into the consumer surplus and there will be efficiency. But the problem is that if you suddenly end up with many disaggregated tariffs you would have exploded the cost allocation issue quite significantly. I think that if BT was ever to consider such a thing they would fear that that would come under more scrutiny, because the more disaggregated you become the more difficult the cost allocations are, but simultaneously the chance of setting distorted tariffs increases.
- Q But in this case we are simply talking about disaggregation between rentals and connections.
- A No, but you were talking about the future. You said "going forward", is what you asked.
- 27 Q The particular issue in this case is obviously the level of disaggregation we are talking about is between rentals and connections, so ----
- A But if we are talking about historically, did BT know what Ofcom's approach would be today as to whether it would challenge the cost allocations, it would not have known until it got to today.
- 32 THE PRESIDENT: I think we have covered that.
- MR. PICKFORD: Yes. I have no more questions on it. You talk in many places in your evidence about combining charges and potential incentives to combine charges. To be

- clear, combining charges effectively means adopting something akin to a rental only price,
 does it not, which factors in some connection costs and it spreads them over a number of
- 3 years rather than having a separate additional upfront charge?
- 4 Yes, I think that that is an analogy of the way in which aggregation takes place. What you are in fact doing is comparing total revenue to total cost, and you can see if it is a single tariff then the total revenue is obviously derived from that single charge and the total cost that is associated with that and in an aggregated way it is the same. So the analogy holds,
- 8 yes.
- 9 Q To be clear, I am not actually making an analogy. I am not talking about what you say is
 10 the appropriate approach, which is to aggregate when you are looking at the two costs
 11 together. I am saying that one of the concerns that you raise is that Ofcom's approach in this
 12 case of looking at them on a disaggregated basis might give incentives to BT to combine its
- charges.

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15 Q You talked about combining charges.

Okay.

- 16 A Yes, yes.
- 17 Q I just want to be clear that when you talk about combined charges what that means, in a sense ----
- 19 A Selling in single tariff.
- 20 Q -- it is a rental only charge?
- 21 A Yes.
- 22 | Q Albeit it has now got some connection factored into it? It is a single ----
- 23 A It is a single charge.
- 24 Q Yes, and it is not going to be a one-off charge in one year, is it?
- A No, no, no, it is going to be a charge in every year. Yes.
- 26 Q Unless BT sets a price which recovers the connections costs in the first year of rental, rather
- 27 than spreading them over a number of years, if a customer decides not to take a service after
- 28 the first year BT is going to fail to recover the costs that were actually incurred in relation to
- 29 connection, is it not?
- 30 A Yes. I mean, yes, it would and that is effectively what it is happening now, that it has allocated electronics to the rental charge. That is a risk that BT bears.
- 32 Q To the extent that those connection costs are sunk then it will not then be able to get them
- back at all?
- 34 A Say that again?

- Q If a customer leaves after one year and it has not charged a connection charge which actually covers all those connection costs, but rather they have been spread into this single tariff ----
- 4 A Under your hypothesis you are saying that there is a single rental charge.
- 5 Q There is a single rental charge but of course there are some costs ----
- 6 A Yes.

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- 7 | Q -- that are associated with connection?
- Yes. Well, I mean, that is where I disagree. I think there are some costs associated with the recovery of capital. That capital is electronics and fibre. We have this distorted view that electronics is a connection charge but, you know, I agree with that. I think ----

THE PRESIDENT: A connection cost?

- A connection cost, yes. I think that it is one and the same thing. It is fibre and it is the electronics. Those two together are used through the duration of the contract together, in the same way as Mr. Pickford's question is, is that if in the first year somebody leaves you do not recover your connection charge, in the same way you do not recover your fibre and you do not recover the fibre or the electronics. That is the problem inherent in a fixed network. You cannot get away from that. There are potentially going to be some winners and potentially there is going to be some losers where you have got an average price.
- MR. PICKFORD: I do not think that we are in disagreement about this. Let us put it this way, a two-part tariff has an obvious advantage for BT, and I think you refer to it yourself, in that it makes it less risky for BT because it has got more of its money back right at the beginning and if the customer then walks away after a year it matters much less than a tariff where it spread out its costs over a number of years.
- A Yes, I agree with you but save one point. There, when we are talking about, what comes into everybody's mind is that you're recovering this connection charge and that it's this connection cost and you're recovering the electronics. But you can extend the point that that initial upfront charge (I prefer it to be called actually an upfront charge as opposed to a connection charge) could include not only the electronics but a proportion of fibre equally. Actually, what we are talking about here is an upfront charge versus a recurring charge. What is the natural balance between those when actually both of them are fixed? I think that Ofcom itself acknowledges it's very difficult to come up with that optimal blend.
- THE PRESIDENT: I see that point completely, but I think what's being put is there is an advantage for BT, faced with that difficulty, if it sets a two-part tariff with an up front and a recurring charge, because that gives it that more flexibility of including some of the capital

costs up front.

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A That's right. Absolutely. I don't disagree with that example. But just to finalise that thought, there is a trade-off for BT. So yes, BT does like to have as much up front, so it could say to all consumers: pay me everything for fibre and electronics up front. That would be the best world for BT. But when we look at Mr. Morawetz's testimony, he said what's most likely to put him off connecting with BT is a high up front charge. So actually what BT has to manage is its own preference for money up front versus potentially a CP's preference for not paying much up front and deferring payments into the future, in part because it doesn't know what the future will hold so values those higher rentals less. But that is the trade-off and there's always going to be a trade-off.

MR. PICKFORD: The obvious way of trying to meet that trade-off and to balance those conflicting incentives is to have a two-part tariff, because that way you are neither recovering everything at the beginning nor spreading it all over time; you are somewhere in between the two?

A You are somewhere in between the two, I wouldn't disagree with that. I think that what Ofcom recognises is getting that balance is very difficult. What it says is that BT should be granted the flexibility to come up with that balance because it understands the demand characteristics best. My interpretation of that is it is saying on balance pricing slightly lower for connection benefits us less but benefits the take up, and if it is BT who's the demand, one has to place some faith that they are getting that balance correct. If you say BT has got it wrong, then I don't know where the fall back position is, because I don't think there's something in economics that tells me that you should have two-thirds or one-third of your capital costs up front. I think it's a very difficult thing. Just to remind you about the materiality of this, the total overcharge is £95 million; the degree of flexibility that we are talking about that BT (if you like) has afforded itself is circa £12 million on that £95 million. So it's a small amount; it's not like this aggregation takes repayments away. It's just a very small part. I think, given the difficulties of balancing, it seems reasonable to me.

Q Let me be clear. The point I am putting to you is not that BT should not be able to make that judgment for itself about the right balance between its connection and its rental charges. The point is that there is a very strong incentive for BT against abandoning that two-part tariff and moving to a single charge, is there not, for the reasons we have just discussed?

A If I understood the question right – sorry, I was thinking and I have forgotten how you termed it – I think now there are two alternatives that happened here, all other things being equal, BT potentially would like an upfront charge.

- THE PRESIDENT: Presumably that is the reason BT priced that way. That was a commercial decision. It could have decided no, but they must have taken that decision for commercial reasons.
 - A Interestingly, I did enquire about that. I would agree with you from an economic perspective. I did enquire about that, expecting that maybe there was some kind of profitability analysis or considerations, and the response I got was: that is how BT has always done it; we've always had a connection charge and we've always had a rental charge, so that's what our mindset is. I don't think there was any detailed analysis about it. But I accept that an upfront charge is a sensible thing, but BT has to get the balance because CPs might not like it.
- 11 Q Yes, I think that is going beyond the very limited question you are being asked.
- 12 MR. PICKFORD: Do you agree the question I asked?
- 13 A Could you repeat it.

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- Of course. The considerations that we have just discussed provide a strong incentive for BT against combining its charges. For all the reasons we have just discussed, a two-part tariff has considerable advantages for it?
 - A For the most part I agree. What I identify in my report is that if it is difficult to get the balance right and that come a determination like this it is difficult to sort the matter out, and that large repayments could depend upon it, then that may provide an incentive in the other direction to go towards a single tariff. Would BT do that? I don't know, because we haven't got to the end of this dispute. Whether it will do it, I don't know. But there is still that risk.
 - You describe some of the possible adverse consequences of combining charges. This is dealt with in issue 2 of Section 4 of the joint report, but I think again these are sufficiently clear that we can just deal with them without having to go to the report itself. You say that the possibility of reducing price innovation, influencing the roll out of new services, and decreasing downstream competition, you recognise all of that?
 - A Yes, I categorise the last two in a single thing. One is the consequence of the other. I was also talking about yesterday that there is also this other competing efficiency argument that it is also beneficial as much as possible to lower the connection charge for consumers. So a single charge, whilst it might not be beneficial for BT, in a balanced view of overall efficiency may be more beneficial for CPs to have a single charge because they are deferring this charge. So these things are always a trade-off good for BT/ bad for BT; good for CPs/bad for CPs.
- Q Perhaps to make it concrete we could turn to para.3.27 of your first report in tab 6 core

1 bundle B. 2 Α Yes. 3 Q I would like to consider firstly what you suggest might be the adverse effects on rolling out 4 new services from combining charges. You explain at para.3.27 what apparently you are 5 concerned about. You say that: " Not to recognise that connection charges are themselves often a barrier to 6 7 switching would be to disregard a fundamental fact of business behaviour and 8 commercial reality; and 9 ii. setting lower upfront margins than on-going margins for Ethernet services 10 contributed to the effective roll-out of LLU services. In this way, competition has 11 been increased in the downstream markets ..." 12 As I think you just indicated to the Tribunal, that sounds like a very good thing from the 13 perspective of consumers. 14 Which one of those two things? They are going in opposite directions. Α 15 Sorry, the latter, that if you have lower up front charges, that encourages switching, Q 16 reducing the barrier to switching, and therefore that improves competition, good for 17 consumers? 18 Α Absolutely. However, remember I talked about a trade-off and the trade-off is that whilst 19 that is good for CPs it's bad for BT because BT, if it's going to implement a new service, 20 takes the risk, the demand risk, and it would prefer, all other things being equal, to have a 21 connections charge so that it front loads some of the recovery of that. If BT went to a single 22 charge and was unable to get an upfront charge, that may have an influence on the speed at 23 which it rolls out new services, all other things being equal, because it's not front loading 24 any of its investment recovery. 2.5 Q The thing about your theory is you say it should be of concern to Ofcom that if it takes the 26 approach it does in relation to aggregation, BT might decide to combine its charges? 27 Yes. Α 28 We have already discussed that actually there are very strong incentives for BT not to Q 29 combine its charges, and you have just elaborated in response to my question and said 30 actually, it would be bad for BT in this context as well. That is another reason why it might 31 not do it. But in so far as it does do it, it is lowering upfront charges, that is good for 32 consumers. So why should Ofcom be particularly worried about the possibility that BT 33 might combine its charges and get rid of its connection charges? 34 A Because, as I said, whilst it is good for CPs and we shouldn't be concerned, on that basis let

- me just reiterate, if that is the case, if that is the argument that is being put forward, then in effect you are endorsing BT pricing down on connections and increasing rentals.

 Simultaneously you are supporting the aggregation argument there. I will just put that to
- Q I am just developing your theory.

one side, but the point is --

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- 6 THE PRESIDENT: Let Mr. Harman finish.
 - A The second point is the risk is that whilst that might be good for CPs, BT would then not have an incentive, because there is a risk associated with it of the speed at which it rolls out new services, because it's end loading any recovery. That has to be taken into account. All other things being equal, if you said to two investors: would you prefer £100 today or would you prefer £100 at the end of year one, you would take the £100 today. So it does have an impact on investment decisions. A single charge will have an impact on the way in which BT thinks about implementing new services.
 - MR. PICKFORD: Of course, BT does not have to do it, does it? That is the whole point. No-one is forcing BT.
 - A But if it didn't do it, then that can have an effect on the success of the market. If I don't introduce a new service to CPs, then CPs can't introduce that to businesses and businesses cannot consume that new service.
 - THE PRESIDENT: If I have understood it, what you are saying is that while you accept in answer to the earlier questions that BT has commercial incentives for a two-part tariff (let us call it that) up front and continuing, if, because of all the problems involved in calculating a DSAC on a disaggregated basis, that creates a real risk of being found to have overcharged and trigger repayments, that might outweigh the commercial incentive, so then it might lead BT not to do what commercially it would otherwise prefer and therefore have a joint tariff. And if its judgment was that a joint tariff is therefore preferable, that might deter BT, or reduce its incentive, to roll out new services because of the commercial disadvantage?
 - A Is that a big risk? I don't know. Has BT stated that it is a risk? Yes, they have. BT would have to be tested on the facts as to whether that's true. But what I find the interesting outcome of this discussion is that it is beneficial for CPs to have a single charge is the direction of this. In fact, what BT is doing is lowering its connection charge relative to the price it can charge, and increasing rental. So you are making this movement towards a rental only which I think does have benefits to consumers. So there is an obvious benefit for allowing BT to be able to use this flexibility.
 - MR. PICKFORD: But to be clear, in relation to a new service, BT never has to roll out that new

- service on the basis that it is going to have a combined charge? If BT is worried about rolling out new services and not recovering its costs, it can obviously have a disaggregated charge.
 - A It could have the disaggregated charge, but we come back to the point: then that runs the risk of being challenged as not being cost compliant.
 - Q Obviously, we have discussed the extent of that risk, so we do not need to --
- 7 THE PRESIDENT: It all comes back, I think, to the extent of the risk?
 - A I find as a general point it is difficult to assess these risks. I am open about that. I think Mr. Myers, in his report, says that there is a case for aggregation and disaggregation on a balanced view, and I think that that has to be the case. I think that the cost allocation issues are significant, but if these risks are unknown but balanced then personally I believe that BT should be able to aggregate rather than disaggregate because there is nothing to choose between the two, even though on balance I think aggregation has a stronger case.
 - MR. PICKFORD: I think, in light of your answers, you would accept that whilst in your report you put it this way, you say Ofcom's Decision in this dispute would lead BT to combine rental and connection charges in the future. This might impose a restriction of BT's pricing freedom ----
- 18 A Yes.

- Q -- in fact, you would accept that there is no restriction on BT's pricing freedom, BT has always the same pricing freedom, it is just that you suggest there might be incentives that drive it one way rather than another?
- 22 A I think that's correct.
- Q If the countervailing incentives to have disaggregated prices are significant ones, ones that
 BT particularly cares about, the incentive to combine charges would need to be very strong to outweigh that, would it not?
 - A I think we have to take that in stages because, first, my starting point is that you have to know whether there is a distortion of aggregation versus disaggregation, so any talk that increased pricing flexibility would allow you to increase prices about DSAC, and that is clearly more distortive than the risks we have just been talking about. That argument is flawed because we do not know what the underlying DSACs are. So, remember first my point about the reason to aggregate is to get round the cost allocation issue first. So, whether that is agreed or disagreed, we now move on to the second step and we say: are there clear distortions in one way or the other. Ofcom says it thinks that they are balanced. I say that because of the presence of whole life costing, and that you will think about these

- things together that is going to decrease any risk of distortion that you are now putting
- 2 forward. I think that will significantly do it in part because most of the benefit of
- aggregation happens in the first year. Thereafter, if we are talking about there being pricing
- 4 signals then I agree, I said my approach captures that; if prices are above costs then there
- 5 will be an overpayment.
- 6 Q You have given some qualitative views, but you certainly have not demonstrated that one
- 7 set of incentives actually outweighs the other, have you?
- 8 A Nobody has.
- 9 Q I would like to move on to a new topic, which is the distortions from assessing prices in
- 10 aggregate?
- 11 A Yes.
- 12 Q Now, a scenario in which BT both complies with its cost-orientation obligation and also
- benefits from the aggregated test over the disaggregated one, is if its profit-maximising
- price for one of rental or connection is below DSAC, but it is above DSAC for the other
- element, and so that if one combines the two the combined price is below the combined
- DSACs. Maybe I can illustrate it with a more concrete example. Let us suppose the DSAC
- 17 for both rental and connections is 10 10 for each, 20 in total, and let us suppose that the
- profit-maximising rental price is 8?
- 19 A So cost 10, price 8?
- 20 Q That is correct, yes. DSAC is 10.
- 21 A DSAC is 10, price is 8?
- 22 A That's correct. Okay, so rentals is below DSAC?
- 23 Q That is correct, the profit-maximising rental price.
- 24 A Okay that is contrary to the case we are actually looking at where it is the other way
- around, is that right? Where price is above DSAC for rentals?
- 26 Q That's correct, yes. Now, on a disaggregated test it does not really matter which way
- around we do it; we could equally do it for connections.
- 28 A It is just that my mind is aligned one way, but we can do it the other way.
- 29 Q We will do it this way.
- 30 A I am sorry, the price for connections is?
- 31 | Q | I am just going to take you through the very basic arithmetic. On the disaggregated test BT
- could charge up to 10 for connection, because that is the DSAC connection, yes?
- 33 A Yes.
- 34 Q But we are assuming it does not want to charge more than 8 for rental?

- 1 A Okay.
- 2 Q So on the disaggregated approach the most that it is able to get out of the system is 18
 3 because it wants to go up as far as 8 on rentals, it can go up to 10 on connections and,
 4 overall, it can get 18 out of the regulatory system?
- 5 A Okay.

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- Q But on your test, if you combine the two it can charge its proper maximising price for rental,
 which is 8, and it can also charge up to 12 for a connection, and still only come up to a total
 of 20, which is the combined DSAC for the two?
- 9 A Yes, I think that is the position I think I am following.
- Q So that is why, in essence, your combined test is better for BT it does not matter whether you do it in relation to rentals or connections because overall it can charge higher prices than under a disaggregated test, because there is only one binding constraint rather than two?
 - A Yes, I think that is the truth. As I say, because of whole life costing, and you have to consider that connection and that rental in the first year, then the way in which CPs will think about the price that they are charged in the first year is with respect to the aggregate of connections and rentals in that year and, given that that is the price signal, i.e. the aggregated price has meaning, then I think that is a sensible thing to be able to do. It also then links to the point that we were just discussing, and this is why this example you framed it the other way around is not as helpful. What you were saying that you agree that it is beneficial, all other things being equal, charging down on the connections and pricing up on rentals. You gave a good reason as to why that is beneficial to CPs. But, you are right, this is what it gives you, it gives you the chance to price down on one, and slightly above DSAC on the other; that is not in contention.
- 25 Q Whilst that may be good for BT because it can recover more than under a disaggregated approach ----
- 27 A But also good for CPs, as you said before.
- 28 Q Well, no, I did not, actually, no.
- A When we were talking about single charges you put it to me quite clearly that a single-only charge would be beneficial. We were talking about that trade-off at some length, and hence the ability for BT to charge down on connections and charge up on rentals is something that can improve efficiency.
- 33 | Q I was talking about a particular proposition, what I put to you before.
- 34 A Okay.

- Q What I certainly did not put to you is that overall a CP would prefer to pay 20 for the combined elements of rental and connection than 18. I certainly have not put that proposition to you. So, if we could take it step by step through my example ----
- As I said, everybody prefers to pay less, but BT has the ability to price at 20, and in the first year I don't see what this distinction between rentals and connections is. Why, in the first year, can I charge a rental of 8, and a connection of 12, because actually the CP is going to consider those both together and he is either going to think that I am willing to pay 20 or 18 or some other number. In the first year you act on both of those price signals.
- You have made those point, but I would just like to go through a slightly different set of questions which does not actually go directly to what you are just saying. My example is illustrating that, obviously, by the results in this case, because you advance your test and you say that the overcharge goes down by however many million 10 million, 15 million whatever it is. So it is a test which is good for BT because effectively, under your test, it would have been able to charge higher prices than under the test that Ofcom has applied?
- A That follows.

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- Q So whilst that is obviously good for BT, conversely, that is bad for the disputing CPs, is it not, because they then are exposed to paying higher prices in the retail market when they are trying to compete against BT?
- A Not necessarily, because your starting proposition on this example is that the DSACs are known with certainty. So when you suggest to me that the rental charge is 10 and the profit maximising position price is 8, due to the uncertainty in allocation of costs that DSAC could have been 8, because I have flexibility in the way in which I allocate costs because there is no right way of allocating it. Simultaneously, the DSAC for connections, you assert it to be 10 but I am challenging the fundamentals of that, and I think that it could be 12, given the ability to allocate costs between one or the other, and both of them be reasonable. So, in that case, based on a bottom up approach to understanding cost behaviour, it is right for BT to be able to charge in aggregate in your example 20 because it can be justified by cost, and therefore it is not bad for consumers because they are not being charge above DSAC.
- I am, for the moment, talking about the disputing parties that are in this appeal and I am putting to you a very simple proposition. You agreed with the first part of my proposition, which is that basically the reason why BT likes your test, and prefers it to Ofcom's test is that it allows it to charge higher prices overall, because there is only one constraint. It does not have to match both constraints, and so therefore it can offset a lower price for one element with a higher price for another?

- 1 A It obviously likes it because it is a lower amount. It also likes it because it is potentially the right answer that by reference to DSAC that is what it should be allowed to charge.
- 3 Q That is a separate point ----
- A It is not a separate point, it is very connected to the point. To contrast it that BT is trying to get away with something that it shouldn't get away with I think is wrong to do. I am suggesting here that the costs are not certain in this example, so it becomes slightly meaningless. If we predicated that the costs could be known with certainty then we could have that discussion, but I don't think that is known in this case so we would be into the world of the hypothetical example.
- 10 Q Whether it is right or wrong, your test has certainly tipped the balance against the ----
- 11 A Very slightly.
- 12 | Q -- competing CPs ----
- 13 A Very slightly.
- 14 Q -- in favour of BT.
- 15 A Very slightly.
- 16 Q It depends on how much rebalancing there is, does it not? In this case it has tipped the balance by 15 per cent or 20 per cent?
- 18 A Yes, 15 per cent. Again, you are saying "tipping the balance", assuming that that balance is not justified by the underlying cost allocations.
- PROFESSOR MAYER: There is something I do not quite understand, Mr. Harman, in what you are saying and that is if it is possible for BT to determine how it is allocating assets between connection and rentals?
- 23 A Yes.
- 24 Q And it can achieve the same outcome as your whole life analysis can through simply
 25 determining where it was going to put various assets. So, under the basis of being
 26 separately evaluated for rentals and connections it could achieve the 20 outcome that Mr.
 27 Pickford was talking about simply by saying, for example, let us put electronics in to
 28 rentals, or vice-versa?
- 29 A Yes.
- Q So one can achieve exactly the same outcome as the one that you are looking for, not by combining or looking at in a whole life context, but simply by saying give BT the choice as to where it is going to allocate its assets?
- A I think that is absolutely right and I tried to explain that before, and maybe that didn't come across right. My primary concern is always about cost allocation first and this issue of cost

1 allocation. When I get down to a disaggregated level I say it becomes very complicated so 2 you have to aggregate to some level to make it easier. That makes it an easier determination 3 because you then do not have to go through and challenge each single cost allocation and 4 work out all the different permutations or cost allocations to see if things are right. So 5 aggregation practically allows you to do away with that so that is one way in which I frame it. 6 7 The other way that you could frame it is to say let's look at the permissible differences in 8 cost allocation. We know that electronics was allocated to rentals in 2010/11. If we take 9 that as a sensible thing to have done, let's allocate electronics in the previous years, re-work 10 out what the DSACs are, and then do the calculations on a disaggregated basis with these 11 re-stated DSACs, I would say that is a sensible approach. 12 I have pointed out DSACs, there may be some other small costs in there, but DSACs is the 13 most important of all of those, so I think that would be a perfectly permissible thing to do. 14 My hypothesis is it comes to the same answer as ----15 THE PRESIDENT: I think you said that you did the maths, is that right, and you came to very 16 closely the same numbers? 17 Α 18

My team has done the maths in terms of just understanding how much headroom there is in

allocating the electronics across to the rentals. So I am satisfied that you would do it. If Ofcom is asked to go back and do the calculations they could go and do those calculations to satisfy themselves. I do not think that would be a difficult thing to do. But I do think they come out to the same.

PROFESSOR MAYER: So as far as I can see, the only concern that you could have with the existing arrangement is to say that there may be too much interference in terms of the way in which BT does their allocation of costs between different items?

Yes, I think so. I have worked with regulators for many years and you do not want to set a Α condition that then binds a company to do something. The outcome of this is that BT could then start to work very hard at biasing cost allocations which become even less economically meaningful and people believe that there is economic meaning behind them. I think that there is as greater preference to allowing BT to allocate costs as it thinks it is sensible to, but if there is a dispute like this, to pause for a second and say could there have been a slightly different -- This is different to the allocation of common costs. We are talking about very specific components of costs between the two.

PROFESSOR MAYER: Thank you.

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MR. PICKFORD: If I could give you an example, if BT chose to have very high connection

1 costs, substantially in excess of DSAC, that would tend to deter switching to the service 2 with the very high connection cost, would it not? 3 Α I am sorry, I got confused with the number of costs there. Connection prices? 4 Q Let us say that there are connection costs in excess of DSAC for a ----5 Α But that is a cost in excess of cost. 6 O I am sorry, prices. 7 A Let me write this down so I have got it. Connections? 8 A high connection charge in excess of DSAC. Q 9 Α So let me just write this down. DSAC, so 10 and 5 perhaps? 10 Q I do not think we need numbers. We can just say it is ----11 Α I am sorry, my mind is trained to look at numbers. 12 Let us just assume that we have a connection charge in excess of DSAC for a particular Q 13 service. 14 Okav. Α 15 I think we are agreed that would tend to deter switching to that particular service? Q 16 A So a very high connection? 17 Q Yes. 18 Α CPs are charged a higher price, makes them less likely to want to go there because of the 19 time value of money and all of those things? 20 Q Yes. Now, let us suppose that that particular high connection cost was attached to a new, 21 more efficient and high speed BES service. So that would tend to delay take-up of that new, 22 more efficient service, would it not? 23 If you had a high connection charge, all other things being equal, that may, yes. Of course Α 24 in our scenario we are the other way round. In the actual facts we have got this the other 2.5 way around. 26 Q And BT certainly could not achieve that effect by combining rentals and connections into a 27 single charge because, as we have discussed before, that gets rid of the connection charge. 28 So combining charges certainly would not enable you to achieve that? 29 No, but I do not see the case why BT would want to charge very high. As I have already A 30 said, there is trade-off between what BT wants, a high connection charge, and what the CPs want. They want low connection charge. So I do not understand this example because it is 31 32 not reality. 33 Q There is a possibility, is there not, that if BT was required to introduce a new high speed

service but actually wanted to make life difficult for competing CPs and did not really want

1 to encourage them to take it up, it could levy a very high connection charge on that service? 2 Α It may be that I am just tired after a number of hours, but ----3 THE PRESIDENT: Shall we resume therefore at 2 o'clock? 4 MR. PICKFORD: Yes, I have not got much further to go. 5 THE PRESIDENT: Mr. Harman has had a long morning. We will return at 2 o'clock refreshed 6 and you can get the example again, which I am sure Mr. Pickford will work out carefully. 7 (Adjourned for a short time) 8 THE PRESIDENT: Yes, Mr. Pickford. 9 MR. PICKFORD: Good afternoon, Mr. Harman. 10 Α Good afternoon. 11 We are hypothesising that BT chose to apply an above DSAC connection cost to a new and Q 12 more efficient high speed BES service, and I am assuming that they are doing this 13 deliberately in order to delay the take-up of that service. It is a service that they have been 14 required to provide by Ofcom, but it would suit BT's purposes if in fact not too many people 15 took it up too quickly. Okay. 16 A 17 Q So they want to have as high connection charge as possible on that service. Okay? 18 Α Okay. On Ofcom's test obviously they could not go above DSAC. That is common ground. 19 Q 20 Correct? 21 Α Well, it is common ground depending on which version of DSAC you mean. As I have 22 said, there is a tremendous ability to allocate costs one way or the other. So if it is based on 23 what is in the RFS and your hypothetical example is by reference to that, then the price 24 would be above the cost, but if you are asking me whether that high connection price could 2.5 be reasonably supported by DSAC under a different cost allocation basis then I do not see 26 that there is necessarily a distortion. 27 I am asking the former question. Q 28 The former, okay. Α 29 Yes. Obviously BT could not achieve the same effect by combining its charges because, as Q 30 we discussed before, combining charges effectively means getting rid of the connection charge? 31 32 That is correct. Α 33 Q Insofar as the DSACs do have meaning attached to them, I am suggesting therefore that that

could lead to a pricing distortion which does not happen under either combining or Ofcom's

- test, and your answer, as I understand it, is that you dispute whether the DSACs actually are effectively meaningful?
 - A I think that first point I'd say is that I don't disagree. The second point I would say, the hypothetical example that you've given is not the facts of this case, or actually the connection charge is lower. The third point that we've admitted, when we were talking about this, is that a consumer, a CP, will still whole life cost. The fact that the connection is higher and the rentals is lower potentially would only constrain the CP if they were capitally resource constrained. If they had sufficient funds they would still do that because on a whole life costing basis they'd be indifferent between a high or a low connection charge. I think that where this becomes an issue is if CPs are new and they are constrained. I could see a theoretical issue but it's not one that I observe in this case.
 - I would like to come on to whole life costing because you talked a little bit about that. If I may, I would just to clarify something, firstly, that you said in your evidence yesterday in response to a question from Ms Rose, who was positing a case about BT rebalancing its charges, and you said this:

"What actually happens in this situation and why this is helpful for CPs for having lower charges is simply this: what goes out of the door is 7 ..."

In your example you had 10 and 10.

- 19 A 7 and 11.
- 20 Q Then you translated it into 7, plus 11, 11, 11.
- 21 A Sure.

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- 22 "... which is lower than the 10 in terms of connection charge and in each of the
 23 three years there's a slightly higher rental charge, 11 versus 10. In NPV terms,
 24 actually the one, the highest net present value is when I don't use that
 25 disaggregation but I paid 10 in the first year for connections, 10 in the rentals and
 26 then the following two 10s. What actually happens is that the discounting effect of
 27 those high rentals in the future has a lower value today, so actually the lowering of
 28 the connection charge has a positive NPV effect."
- 29 A Yes.
- Q When you say a positive NPV effect, what you mean is that the stream of payments by CPs has a lower NPV to them so they are better off?
- 32 A Yes.
- 33 Q Conversely, the stream of payments to BT has a lower NPV and so BT is worse off?
- 34 A The effect is opposite for BT. The CPs would prefer to delay payment and BT would prefer

1 to frontload payment. I think I also discussed that yesterday. That's the trade-off between 2 the two. 3 Q So certainly, if it wanted to remain neutral, BT would not reconfigure its charges in that 4 particular way? 5 Α How do you mean "neutral"? 6 O If BT wanted to remain NPV neutral, it would not, in fact, simply drop one charge to 7 and 7 put the others up to 11 because in NPV terms it is a lower stream of income? 8 Well, not quite. In that example what BT would do is have a connection charge equal to 40, Α 9 of all the payments upfront, because that would be the highest NPV to it. So it, 10 unconstrained, would prefer the highest upfront payment charge that it could have and that 11 would be to recover all infrastructure charges in one go, which would be 40. 12 Q I am sorry, I think we are at cross-purposes. I am not talking about what BT's optimal 13 pricing is, left totally unconstrained. I am simply saying that in your example you said BT 14 changed its prices, it drops from 10, 10 to 7, 11, 11, 11? 15 That's not neutral. Α 16 O No, exactly. 17 A In terms of the full permutations, they could have all connections upfront, they could have 18 all rentals, or it could have a mix of the two. You have the two extremes, that BT would 19 prefer all connections and the CPs would prefer potentially all in rentals. You have to get a 20 trade-off and a balance in between and that's very difficult to do. 21 Q My point is a very, very simple one. I will put it once more and if we do not get it I think 22 we can move on. It simply that if it is a lower NPV from the point of view of the CPs ----23 Α Yes. 24 -- it is also a lower NPV from the point of view of BT. There is no magic in terms of your Q 2.5 changing ----26 Q No, no, there is. 27 Q -- the structure, because BT would not simply want to have a lower NPV itself? 28 Yes. One is a cost and one is a revenue. So whilst they are the same NPV they have Α 29 different impacts with the two parties. CPs are facing a lower cost and BT is facing a lower 30 revenue stream, and that has a different connotation. 31 Q You dealt with Ms Rose with a number of problems in relation to migration and how that 32 fits with your approach. I do not want to cover those again. What you said is that you think 33 your theory works better in relation to new circuits?

I think I probably said something in those terms. What I said is that it's neutral for those

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1 who migrate across, if you're thinking about the aggregation effect because the CPs who 2 migrate across, there is no connection charge to offset, so they get the maximum 3 overcharge. So my approach is beneficial to them. That's when you're considering whole 4 life costing and distortion, but if you look at it on a cost allocation basis, then those CPs 5 who migrate across may actually be facing a higher rental charge than they actually got, 6 which is actually revealed in the RFS. 7 O I would like to focus on the new circuits point. Could you go, please, to your first report at 8 para.3.15. That is in tab 6 of core bundle D. This is where you set out your whole life 9 costing approach, though you do not use those particular words in this paragraph. That is 10 correct, is it not? 11 Α These points feed into the whole life costing element, which is expanded later on. 12 Q I understood that 3.15 effectively summarised the essence of your case on whole life costing 13 - is that not correct? 14 I think that I used the words "whole life costing" in a different place, so I'm surprised that Α 15 it's not actually in 3.15. It's developed further in my second report, but I'm saying that these 16 are inputs into the whole life costing debate. 17 Q Do you mean, when you are talking about whole life costing, that if we assume a constant 18 NPV, the particular balance between connections and rentals does not have significant 19 economic effects or are you admitting that it does have significant economic effects, 20 assuming a constant NPV? 21 Α If it's a constant NPV then clearly - if you're saying that different balances of connections 22 and rentals leads to the same NPV, then it would follow on a whole life costing, then in 23 those two scenarios it wouldn't matter, because they have both led to the same NPV. 24 Q Obviously under a pure whole life costing approach, you posit the whole life costing ----2.5 A Reduces. 26 Q -- is actually applicable on the facts of this case, and what I am asking you is: are you 27 saying, therefore, that for a constant NPV the particular balance between connections and 28 rentals does have economic significance or does not have economic significance? 29 Okay, I'm saying that if they're ----Α 30 Q On these facts?

If you're saying that there are - I'm just trying to unpack the question. If you're saying that

rental, and vice versa, and if I discounted them back today at my discount rate and gave the

same NPV, then I would say - obviously I'm going to be neutral between the two of them -

there could be two alternative connection and rental charges, so high connection and low

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they give me the same net present value today. I should be indifferent between them. That's the whole concept of NPV. If you're saying that those connection rentals gave a different NPV then that would be relevant.

- THE PRESIDENT: I think, as I have understood it, the question is not would it affect the NPV or it would not, but whether there would be other economic effects that would differ as between the two hypothetical cases aside from clearly NPV, which one is assuming is the same. Is that the question?
- MR. PICKFORD: That is my question, Sir. Another way of putting it is, how applicable are you saying the whole life costing theory really is in the real world? In the context of the assumption of constant NPV, do you accept, and we are talking about new circuits here because obviously we have seen the problems attached to migrations and I do not want to go over that again even in relation to new circuits do you accept that the particular balance between connections and rentals has significant economic effects or is it your case that it does not have significant economic effects?
- A I make it clear that whole life costing is not the answer to everything here. I state that in my report. It reduces any effect. If I am being asked, is it still possible that individual prices within that could be meaningful, I state that in my report. They can be meaningful. The fact that you are whole life costing reduces that. It doesn't do away with it, but it reduces the fact. In effect, what is happening is that if I am doing a build or buy decision and I have a particular set of rentals and connections, the only way that I can compare alternatives, which may have different balances is to do it on a constant basis, which is the NPV. So obviously NPV gives us a common basis of comparison. There is no doubt that a different structure of charges may lead to a different NPV, and that may have implications.
- Q Just to be clear, my example was NPV neutral.
- A If it's NPV neutral then it has none because it's NPV neutral. It has to be. I would agree with you if you're saying it's not NPV neutral. If you're saying that I have a connection charge and a rental charge, one is high one is low, and I have an alternative which is the other way round, if I discount them both back and they have the same NPV then I should be indifferent between them. You'd have to give me an example of where that didn't apply, but I think on basic terms that cannot apply.
- Q All right, let us give you an example. If you turn to para.3.27 of your first report, you quote what BT has argued and you appear to be endorsing what BT says?
- 33 A Yes.

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Q In sub-para.(i) you say this:

1 "Not to recognise that connection charges are themselves ..." 2 that is the point I would like to emphasise "themselves" -3 "... often a barrier to switching would be to disregard a fundamental fact of 4 business behaviour and commercial reality." 5 That is saying, is it not, that of themselves connection charges are highly important? Put 6 aside where they sit in the NPV balance, of themselves they really matter? 7 A Listen, I'm trying to agree with the point that you're making, but the way in which you 8 phrase it doesn't work. If they're NPV neutral then it wouldn't impact your decision. This 9 paragraph is assuming that when you did the discounting you would end up with different 10 NPVs. If you've got a high connection charge and a low rental and *vice versa*, you may 11 prefer one or other of those because they result in different NPVs, not the same NPV. So 12 the balance of charges, rentals against connections, could well matter. It could well matter 13 because you could give rise to different NPVs of which you would prefer. On the strength 14 of this case in which direction is it going? We are lowering the connection charge, we are 15 increasing the rentals. All other things being equal, that is beneficial to CPs and 16 disadvantages BT. If, when you started your example - after lunch you were saying you 17 were pricing up on connections, then that would be going in the direction where I would 18 endorse and accept your argument that that would potentially be more distortive towards 19 CPs, but that's not the facts of this case. The facts of this case are a lower connection charge 20 and a higher rental charge. All other things being equal that is beneficial to CPs. 21 Q My proposition is that that is not what you say at para.3.27(i) because of the use of the word 22 "themselves". 23 A I'm just explaining to you what I mean by that. 24 O Sir, I have no further questions, thank you. 25 THE PRESIDENT: Any questions, Mr. Saini? 26 MR. SAINI: I have no questions, sir. 27 MR. HARRISON: I will not prolong it too long. 28 Α Thank you. 29 Just to understand some of the numbers, actually. In your first report, p.22 you have got a Q 30 table there. I am not going to read through the numbers because they are confidential, but 31 hopefully you have got the numbers in your report? 32 Yes. A 33 Q If you look at p.7, that is the starting point. 34 Yes.

- If you compare them across, just how the numbers work. First of all, the first year, you come out with a higher charge. I am just trying to understand the maths of it, on an aggregation. How does that work? Why would it come out with a higher number if you are aggregating?
- 5 A There are some numbers that move in strange directions.
- Hang on to it. If we then move to FY09 and you compare FY09, that and FY10 are the true substantial movers in your different calculations, the £12 million or £13 million that you are talking about. On those FYO9 what are the main drivers to cause those numbers to be different? What is the arithmetical reasons for those numbers being so different?
- 10 A There's a lot of things that move in different directions. One of the things that is different
 11 year to year is a different mix of connections to rentals. So in some years there's relatively
 12 low connections to rentals so that you can't offset as much, and in some years there was a
 13 much bigger impact on that. So that's one of the reasons why you get a difference in each
 14 year.
- Q Mine is a simpler question. Is it because of price, or is it because of this cost allocation?
 Which is the factor: is it the cost allocation problem, or is it a pricing problem?
- I think all of these things are generally moving together as well, which is why it's a little bit hard to unpack. Firstly, prices are changing over time. As I said, prices are declining over time. It's also the truth that DSAC changes over time. You have two major changes to DSAC over that period. I can't remember if it's in 2009/2010 the service centre provision cost goes from rentals to connections and in 2010/2011 the electronics component goes from connections to rentals, so they are going in a different direction.
- 23 Q If you look at 2010/2011 the movement is minor.
- 24 Yes. In 2010/2011, sorry, the service costs go from rentals to connections. So that's one reason. The DSACs will change, and also the prices are coming down, but they don't all come down linearly, so it's not like --
- 27 Q But the prices that come down are those relating to connections, are they not?
- 28 A And rentals, connections and rentals.
- Q Sorry, this might be useful for me. What we are saying, though, is that throughout rentals are above DSAC?
- 31 A For the most part, yes.
- Q Right. The only time that therefore price is relevant is in respect of the connections, or your upfront charges?
- 34 A Yes.

- 1 Q So that's the only time. The fact that prices are coming down on rentals is irrelevant
- 2 between your methodology and the methodology used by Ofcom?
- 3 A Correct.
- 4 Q So the only bit can be the price reduction in connections?
- 5 A Yes.
- 6 Q So that is an element of it?
- 7 A That's an element of it. Then I think the other element of it is that there is a different mix of
- 8 connections and rentals in each year. So you sometimes get a position where the connection
- 9 surplus can be either smaller than the rental, equal or above, and that mix changes slightly
- over time. One of the things that I don't do in this is that I don't say: if there's some left over
- surplus in one year i.e. connections was above the rentals I don't flow that through to the
- second or third year. So there's no aggregation here over time. It's aggregation in one year.
- 13 It's difficult for me to be more precise because the numbers change, and to be fair, Mr.
- 14 Coulson did the analysis, the team referenced them and did that, but I have never got into
- 15 them to say --
- 16 Q OK. So perhaps I can save that one for Mr. Coulson. If you turn to bundle B as well, the
- Determination p.328. I am sorry, I have come back to this table with Mr. Dolling as well
- and I am coming back to it with you. Once your eyes have adjusted you can see this comes
- out of the RFS, so it is not for all the products that were concerned, but this would have
- been a substantial part, I guess, behind your analysis.
- 21 A Yes, I mean I think there was a more detailed model that Ernst & Young used to do this.
- 22 Q When you look at it, in the first year of this, and if you total what's on this page (and I
- 23 recognise there are not totals there), for the areas you were looking at, which is the WES
- and the BES, leaving out the main link rental, then in the first year, 07 on there, we are
- looking at external revenues of somewhere in the region of about £52 million.
- 26 A OK.
- 27 Q The excess over DSAC and actually FAC in those levels, the excess is not significantly
- between the two, is about £31 million/£32 million.
- 29 A Yes.
- 30 Q So at that point in time, if you like, the degree of excess pricing based upon the RFS was to
- 31 the tune of 60%?
- 32 A Yes.
- Having been through these numbers, would you describe that as significant in your own
- terms? I am aggregating, what I am doing here is aggregating as well.

- Yes. I think that's always a difficult question as to what is significant. In excessive pricing cases the case of how unreasonable something is to a point that it becomes significant --
- 3 Q 60% excess of the actual price. Therefore, you would not describe as significant?
- A There are some cases, like in Mac, where the Tribunal found differences between cost and price of 1,000% and at that point in time it decided. I am just giving an off the cuff remark and I hadn't gone into the detail. That looks a high amount. That's why an overpayment comes from that.
- 8 Q Fine. If you were in BT at the time and you saw that coming out in the RFS, would that have been, in your mind, a cause for significant investigation into what was causing that?
- 10 A You know, I think it's a reasonable question, it's a reasonable question to which I don't know the answer.
- 12 | THE PRESIDENT: He is asking if you had been there at the time.
 - A Yes, I understand that. I think there's a number of complications. There's a number of issues that are difficult which have been explained by Mr. Maldoom in his evidence. One problem is that you are trying to set a price ex ante, but you are reviewing costs ex post. So you do have that delay. It may be the fact that you believed that that was causing the issue and that next year you repeat the game, you think that you are going to get the forecasting right.
 - MR. HARRISON: OK, fine. Let me just sort of continue, if you can bear with me. This is the information that goes out for your customers on which you are going to be judged. So even before it goes out you would have expected someone to be looking at this to make sure the numbers were right for a start before they went out. Having seen the size of it and the extent of it, you would have expected the methodologies behind it to be thoroughly investigated.
- 25 A Yes.

- 26 THE PRESIDENT: Is that fair? Do you agree with that?
 - A You know, I don't disagree with it at all. Having spent many years in pricing and cost allocation, you know, these costing systems have a degree of complexity which people get lost within. If BT's mind was around ensuring the accuracy of the costing allocation system, and that's where a lot of the focus goes into, it is quite feasible that they take their eye off the pricing side of it. In fact, there are two different teams, as I understand it. There is a pricing team and there is a costing team. The pricing team doesn't use the RFS; it uses the underlying data to come from that. So there is a degree of left hand not talking to right hand. I've seen that within businesses.

The second thing to overlay on that is that it is BT's case that they've always thought about these things in the round. So if BT's mindset was that when we interpret the condition we interpret it in aggregate, everything in aggregate, plus we have an expectation that Ofcom will accept that there are different ways of allocating costs, some of which will be overheads, into it, coupled with the fact that you are trying to set a price on an ex ante basis, I think that it is possible that this would slip through the net when this is one part of BT and there are many parts to BT.

- Q You say in aggregate, these are in aggregate. These are aggregate figures, are they not?
 - A These are in aggregate, but you know I think there is a wider question that Mr. Maldoom was talking about, overheads coming into the business. It seems like there's a lot of complexity. At the same time, I wouldn't expect BT, because it's in the RFS, to knowingly and blatantly do it either, because obviously it will get caught doing it. So I suspect there must be an explanation but I don't know. If you're asking me if I was there and I was the regulatory manager might I have spotted it? It's plausible that I would.
- MR. HARRISON: As I've done in aggregate, and if you look at your first year actually in the table that I first referred you to, the difference, although I pointed out the arithmetic sort of difficulty I had, nevertheless were very close numbers. So in the first year the methodology of aggregation versus disaggregation has no impact?
- 19 A Yes, exactly.
- Q So in looking at that year it has got nothing to do with methodology. It could be ex ante, because they did not know. But ostensibly, from an accounting point of view, that was potentially the overpricing, and arguably could have been a provision in BT's accounts for the money that it may be subject to overcharging and have to repay.
- 24 A Yes.

- It would not have been unreasonable to have actually set up a provision for that in BT's accounts in the possibility/probability that it may be repayable. Would that be fair?
- 27 A The auditors missed it. You know, you would expect them to be reasonable people and well
 28 versed with BT's regulations and provisions. So it's easy for me to say that I would spot it,
 29 but BT is paying millions to an accounting firm that doesn't.
- OK. In the second year the situation, although slightly reducing, we have revenues then (if we total those tables) of about £79 million and an excess over DSAC of £38 million, so again it is 48%, still a substantial number in the second year, and then 67% over FAC.
- 33 A Yes.
- 34 Q Again, it is the second year it has happened. The first year ex ante, life is difficult; in the

- second year why would that not --
- 2 A Why wouldn't it have been addressed?
- Q Sorry, I will not ask it that way, but from your point of view, again, if you were involved in it would that have been a matter of concern for you?
- Again, to be able to answer that question I would have to know two or three things. One is the size of the *ex ante* risk, and I honestly do not know if that can swamp these numbers.

 But if you are expecting potentially half the volumes that actually do or vice-versa then obviously that is going to have quite an impact on unit costs, that volume side. I can see that that can be significant. It still requires somebody who is responsible for both pricing
- 11 THE PRESIDENT: That will not be an explanation why it was not. I do not think that is the question. You are not being asked to go into what happened at BT.

and costing simultaneously to get it and connect, and understand that.

- A But that is why it's such a difficult question for me because I wasn't there and I wasn't there and I wasn't doing it. If you are asking a reasonable person, who was doing this and was on the ball, should they have been able to stop that, you would have to say it is a sensible question to ask, I am agreeing with you.
- MR. HARRISON: But in the explanations that have come through as well there was this not the right hand knowing what the left hand is doing. With this size, would you not have got the left hand and the right hand in the same room to have a conversation about it?
- 20 A That is a reasonable thing to think.

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- 21 Q Given the size of the numbers, and I am just taking them from this table?
- 22 A But don't forget this is small in comparison to BT overall, so there has to be a materiality
 23 factor to this. There are many parts to BT who have many issues. The regulatory team does
 24 not have hundreds of people strong, they are dealing with Ofcom on a day to day basis.
 25 There is a least line review, there are all sorts of reviews going on. People can be fully
 26 employed, fire-fighting and dealing with things at their desk at the same time.
- 27 Simultaneously you might why didn't the CPs observe this straight away either?
- Q Sky actually picked it up in 2008 which was, I guess, the first opportunity that they had to pick it up. I think that is the right date, it was January 2008?
- 30 A And that was because RFS stage was not ----
- 31 Q Because the RFS stage I presume for 2007 had only just become available just before
 32 Christmas or whatever, and so on. So, therefore, they did pick it up. What I am trying to
 33 understand it, and Professor Mayer actually posed the question to you before lunch, which
 34 was that there is a degree of flexibility that exists within BT to actually start correcting for

1 some of the effects to achieve through its costing model what you have achieved ex post 2 through your aggregating process? 3 Α That's right. 4 Q Therefore, given the size of these numbers you would have perhaps expected, I think, BT to have actually given a real drains-up examination - if I can use that term - to understand why 5 6 these numbers were coming out as they were ----7 A Yes. 8 Q -- and really look at some of these, so the decisions did not come as a surprise to them at a 9 later date. It was not that they suddenly found that they should have electronics components 10 which are 95 per cent, you said, of the problem? 11 A But remember I am only talking about connections and rentals, because you are comparing 12 total overcharge ----13 Yes? Q 14 -- you are already taking that into account. If I had changed my electronics that wouldn't Α 15 have changed these numbers. This is an issue above that as to you didn't have enough cost 16 in there. 17 Q Absolutely right, because at that point in time everything, near enough, was above DSAC, 18 so looking at it, and trying to come to the solution you would have expected the 19 methodology to have a pretty good exhaustion of really what was relevant to the numbers? 20 A Only to the extent, I think, that we think BT was incentivised to play a cost allocation game 21 as opposed to coming up with something that it thought was reasonable, because it thought 22 that if it had to go through an investigation it could still have an opportunity to show that 23 there were different ways of allocating costs to support their case. 24 An unintended consequence of something like this is that BT goes away knowing the game, 2.5 and then starts to artificially allocate costs in a way that supports its prices and I think that 26 could be dangerous if you then said by the time that we come to the determination we'll 27 never look at the underlying cost allocations because you have the flexibility to do it. I think 28 I would much prefer a process that allows them to record their costs. 29 If there is a problem - and this identifies that there is a problem - and whether they should 30 have done something about it at the time is why we are here today, but at least they have an 31 opportunity at that point in time to say: "That was on the basis of costs allocation. I have a 32 second way of allocating it, it is before the Tribunal, do you accept that that is a sensible 33 way?" If they cannot prove that point because there were errors or something else then 34 there is a case for over payment for a recharge and I fully accept that. But it is difficult for

1 me to know without having been there how easy these things would have been to spot. I 2 have worked with regulators and regulated companies and it can go for years before 3 somebody actually spots that there is something wrong in the cost allocation system, hence 4 why it evolves over time. That is why there are corrections to it over time. Those things 5 can be very difficult to disaggregate and understand. At a total level you are absolutely 6 right you can see an issue. 7 What BT could have done at the time to correct that, I do not know. 8 Q Because in the evidence you gave this morning and yesterday, one of the key things was the 9 electronics components which was 95 per cent. In your description this was a pretty 10 common problem of: do you recognise it up front, or do you spread it? 11 A Correct. 12 Q I am sure it was not just the one point issue and that there were probably a lot more, but that 13 was the substantive point that causes the change, so it is only a one point type discussion 14 and a decision, rather than a million different calculations in order to get to it? 15 No, that is right, and in 2010 and 2011 they recognised the problem and they corrected it. I Α 16 think if you talk to people who were there - you will have an opportunity to hear Mr. 17 18 19

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Coulson in due course, he can tell you in more detail the things that I am telling you today and he will have a much better understanding of why these things were difficult. He will genuinely say the pricing team thought it was on one basis, the costing team thought it was on the other basis. When they finally did come together, and for whatever inefficiency they didn't, they corrected the process.

That does not address your overall observation that in total DSAC is above pricing, prices

That does not address your overall observation that in total DSAC is above pricing, prices are excessive with respect to DSAC. What BT could have genuinely done at that point in time to have lowered that to make sure that they were not over pricing is difficult for me to determine, apart from to say I guess if I'd been there and I was switched on and I was focused on it, maybe I could have spotted something like that - maybe somebody could. But it pre-supposes that you have enough resource, and you have enough bandwidth to be able to turn your attention to it and it can slip through the net, I am sure that it can.

THE PRESIDENT: As you said, just a moment ago, that BT were trying to set their price *ex ante*, I just want to ask a couple of, I think, very simply questions. Despite that sort of price setting, as I understand it in the ordinary commercial world DSAC is not a common accounting concept, is that right?

A That is right. I remember reading the PPC, they say in a contestable market the price could be anywhere between FAC and SAC, and there is a whole debate about how you do a SAC

- test in PPC. It was agreed that DSAC was a calculation of convenience to be able to set a
- 2 level and I think that it is important to realise that DSAC may be, will be below SAC, so
- 3 there is still potentially a degree of scope for BT to price above DSAC and below SAC and
- 4 still for that to be consistent with contestable market ----
- 5 Q I asked a much simpler question, actually, which is: outside this rather specialised field of
- 6 telecoms regulation, is it right that DSAC is not a commonly used accounting concept?
- 7 A I have not seen it before this set of cases.
- 8 Q And you have had quite a long experience as an accountant before this set of cases?
- 9 A Yes.
- 10 Q And you never encountered it?
- 11 A No.
- 12 Q So it probably is fair to say it is not commonly used or you would have come across it I
- 13 imagine?
- 14 A Absolutely, and so in ----
- 15 Q That is all I was asking.
- 16 A In the excessive pricing cases that I have done we have looked at the range from FAC to
- 17 SAC because the products are less and we've done some combinations based on that to
- make sure that there is no recovery overall. If I could do that that would be my first test, but
- 19 here it's very complicated.
- 20 | Q If a multi-product firm launches a new product or a new service in a normal competitive
- 21 market and is having to price it prospectively, commercially they will need to price at above
- 22 their marginal cost to cover their marginal cost?
- 23 A Yes.
- 24 Q And a reasonable rate of return?
- 25 A Yes.
- 26 Q Which I think economists would call LRIC or LRIC+, but including rate of return?
- 27 A Yes.
- 28 Q Then that will be a profitable price?
- 29 A Yes.
- 30 | Q And to do that if you are pricing the various elements of that new service separately, clearly
- 31 you are going to have to cover the common costs across those elements particular to that
- 32 service?
- 33 A Yes.
- 34 Q As between them you have to allocate it in some way or other so you cover those costs,

- because they are part of the marginal cost of the service, are they not?
- 2 A Yes.
- And there are various ways of doing that as you explained, and reasonable people might do
 them different ways. If the division of the company was told by its CEO: "You have to do
 more to cover your marginal cost and rate of return, we expect the service also to contribute
 to a degree to the company's fixed costs, headquarters, my salary", etc, and your pricing
 prospectively, of course, setting your prices, then there is a measure of cost to do that. What
 would one normally use one would normally use FAC as a basis of trying to do that, to say
 what is a reasonable allocation of your ----
- A Costs multi-product firms, it is difficult. You look at things like the OECD guidelines on excessive pricing, think about them all in aggregate because it is too difficult to disaggregate. But, that aside ----
- 13 Q Yes, but you do not have market power?
- A Even if you had market power and you were looking at it, as I say, multi-products it is very difficult to unbundle these things, you should look at these things in aggregate. If you are going to disaggregate then you would have to give very careful consideration as to the level of costs that should be allocated.
- One method, FAC, assumes that over the products you get cost recover back.
- 19 Q FAC is a well established ----
- 20 A In regulated terms ----
- 21 Q Yes?
- 22 Α -- we regulate at FAC allocatively efficient on all this kind of stuff. What the contestable 23 market field goes on to say is that in competitive firms you need a little bit more than that 24 because at the limit, at the price at which you would expect competitive entry, is whether 2.5 that person could compete with you and just provide that one service. We are not assuming 26 that you have a firm as big as BT coming in to be able to compete. We are assuming that a 27 CP who is small and is going to take a position against you. What is the minimum price 28 which they would face? And that's its kind of entry cost into the market; that may more 29 closely resemble the stand-alone cost of that product. That's why we get this gap between 30 FAC and SAC because from a competitive perspective that is the pricing signal. If I price 31 above that cost then I would expect competitive entry, so that's why you get that range 32 between FAC. And SAC.
- 33 Q That is in terms of pricing signals and inducing entry.
- 34 A Yes.

- I was thinking of perhaps a rather simpler way of simply being told you must allocate to this new service a share of the fixed costs of the overall business, and you need a method of doing that.
- 4 A Yes.

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- 5 Q Would FAC then be a reasonable method of doing it?
 - A I think if the question is how do I allocate a set of common costs to a set of prices for accounting purposes, then ordinarily, 9 times out of 10, a FAC type methodology would be used, either based on something simple, such as revenue, though in a competitive circle people may say revenue, if one is excessive, that is going to over-allocate common costs to the service level is excessive. There could be an operational method, number of employees, something like this. There could be very detailed analysis that says, "Well, this part of your business uses this much HR, this much finance, so we will try and do it on a more disaggregated basis". As yesterday, we were told the gold standard, Ramsey pricing, we would allocate common costs in inverse proportion to elasticity. I have never really seen it done successfully but that is still ----
- 16 Q That is a theoretical model ----
- 17 A It occupies people's minds.
- 18 Q -- in part applying practice.
- But generally speaking, in terms of management accounting purposes, you see two things.

 Either you see no allocation, because actually I want to understand my decisions at the
 margin and I do not want them to be distorted by common costs, or for accounting purposes
 then it will be allocated on some kind of basis which is a FAC methodology. But for
 competition purposes, in my opinion, most competition authorities around the world will
 depart from FAC because they understand that that is the point which sets the competitive
 price signal. So it depends on what you are going to use it for.
 - PROFESSOR MAYER: And whether to set that, as you describe it, competitive pricing is appropriate depending on whether or not you want to encourage entry of similar firms which, in this case, is relevant to upstream activity.
- 29 A Yes.
- Q Or if you want to encourage entry downstream you presumably might want to set a price below that?
- We do, and I think that is not contestable but I think that what Ofcom says is that it has to balance dynamic efficiency against productive and ... efficiency, and so for the duration of this case what was on their mind was dynamic efficiency, encouraging BT to innovate in

- a consistent way with the legislation. And you might get at some point, if there is a
- 2 constraint in the market, a change from one standard to the other and leads to a different
- 3 form of regulation and considerations.
- 4 PROFESSOR MAYER: Thank you.
- 5 MR. PICKFORD: Sir, I have one very, very short question arising out of that.
- 6 THE PRESIDENT: Yes. You ask now and there may be re-examination.
- 7 MR. PICKFORD: I am grateful. Mr. Harman, if you can please just take up Bundle BT8. It is
- 8 just to clarify a point that you made about BT's accounts and the extent to which they are
- 9 audited. Turn please to Tab 17 in BT8. Do you have that?
- 10 A Tab 17?
- 11 Q Tab 17, yes. If you could turn, please, to p.40 within that, which is Section 3.10, being the
- 12 AISBO.
- 13 A Yes.
- 14 Q You see here that BT sets out various financial information in relation to AISBO?
- 15 A Yes.
- 16 Q You see that there are two sections below the first two rows that deal with non-
- discrimination and then cost orientation. You see that? There are some lines about a third
- of the way down, a group. The first six columns are the non-discrimination and then the
- 19 next four columns is cost orientation.
- 20 A I am sorry, I thought for some reason you said "rows", but columns, yes.
- 21 Q You see that?
- 22 A Yes.
- 23 | Q You see that for cost orientation we have "FAC", you see section 6?
- 24 A Yes.
- 25 Q And then next to that we have "Unaudited LRIC floor"?
- 26 A Yes.
- 27 | Q Then "Unaudited LRIC ceiling"?
- 28 A Yes.
- 29 Q The "Unaudited LRIC ceiling", that is another word for DSAC, is it not?
- 30 A Yes. I think so, yes.
- 31 Q So we see that of all the financial information that is prepared by BT, its LRIC and its
- 32 DSAC are unaudited?
- 33 A Yes.
- 34 Q But its FAC, we infer from this, is audited?

1 Α Yes. I mean, I think the question that was put to me was that if BT knew about this there 2 should have been a provision and therefore statutory accounting purposes the auditors more 3 generally should have been alive to that factor. Whether the FRS are audited and unaudited, 4 the statutory accounts are audited. 5 MR. PICKFORD: I have no further questions. Thank you. 6 THE PRESIDENT: Yes, Mr. Thompson. 7 Re-examined by Mr. THOMPSON 8 MR. THOMPSON: Mr. Harman, it may seem a while ago but there are a number of specific 9 points that I would like to just pick up with you, largely arising out of the cross-examination by Ms. Rose. First of all, simply on reference that you did not have at your fingertips but 10 11 which I can assist you with, if you turn to your first report at 4.29, you might want to refresh 12 your memory about the contents of that paragraph. (After a pause): 13 Yes. Α 14 That was the issue between the views of the pricing team and the charging team. Q 15 Yes. Α 16 The reference is given at the footnote, which one finds in BT24 Tab 13. Do you have that? O Yes. 17 A It is something called an ASIG paper, which we will come to in a moment, and it is dated 18 Q 3rd November 2010. 19 Yes. 20 Α Or rather the submission date is 3rd November 2010 and I think at the top right it has 10th 21 Q November 2010. I think it is simply the first paragraph on p.2 that you might want to read 22 23 and then comment on. 24 A Yes, I think that goes to the point that I was talking about, that there was a 2.5 misunderstanding between the two parties. I discovered that initially through talking to the 26 regulatory finance team and then this document was used as an uncontemporaneous 27 document to corroborate that fact. 28 So that was the factual basis for your assertion in your report? Q 29 Yes. A 30 Q Just for the Tribunal's note, if we are interested in what ASIG is, that is explained in Mr. 31 Dolling's statement at Tab 7, para.65 and following of his statement. It is a group within 32 BT. The second thing, Ms. Rose asked you some questions about main link and its 33 relationship to connections and rentals. I think you very fairly said that it was not an issue

that you had really thought about. Can I just assist you in relation to that? Paragraph 6.6 of

1 the Determination, Core Bundle B.

- 2 A I am sorry, which page?
- 3 Q 47.
- 4 A Yes.

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5 Q It says:

"As can be seen in the diagram, BES services consist of 'local ends' and 'main links'. Local ends are used to connect a CP's equipment in a BT local exchange to the CP's core network, whereas a main link is required when the BES circuit passes between two BT local exchanges".

Do you have any comment on that in relation to the issues that you have been considering? (After a pause): If not, we will simply pass on. I was simply clarifying because the issue was dealt with in a rather abstract way.

- A No, I do not think that I do.
- Q The point was put to you, I think, that there was some inconsistency in your answer because connections and rentals were said to be in the same economic market but main link was not separately treated by you, or was not treated by you as part of your investigation. I just put to you, does the fact that connections and rentals are in the same economic market mean that nothing else is in that market?
 - No, absolutely not. It means that there are other things in the market, most of which will be substitutes to each other. They will be services that CPs have a choice about. The specific context of rentals and connections being in the same market is that these things are not individually construed as a service. One does not have a connection or one does not simply have a rental. They are always bought together. In an economic perspective they are economic complements. This is why when Ofcom talks about them being in the context of a lease line review, they say that rentals and connections are in the same economic market and they are consumed together means that these two items should necessarily be thought of together. It goes on to say that we acknowledge that it is difficult to get this balance between the two and therefore, for the purposes of setting a starting price control, we will aggregate them and it is using that economic argument to support the aggregation. Nothing has been said in response to what I have set out in my first and second reports as to why that should not also apply in a straight cost orientation test. What Ofcom does say is that a price control should not be more restrictive than cost orientation. It says that very clearly. Yet in cost orientation, by forcing you to think about things individually, that is more restrictive so I find that a little bit difficult to follow.

- 1 Q Can we just look once more at the Leased Lines Charge Control passage that eventually we
- got to? It is in Core Bundle E, Tab 14, and it is pp.157 and 158 of the report, which is the
- 3 control document which is manuscript pp.44 and 45.
- 4 A Yes, I have those.
- 5 Q I think you were taken to 5.94 but can I also ask you to look at the first bullet in 5.90?
- 6 A Yes, I have that.
- 7 Q And then 5.94. Various assertions were made to you about main link?
- 8 A Yes.
- 9 Q Do you have any reason to think that main link was included in this calculation on the basis of what you were told?
- 11 A No, I don't. As I said, they talk consistently about connections and rentals. I think, if main
- link had been a part of this, it would have been included with more clarity. As I said, it
- talks about aggregating one connection and three rental charges, it makes that very clear. If
- main link would have included, there would have been a second sentence, in my opinion,
- saying what assumption it had made about main link, because main link isn't simply three
- years of main link charge. There are other factors that go into that calculation.
- 17 | Q You were also shown the detail of the control that was put in place. I do not know where
- 18 you have got it in your papers. You will recall this is a very detailed annex to the charge
- 19 control?
- 20 A Yes.
- 21 Q Do you have that available?
- 22 A No, I don't.
- 23 THE PRESIDENT: It was handed up as a loose document.
- 24 A Sorry, is it this leased line one? Someone has helpfully put it to the side.
- 25 MR. THOMPSON: I do not think I will be accused of leading you if I say this is a more intrusive
- form of control than cost orientation is that fair?
- 27 A It certainly is, yes.
- 28 Q If we look at annex A on p.179, there are a number of items in relation to specific products -
- is that correct?
- 30 A That's correct.
- 31 Q I think it was put to you by Ms Rose, it went quite quickly, I think it was HH4.10. There
- was reference to each of the charges for each and every product, band or service falling
- within a particular classification.
- 34 | THE PRESIDENT: Was it not 8?

- 1 MR. THOMPSON: I am sorry, it went quite fast. In that case, I apologise.
- 2 THE PRESIDENT: That was my note.
- 3 MR. THOMPSON: Each and product, band or service falling within the AI sub-basket?
- 4 THE PRESIDENT: That is the one you highlighted, yes.
- 5 MR. THOMPSON: So it is a specific provision in relation to specific products?
- 6 A Sorry, am I on p.179?
- Yes. I just wanted to ask you if there is any equivalent provision in relation to cost orientation that you are aware of?
- 9 A I'm not aware of any.
- 10 Q It was put to you, I think, that LES products were a form of wholesale product. Just as a point of correction, can we look at core bundle C, tab 2.
- 12 A Does this go to the fact that they may have been retail products?
- 13 Q It is simply a clarification, yes. It may be that everyone knows that perfectly well, but it is explained in Mr. Jones' annex, p.23?
- 15 A Yes, as I just said, a retail product.
- 16 Q Then various points were made to you about a reduction in the connection for WES 10, and
 17 still in Mr. Jones' second statement, which is at tab 5, and it starts at para.10, he comments
 18 on this whole area in some details in terms which I think were not challenged at paras.10
 19 through to 18, and I draw your attention in particular to para.14. Do you have any comment
 20 on the WES 10 that was put to you in the light of that?
- Yes, I think there's probably a reference to this in my second report, but in effect I think
 what he is saying here is that the company that was disadvantaged most by this change was
 BT, because it had by far the most circuits, so not only did it have to charge a it faced a
 high connection charge, but once there was rebalancing they then faced a slightly higher
 rental charge as well, and so the combined effect is that BT was also hit by this, and
 potentially more than anybody else.
- 27 | Q Thank you, those are my questions. Does the Tribunal have any further questions?
- 28 | THE PRESIDENT: Thank you very much, Mr. Harman, you are released as a witness.
- 29 A Thank you.
- 30 (<u>The witness withdrew</u>)
- MR. THOMPSON: That then concludes BT's expert economic witnesses, though Mr. Coulson will be here later on, so I will hand over to, I think, Mr. Pickford.
- 33 | THE PRESIDENT: Yes, Mr. Pickford?
- 34 MR. PICKFORD: I call Dr. Houpis.

1		Dr. GEORGE HOUPIS, Affirmed
2		Examined by Mr. PICKFORD
3	Q	Good afternoon, Dr. Houpis. Could you take up bundle CBD, and turn, please, to tab 8.
4	A	Yes.
5	Q	Do you have there the first expert report of Dr. George Houpis?
6	A	Yes.
7	Q	And could you turn through, please, to p.27?
8	A	Yes.
9	Q	Is that your signature?
10	A	Yes.
11	Q	Do you adopt this as your evidence in these proceedings?
12	A	Yes.
13	Q	Could you turn on then, please, to the next tab, tab 9. Do you have there the supplementary
14		expert report?
15	A	Yes.
16	Q	Can you turn to p.6. Is that your signature?
17	A	Yes.
18	Q	Do you adopt this as your evidence in these proceedings?
19	A	Yes.
20	Q	Can you turn on to tab 10. Is this your third report?
21	A	Yes.
22	Q	If you turn, please, to p.28, is that your signature?
23	A	Yes.
24	Q	Do you adopt as your evidence in these proceedings?
25	A	Yes.
26	Q	Then finally tab 11, the next one on, please?
27	A	Yes.
28	Q	Do you have your fourth report?
29	A	Yes.
30	Q	And if you turn, please, to p.48, again the same questions: is that your signature and do you
31		adopt this evidence in your proceedings?
32	A	Yes.
33	Q	I have not gone to the additionals because we have them all there in the core bundle. Would
34		you wait there, please, Dr. Houpis, thank you.
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1 Cross-examined by Mr. SAINI 2 Q Good afternoon, Dr. Houpis, I am going to ask you some questions on behalf of Ofcom. I 3 am going to focus on your first and fourth reports which I believe are concerned with the 4 question of cost standards. I notice from your first report, we do not need to turn this up for 5 the moment, in reference to your background you appear to have substantial experience in 6 the telecommunications industry, in particular on advising in relation to price controls in 7 telecommunications. I just want to check with you whether or not certain points are 8 controversial. I put these points, you may recall, to Dr. Maldoom. I want, first of all, to ask 9 you about DSAC. I think everyone has agreed that DSAC within cost accounting is not 10 generally well known, but it is a familiar concept within telecommunications regulations -11 do you agree with that? 12 I agree with that. Α 13 Would you also agree with me that DSAC is a benchmark, a costs benchmark, which Q 14 provided a regulated firm with quite substantial price flexibility in recovering its costs? 15 I would agree with that. Α 16 O Would you also agree with me that it is a benchmark that, although it is flexible, is bounded 17 in a way to prevent the regulated firm from exploiting its market power? 18 Α I think that depends in terms of how in practice it gets applied. I do not think, necessarily, 19 this on its own would be sufficient to achieve that objective. It is one of the instruments 20 that is available to ----21 What I am suggesting to you is that there are two, in a sense, benefits to DSAC. Number Q 22 one, that it gives pricing flexibility, which I think you agree with; and number two, the 23 pricing flexibility it is limited, it is bounded, and I think you are agreeing with me that that 24 is one of the controls that can be used to prevent an exploitation of market power? 2.5 I agree that having it bound in terms of the level at which a regulated company can price its Α 26 services would be necessary in order to try and restrict the ability of that regulated company 27 to exploit that power, but at what level it is bound is also quite an important question as to 28 whether you restrict the ability of the company to exploit its power effectively or not. So, 29 having DSAC, the answer is yes, it does prevent a regulated company from pricing a group 30 of services above DSAC, if it was to comply with DSAC, but that's not necessarily 31 sufficient to ensure that the company doesn't exploit its market power. 32 Would you agree with me that if a regulator such as Ofcom decides to use DSAC as a Q 33 measure of cost orientation, that is a decision it could arrive at as a matter of a regulatory 34 balance?

- 1 A I'm not sure you'll need to unpick that question. In what context?
- 2 Q Certainly, let us look at what happened in this specific case, and it may be easiest if I show
- you a part of Mr. Myers' evidence which I did not believe was controversial, but it will put
- 4 the matter in context. If you can look in the expert bundle, bundle D, divider 13, please, p.8
- 5 within that divider. Perhaps you can read para. 17 to yourself, first of all, please.
- 6 A Yes.
- 7 | Q Have you read that?
- 8 A Paragraph 17, yes, I have.
- 9 Q You will see there that what Mr. Myers is saying is that in this specific, this is step 2 of the
- assessment in this specific case, DSAC is being used because it reflects a regulatory balance
- between these two factors in (a) and (b) you see that?
- 12 A Yes, that is the wording that Mr. Myers is using. Yes.
- 13 Q Is it your position in these proceedings that that is a regulatory balance which is completely
- inappropriate or is it your position that you have a different view and this is not completely
- inappropriate?
- 16 A Maybe I can set out my position. I was not sure what the distinction you give to not
- 17 appropriate than ----
- 18 Q Maybe I should put the question more clearly to you.
- 19 A Sure.
- 20 Q Dr. Maldoom and Mr. Myers have explained the use of DSAC as a particular measure of
- 21 cost orientation and that is the way in which Ofcom has decided in this case, and
- 22 historically, to interpret and enforce cost orientation in addition. As a matter of economics,
- and you are here giving evidence as an independent economist, as a matter of economics do
- 24 you consider that the use of DSAC in the context of this dispute is a reasonable option open
- 25 to a regulator?
- 26 A I think, as I have set out in my reports, I think there is a distinction between the issue of cost
- orientation at the individual service or charge level and the issue of cost orientation at the
- level of group of services, and I think that a measure of DSAC is an appropriate measure
- 29 when one is considering the issue of cost orientation at the level of the charge or service
- level, at the individual charge or service level, but in my view using DSAC for a group of
- 31 services in this context is not appropriate to provide the necessary protection.
- Q What is your understanding of the way in which Ofcom has used DSAC in this case? Is
- Ofcom using it at an individual level or in a group level?
- A My understanding is that in this case Ofcom has used the DSAC test at the level for

1 individual charges. 2 Q You are not disagreeing with that as an approach? Is that right? 3 Α No, I am not. 4 Q But your desired approach, and if I can call it "the Houpis test" because I think that is what 5 the experts call it, is that in addition to that you would like to see Ofcom apply a further test, 6 which is the Houpis test. Is that correct? 7 A I will accept the name but it is not just my view, but the answer is, yes, I would like to see 8 the additional test being adopted. 9 Q You have seen Ofcom's position that it has adopted the DSAC test, which is well-known of, 10 and it considers it inappropriate in this case to adopt a further test. You know that is the 11 position? 12 I do, yes. Α 13 We will explore in a moment the reasons for that. The Tribunal is here deciding whether, in Q 14 addition to the DSAC test a further test should be applied. You are aware of that? 15 Yes. Α 16 O As an economist, is it your position that not to adopt this further Houpis test leads to some 17 kind of regulatory failure? 18 Α If I set out my understanding of the Ofcom objectives, it is to actually enforce the cost 19 orientation obligation and the cost orientation obligation sets out that the costs for services 20 should be set on the basis of forward looking incremental cost plus an appropriate mark-up 21 for common costs plus a mark-up for cost of capital, and, in my view, if you apply this at 22 the level of group of services that, in my view, would require the application of an 23 additional test which is the FAC test, and therefore if you do not apply that then my 24 assessment is that that would be inconsistent with what the cost orientation obligation 2.5 requires. 26 Q Are you aware of any circumstance in the telecommunications industry where the Houpis 27 test, if we call it that, has been applied to a cost orientation obligation of the type we are 28 considering in this case? 29 Okay, just to clarify a couple of things. The cost orientation obligation is very specific to Α 30 the UK regulation. There are different approaches in other countries and I understand that is 31 not what you are talking about, but you should not presume that there is some universal 32 approach in regulation. There are cost orientation obligations across foreign telecoms 33 operators, despite the UK specific measure. I think the specifics of the case are, in my view, 34 what is the relevant question in terms of the cost orientation review. So, for example, if the

obligation that the company has is in relation to a range of services but it only breaks the cost orientation obligation in relation to one service, then I think it is appropriate in that context to allow the company to price up to DSAC, and that would be the test. My understanding is in previous cases, for example in the *PPC* case, that it was concerned with individual service or one particular service. In that sense, if you were to look at the group test, I do not think necessarily it will apply because it was only one service. Here I think you have a different situation because the cost orientation obligation applies to a range of services and therefore I think the relevant question for me is how should the cost orientation obligation be interpreted in this specific context.

- It is vital, because I have not made my question clear, and I do not want to debate with you the *PPC* case because we will have to address the Tribunal in relation to that separately. Let me make my question very, very clear, and I apologise for not having done this earlier. The Houpis test seems to appear, if I have understood the history correctly, when Frontier Economics was advising Sky and TalkTalk in the course of Ofcom determining this dispute. Is that right?
- 16 A No, that is not right. The actual Houpis test, as appears in my report, did appear in my report.
- 18 Q No, I understand that but were you advising your clients, or rather Sky and TalkTalk, in the course of the disputes when Ofcom was considering that?
- 20 A That is correct.

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- 21 Q And in the course of those disputes Sky and TalkTalk put forward this test, no doubt based upon your advice?
- 23 A Actually I do not think they put forward that test.
- 24 Q They did not put forward that test?
- 25 A They put different variants but as far as I understand I do not believe that they put forward the test that I have put forward in my report.
- 27 | Q So as far as you are aware the first time this test has been put forward is in your report?
- A The specific -- I think we are potentially mixing two things. There is one issue, which is the extent to which an additional test based on fully allocated cost, should be applied in relation to the specific case. That proposal has been made before. How that test is applied in practice and the exact specification I think differs, and so proposals to apply the second FAC test were made before. The specific, I think the proposal I have in my first expert report, my recollection is that I think it was the first time was in my expert report.
 - Q Okay, so let's just be absolutely clear about this then and it may be the easiest way to do this

- 1 is to look at the Determination in Bundle B at p.116, please, where there are some 2 conclusions expressed. 3 Α Page 116? 4 Q 116, please. There are some conclusions expressed by Ofcom in relation to the role of 5 DSAC and FAC. 6 116? Α 7 O Yes, and you may just want to look at 9.17 to 9.172 quickly before I ask you any questions 8 about it, because this appeared to be the case that had been put forward by Sky and TTG at 9 the time. (After a pause): 10 Α Yes, I have read that. 11 If you would like to look over the page, to just at the end of 9.172.3, at this time was your Q 12 firm, Frontier Economics, advising Sky and TalkTalk? 13 At the time the final Determination came out? Α 14 Q Yes. 15 No, I do not believe we were at the time the final Determination came out. Α 16 O Okay, so Sky and TalkTalk were putting forward their own tests at this point and you will 17 see at ----18 THE PRESIDENT: I thought you said you were advising them in the course of the dispute? 19 Α Can I maybe just explain? If I can just be clear, the position is the Determination came out 20 in 2012 and that invited responses from everyone, and then we advised TalkTalk and Sky 21 and produced the report which was submitted to Ofcom together at the same time, or 22 thereabout, as the Sky and TalkTalk responses. I think that is the report that was referred to 23 earlier, and that concluded our engagement. Once the report was submitted to Ofcom we 24 were no longer engaged. Then I think my question was whether we were still working for 2.5 Sky and TalkTalk when the Determination came out and the answer is that we were not. 26
 - MR. SAINI: I suppose again it is my fault. I was not being specifically clear. My understanding was, and I think you have cleared up the position, that Sky and TalkTalk are putting forward their own test, a test based on FAC. We have seen that there.
- 29 A Sure, yes.

- Q My understanding was, and I think you are agreeing with this, that the underlying economic reasoning upon which that test is based was drawn from reports that you were submitting on behalf of Sky and TalkTalk to Ofcom in the course of this dispute. Is that right?
- A I think you would have to ask Sky and TalkTalk that question. I can say that from our report, the report that we produced, has similar economic reasoning, they are similar

- principles, in terms of what drove the proposal for FAC testing in our report, yes.
- Q Okay, and then you will see the conclusion over the page at 117, 9.172.3. The view that
- Ofcom reached there was that this new test being put forward, this FAC based test, was not
- a test that BT could have reasonably expected Ofcom to rely upon. You see that?
- 5 A Sorry, where are you referring?
- 6 Q Page 117, 9.172.3.
- 7 A We are in 2.3?
- 8 Q I am so sorry.
- 9 A I was looking at the next one. (After a pause): I can see that, yes.
- 10 Q It seems to be, I think you tell me if this is agreed or not the test that you are putting
- forward, call it the FAC based test at the time of the Determination or call it now the Houpis
- test (I know it is slightly modified), that appears to being put forward for the first time, or a
- test of that type, in the course of this dispute. Do you agree with that?
- 14 A So for the first time in what context?
- 15 Q In the context ----
- A I mean, it was the first time that the issue arose so, therefore, yes, the test was put as a
- proposal in relation to those. I am not sure ----
- 18 Q Let me put the question more directly. Ofcom is saying BT would have had no idea that its
- prices and its costs were going to be tested according to this FAC based test, and the reason
- 20 that Ofcom is saying that is because until this test had been put forward in the course of this
- 21 Determination nobody had suggested to BT that this would be the test that was going to be
- 22 applied. Do you follow that?
- 23 A I hear the statement you are making. I am not sure about the causal link. I understand what
- Ofcom is saying is that Ofcom's view is that it may not have had the reason to expect this
- 25 test to be applied. There is a separate point, and I think that is one proposition, and there is
- a separate point as to whether the specific proposal we made was the only trigger that it
- could consider that a test such as this could be applied.
- 28 | Q Let us put the second consideration to one side for the moment, which is a question in the
- sense of the merits of the test, but let's just look at whether or not BT would have known.
- As I understand it, at no point prior to these disputes was this form of test, a FAC based test,
- 31 the aggregate test or the Houpis test, whatever one calls it, at no point was it ever suggested
- 32 to BT that its cost orientation obligation would be tested according to this new test.
- 33 A I think that is the position that Ofcom is setting out here.
- 34 Q What is your view?

My view is that there are two considerations. The first one is that if one goes back to the cost orientation obligation, the cost orientation obligation I think sets out quite clearly that the costs on which the cost orientation will be based, should be derived on the basis of incremental costs plus a mark-up for an appropriate recovery of common costs and an appropriate cost of capital. So if I was BT or if I was a communication provider reading that condition then my view is that I don't see why I should not expect for a group of services (I repeat that, for a group of services) I should not expect that if there was potentially a dispute and I had to establish that my costs were costs oriented that a FAC type test, a fully allocated cost measure, would be used to assess my compliance with that wording. I think furthermore, BT itself has used this kind of argument. My understanding is that in the PPC dispute there was a slightly different way in which BT used the argument, but my understanding was that what they tried to argue was that one should not just look at the main links, but one should aggregate: look at the main links and the other services together. Therefore what the regulator should do is look at the group of services, that is a grouping of services, look at the returns on that basis and then come to a view whether those returns were excessive or not. Those returns effectively would be calculated on the basis of fully allocated costs. I think in that case again, I think Mr. Morden was asked that, I think by you, about how BT looked at the pricing of PPCs, I think his answer was that the way BT itself looked at the pricing of PPCs was at the group level. They looked at all of the PPCs together, and my understanding of what he was saying was that what he was trying to do was to make sure that the returns from PPCs at the group level were not excessive (I think is the word he used). To my mind it would be excessive in terms of what? In terms of the return on capital, the appropriate return on capital, that BT was allowed to make. And the appropriate return on capital they were allowed to make would be perfectly consistent with fully allocated cost. My question is more of a basic one with respect, Dr. Houpis. As I understand it, you accept

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Q My question is more of a basic one with respect, Dr. Houpis. As I understand it, you accept that Ofcom itself has never suggested to BT that it would apply this test, we are agreed on that?

A That is what Ofcom says. I don't have a view on that. I have not gone and examined and tested whether there was, at any point during the last four or five years or over time, whether Ofcom made the specific suggestion as to exactly how the cost orientation test would be --

THE PRESIDENT: Dr. Houpis cannot know everything Ofcom suggests. He says he is not aware and would not necessarily be aware of what Ofcom might have suggested.

- A I'm also not aware what has been suggested by the other side. I think we can speculate, but I don't have the answer to that.
- MR. SAINI: Can we look at the test itself? I just want to understand how the test is meant to
 work, because you will see that the reason there have been a large number of reports and
 very detailed joint expert meetings is because it was not always that clear how the test was
 going to work and it has developed over time. Let us look, please, at your fourth report at
 divider 11. Look at 3.21. I am going to focus on that in a moment. It is at p.16. Before we
 get to the FAC test I think you are accepting the DSAC test will be applied, and it is
 appropriate to apply the DSAC test. That is correct, is it not?
- 10 A At the level of the individual charges, yes.
- 11 Q Then if I can understand how your second test is going to work, if we can call it the Houpis 12 test, you are first of all going to create a basket of services, are you not?
- 13 A Create a basket of services?

- 14 Q Aggregate services? Say it in your own terms.
- 15 A Yes. In my mind there are two ways that the test would work. The first one is
 16 retrospectively in terms of the specific dispute. The other one is obviously if the decision is
 17 taken that this test should apply, my expectation is that it will set a precedent for the future
 18 and therefore the question would be how will it apply in the future? In terms of the specific
 19 dispute, there has to be the decision of the grouping. I set out --
- Q I am sorry to interrupt. I just want to take it in stages so that I am following. The decision as to the grouping, so you are going to create a group of services first of all, that is right?

 You call it a grouping, I call it a basket, same thing.
- 23 A In relation to the retrospective case, is that what you are asking me about?
- Q Let us forget the future for the moment. This Tribunal is only concerned with this current dispute, not setting a charge control for the future. In this particular case we are going to collect some services together, that is right is it not?
- 27 A Yes, correct.
- 28 | Q You call it a grouping, I call it a basket. What is going to be within that basket?
- 29 A My proposal was that it should be all WES/BES services and also main link.
- 30 Q Then as regards everything within that group, what does BT have to do to show prima facie compliance with the test? Everything that is in your group or basket, what does it have to do?
- 33 A I'm not clear. How can it show compliance with respect to --
- Q With respect to those services that are within the basket or the group. How is it meant to go

- about showing that the services within the basket have been supplied at cost oriented prices?
- A Sorry, I think I'm understanding. To my mind, you know, if BT can't show compliance about historic prices, then it's done. The question is then how are you going to calculate the difference between the prices it would have set if it was compliant.
- 5 Q I just want the practicalities.
 - A Sure. OK, so the way it would work is that for those services where the price was set above DSAC, those prices would be reduced to DSAC. This effectively would be the prices that you would use in the second stage when you look at all the prices of the products in that grouping, and then you would compare those with the fully allocated costs of all of those products. The difference between those two would give you the differential between where prices should have been at the group level in order to comply with the test, and where they were, and then you would apply that in order to derive the corresponding prices. There are different ways one can go about doing this, but I've made the proposal in my report and I think it's been implemented by Mr. Robinson as to how that would be applied in terms of the implied prices for the different products, which would imply that the revenues would be consistent with fully allocated costs.
- THE PRESIDENT: Just so I understand, you said that the first stage is prices above DSAC of individual products be reduced to DSAC.
- 19 A Correct.

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- 20 | Q If no individual products were above DSAC would you then go straight to stage 2?
- 21 A That's correct.
- MR. SAINI: I think I have understood that, Dr. Houpis. Would you agree with me that subject to the ability of BT to justify an excessive price, this looks like a charge control based upon outturn, FAC?
- 25 A I think you know the answer, but no, I don't agree.
- Q What is the difference? It looks like a charge control. Everything within the basket that you have picked is going to be controlled in its price. I agree that within the basket prices can go up and down, as long as the average is OK, but everything within the basket is price controlled, is it not?
 - A I don't think you can make that comparison for a number of reasons. Firstly, my view is you cannot go and put a price control by its nature is forward looking. You cannot go and apply to a historic set of prices and costs a price control as such. The whole concept of price controls is it's forward looking, and this is what provides the incentives to regulated firms to reduce costs. The second point is that a price control is very strict in terms of what

the company is allowed to do in terms of setting its prices. The prices for the group of services has to be below the projected cap, and it's not allowed to go above it. Compared to the test that I have proposed, as we see in para.3.2 but also in my first report, I said that it would be applied in a non-mechanistic way and therefore there would be opportunities, if appropriate, for BT to be able to recover more than fully allocated cost, if it was justified, ex post, it could recover more than fully allocated costs. To my knowledge, I don't think it can do that with a price cap. It would not be able to go after a price control period to Ofcom and say: can you please let us have a bit more. That just would not happen. It's fundamentally different, the nature of the price control. So in my view, I think those two things imply that there's no comparison between the two. I don't think it's surprising. I have noted the comment that some of the characteristics of my proposal are similar to a price control. I mean, it shouldn't be surprising because they are both trying to achieve the same thing. What they are trying to do is to make sure that prices are not excessive. They are trying to achieve that by grouping, at the level of the grouping. So to try and say because there is a similarity in terms of how my proposal and a price control works, that means the two are effectively same, I think is just going way too far in terms of the analogy. I think it's perfectly reasonable that there will be similarities given that the objective is the same.

- Q You accept, do you not, the similarities are so great that you accept that after 2009 when there was a price control imposed, you do not require this test to be applied any more, do you? You know from 2009 and following there was an explicit price control imposed as far as low bandwidths were concerned. You are aware of that, are you not?
- 22 A Yes.

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- Q From that time onwards you do not require the cost orientation condition to be interpreted in the way that you are interpreting it now?
 - A That is correct. I do not require after the period when a price control was imposed on those services. I think the reason for that is because the price control is there from 2009 onwards to constrain the prices of the basket, or the grouping of those services, from being above fully allocated costs. That is the function of the price control and that is how the price is set. Then my test, I accept is redundant.
 - Q So it would seem to follow from that, and I think this probably comes out of the joint expert report but tell me if I have understood them correctly, that you regard the Houpis test (and let us forget terminologies for the moment) as being functionally equivalent to the type of price control that was imposed from 2009 onwards?
 - A I'm not sure what you mean by functionally equivalent.

- Q It performs the same function, it controls costs, does it not, in the same way?
- A No, it does not. The price control has a completely different way it works. It sets prices so that they do not exceed overall the fully allocated costs of this grouping of products. But the whole idea of the price control is that it's trying to provide incentives to BT to reduce costs over time. That's the key advantage of a multi-year price control. A cost orientation obligation does not do that, cannot do that, because it is assessed on an annual basis. Now for both instruments, the objective (I go back to what I said earlier) is to make sure that the company recovers incremental costs plus an appropriate amount for common costs plus a reasonable return on capital employed. If that is fully allocated cost for a group of services it should be no surprise that the fully allocated cost test in my cost orientation proposal is also what happens in a price control. That is the objective.
- 12 Q So they both fulfil the same objective?

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- A I think one of the objectives. There is a commonality in the objectives and one of the objectives is to ensure that the revenues that the regulated company makes are consistent with the recovery of incremental costs plus a mark-up, etc. That objective can be achieved with the application of fully allocated costs standard.
- I do not want to use the words price control, because I know it makes you unhappy, but let us look back at 3.21, p.16, the part of the report you are looking at. Your test, which I have been calling the price control, seems to me to be, and tell me if I have understood this correctly or not, a test where, if there is failure of the test by BT, if BT failed the test, then there are escape clauses. The escape clauses, we see there are four of them in 3.21 which you say are set out there to avoid a non-mechanistic application, is that correct?
- 23 A That is correct, yes.
 - Q And the first escape clause is that if BT exceeds what you regard as the appropriate FAC based level then it can justify exceeding that by finding some other service which shares common costs and then saying actually, we under recovered on this other service. Is that correct?
 - A That is the wording in my statement. What I have clarified was that it is taking the point of my overall statement, is that the under recovery in my opinion would need to be from services which, as the first condition, share significant fixed and common cost with the cost oriented services that you were looking at. But I think I would go beyond that and I would say that it needs to be, with services that have a cost orientation obligation themselves. In other words, when this is applied, it should not be allowed for an under-recovery in relation to services that are offered in competitive markets, because of pricing below FAC in those

- markets, I do not believe that that would be a justification to allow recovery above FAC in relation to cost oriented services.
 - Q Can I just try and understand that point for the moment. So under this test BT has to look right across its range of services, of which we know there are thousands of services BT provides, and then come along with a service which is regulated, subject to a cost orientation condition, and then show that it is under recovered in relation to that particular service which shares common costs, is that right?
- 8 A No, that's not right.

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- 9 Q So how is it working then?
- 10 A Well, I have just started ----
- 11 | Q Sorry, you carry on?
 - A Maybe if I can finish and I will explain it. So you say it offers thousands of services, the point I am making is that services, the first point I am making is that services that are offered in competitive markets should not be included in this, what you called an 'escape' clause. So therefore any services which are offered in competitive markets could not be relied upon in terms of the application of this clause to try and justify recovery of more than fully allocated cost from cost oriented services.
 - Secondly, I think any services which are subject to price controls, RPI-X type price controls where the expectation is that prices are set in order for a particular service or the group of services to converge to their fully allocated cost, given that that is exactly the objective, the objective in those services is to set the price control to recover the fully allocated cost either for the specific service or the group of services. That's what Ofcom does when it sets the price controls. So at the time Ofcom sets the price controls that is the time where BT and, if appropriate, communication providers if they are affected, can have a debate as to whether the costs that are allocated in those price controlled services are right or they should not be right. Once that decision has been taken then in my view that would also imply that the price for those services are set. I wouldn't necessarily, to be honest, expect under recovery, but just in case, so what that does is that leaves the group of cost-oriented services which we are interested in and then other groups of services that have a cost orientation obligation. So that would effectively form the grouping that could be looked at.
 - Q You have explained that very clearly, and I understand that you are drawing a distinction, which you made earlier, between this particular dispute and what Ofcom might do in the future. What you suggest may well be a very good idea but would you accept that this is an idea that you and Frontier Economics have come up with and we do not see it being

- suggested as an escape clause in any guidance from Ofcom, or do you not know?
- 2 A Maybe you want to rephrase that question?
 - O This is something that you have come up with as a theory. I am not saying it is a good or a bad theory, but if there is going to be such an escape clause you would expect the regulated entity to know not only first of all that this new novel FAC test is going to be applied, but secondly there is this escape clause. Good regulation would require that to be made clear, would it not?
- 8 A It would.

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- If I can turn to your other escape clauses, 3.21.1, which is uncertainty in forecasts. That is similar to a principle which Ofcom already applies, uncertainty in forecasts. The third one, which is there are identified and justified dynamic efficiency benefits. If I can just take a few moments with that one. Is it being suggested that Ofcom when it finds there has been a breach of this novel test should undertake an economic analysis of BT's claim that there are justified dynamic efficiency benefits. Is this the way this is going to work?
- A That's only part of it. I think the way I envisaged that would work is that when Ofcom does the market analysis it has to actually look at all of these issues. As I think you are aware when the 2004 analysis was done Ofcom, Mr. Myers, has claimed even though it is not explicitly stated in the analysis there was a lot of thinking around the allocative efficiency, dynamic efficiency, potential trade-offs, and all of that thinking took place that Mr. Myers is claiming, and ended up with the cost orientation obligation as it was so imposed in 2004. So my suggestions are: rather than having that thinking done implicitly, as appears to be the case in 2004, to make that more explicit, so when Ofcom is undertaking the market analysis it would set out clearly in its reasoning how it thought about allocative efficiency, how it thought about dynamic efficiency if that was an important factor and therefore I think that would provide information in case there was a dispute. In case there was a dispute that would provide information to communication providers and I would imagine that would be welcomed by BT as well, as to how then Ofcom might go about assessing the merits of the different arguments if there was a dispute.

analysis gets done Ofcom would need to set out its thinking more clearly than it did in 2004 as to why it decided on the cost orientation obligation and what were the different factors. Once that is done, I think subsequently if there is a dispute then, yes, Ofcom will need to assess the different arguments that the parties would put to justify departure. If BT was to justify departure from FAC then it would have to provide the necessary arguments to justify

So to my mind there are two elements. The first one is very important, that when the market

that departure.

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- Q Let us divide, Dr. Houpis, this matter in to two. First, let us put to one side what Ofcom might do in a market analysis in another case, it has not done that here. It appeared to be being suggested in your answer just now that in the future when Ofcom comes to assessing cost orientation then it might set out, when it imposes this obligation, this form of escape clause, the dynamic efficiency escape clause. That is the first part of your answer, is it not? It might be a good idea for Ofcom to do that in the future?
- A I thought that's what you asked me. You asked me that it's okay to apply this historically, but what does that mean for the future when we don't know? I thought that was your question.
- Q Let us just focus on this now, because the case that is being advanced by Sky and TalkTalk, and this may not be clear to you, is that this Tribunal now, and Ofcom when it determined this dispute should have applied a test on these terms?
- A Okay. I think my point is, and I think it is set out in the joint experts' statement. I accept that the Tribunal needs to take a view in relation to these factors in order to come to a view as to whether to accept the Houpis test, and whether to accept it as is, i.e. with not allowing any over recovery above allocated costs for the group of services, or the Tribunal could come to a view that for one of these reasons that they could allow some over recovery above FAC. My own view, based on the analysis that I've done is that in terms of the historic case there is no reason to allow, for any of these factors, any recovery above FAC, and that relates to the analysis we have debated with Mr. Myers as to the merits of allocative, dynamic efficiency, productive efficiency for the following reasons: first, there is no evidence of cost under recovery somewhere else from cost oriented services in fact, if anything it is the opposite as I said in the cost oriented services.
 - In terms of dynamic efficiency I think my position is that I do not believe that it is necessary to allow prices above fully allocated cost in order to incentivise upstream entry to a significant extent to the type of entity that would deliver the benefits that Ofcom was alleging could materialise. I also argue that in terms of dynamic efficiency downstream, competition downstream again setting the price at FAC would encourage downstream competition which would be desirable from the dynamic efficiency perspective.
- Q Dr. Houpis, I am sorry to interrupt you, I just want to go back to my question. I do not want to stop you saying what you want to say but I want to remind you what my question was. It is a very practical matter, this question. You are saying that one of the escape clauses should be whether or not BT can justify what you say is over recovery by some identified

and justified dynamic efficiency benefits. That is one of your escape clauses there. The Tribunal can itself separately consider whether or not that has ever been made clear to BT as being a factor there. I just want to ask you a specific question about how you think this is going to work in practice. My question was: are you suggesting that when Ofcom was determining this dispute, and if it found an over recovery it should have said to BT can you justify this over recovery by reference to some dynamic efficiency benefit, and then Ofcom should have conducted an economic analysis as to whether or not BT were right. Is that your position?

- I think this is very difficult to do because I am afraid the way Ofcom did the analysis in Α 2004 was to ----
- Let us forget 2004, let us look at this particular dispute that has been resolved, and we are Q 12 looking at Mr. Pickford, who represents Sky and TalkTalk, who is saying that your test 13 should be applied by this Tribunal now. Is it your position that this Tribunal, and Ofcom 14 earlier in the Decision which is being appealed, should have applied the test and these 15 escape clauses? It is still not clear to me?
 - A My position is that Ofcom, when it came to assess this, should have looked at the application of the fully allocated cost in a non-mechanistic way. There is an important element of looking at the application in a non-mechanistic way. Given what Ofcom has now said, because all that has become apparent as part of this dispute, it wasn't something that was necessarily clear from the 2004 statement, given that Ofcom has set out its views in terms of those different elements of efficiency which influence their Decision, then I think, yes, those elements need to be evaluated by the Tribunal. If the view is that those elements justify allowing the price to go above FAC, if they accept the Houpis test, and the views that those specific elements - one or more of them - would allow prices to be above FAC then they should come to that view.
- 26 Q Would you agree with me that if this particular part of your case ----
- 27 A If I can just finish - but my view is, given the case my own view is that I believe the FAC 28 test, those specific clauses should not apply ... to this case, that's my view.
- 29 Sorry, should apply? Q
- 30 In the specific case ----Α
- 31 Q What?

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- 32 -- if you actually look at those clauses there is no reason, in my view ----
- 33 THE PRESIDENT: I think that is a separate point.
- 34 MR. SAINI: Yes.

THE PRESIDENT: I think you are just being asked at the first stage, never mind how they then will apply in this case, what questions - I will put it that way - Ofcom should have asked, not what the answers are. I think that is what Mr. Saini is asking about?

- MR. SAINI: That is my question, and I think your answer is and tell me if I have got it wrong you are saying that in resolving this particular dispute, if there had been shown to be an over recovery one of the escape clauses available to BT would have been this dynamic efficiency escape clause, and you would have expected to conduct an economic analysis as to whether or not there was, indeed, a justified dynamic efficiency benefit. That is what you would have expected?
- A I think the question I wanted to be answered is whether it was necessary for ... prices to be above fully allocated costs on the specific example you are giving me ----
- 12 Q Yes.

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- A -- given the assessment that was made in 2004, and if the view was that, yes, it was appropriate for revenues to be above fully allocated costs for dynamic efficiency reasons then Ofcom could come to the view that it should allow revenues above fully allocated cost, yes. But just to finish that point, that is made more difficult I think it's important to be very clear on this on the fact that the analysis ... was very, very limited so I want to distinguish between the specifics of this case, where a decision is taken in 2004 and all that is being said about the trade-offs is one sentence in one paragraph of a hundreds page document. If that was decided to day I would take that line in the future, because I think it is quite important that when it comes to applying this test in the future my view is that it would be desirable to provide an indication, at the stage when the market analysis is done, as to how those criteria would be assessed. For the future I do not see any particular issue in my mind in terms of them, if there is a dispute, trying to resolve it by looking at this criteria.
- You are aware that this Tribunal is not hearing an appeal against what happened in 2004, and the Tribunal is not concerned with what might happen in the future. The Tribunal is concerned with dealing with this particular dispute. You understand that, do you not?
- A I'm aware of that, but I think in terms of the relevant considerations, and my understanding is that this is common view among all the experts, it's in the joint expert statement, the decision would set a precedent for what happens in the future. So in that sense, I think that is a relevant consideration.
- Would you agree with me, just dealing with your dynamic efficiency benefits, that the experience that you have had with Dr. Maldoom and Mr. Myers shows that reasonable economists can disagree on the issue of whether or not a particular charge, or a particular

- structure of charges, will promote or harm dynamic efficiency? There are areas of reasonable disagreement, are there not?
 - A There are, but I don't find them any more challenging than the areas of disagreement on whether provisioning costs should be allocated to rentals or connections, there are areas of disagreement on a number of issues. As you very well know, Ofcom itself has said it applied the DSAC test in a non-mechanistic way, and there were tens and tens of pages in the Determination (I can't remember the exact number) where a number of issues were being considered and where arguments were being put forward by the different sides. So I'm not quite sure why that would be more difficult or any different from the way the DSAC test will apply.
 - Q Going back to the baskets, the grouping and the baskets, would you agree with me that when Ofcom imposes a price control it gives detailed consideration to how the basket is to be made up and invites consultation responses on that?
- 14 A Yes, I agree with that.
- We can see, if you can please be provided with bundle BT A7. Sorry, I have two numbers on my bundle. If you can go into divider 12 please, p.139. Just to give you some context to this document, you are aware that in 2008 Ofcom decided that for low bandwidth it was going to impose a price control before that?
- 19 A Yes.

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- 20 And then after that there was a detailed consultation about how to structure that charge
 21 control. If you look at the first document in this tab, this is actually the Leased Lines charge
 22 control of 2nd July 2009. I am taking you to a part of it. You will see, if you look at the page
 23 we are on, 139 and going forward, there was detailed consideration as to how to construct a
 24 basket of services for the purposes of the charge control, and there were differing views
 25 expressed by various consultees.
- 26 A What do you want me to look at?
- 27 Q Sorry, I am just wanting you to look at section 5 of where the conclusions are made. You will see, bottom of the page, 5.5 Ofcom there concluded that they were going to have three different charge control baskets. Then going over the pages one sees that there were differing views expressed by consultees as to how the basket should be constructed.
- 31 A Sure.
- Q I am not criticising you. You have come up with a particular basket for the purpose of the Houpis test, we agree that?
- 34 A I agree.

Q Would you agree with me that as a matter of good regulatory practice, if one was going to adopt the type of approaching you are suggesting one would need to consult the industry?

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Α I think we need to put things in context. The point is that, as I was saying earlier, we found ourselves with a dispute in relation to these services, so a decision needs to be made about the grouping at which the fully allocated cost would apply. Because I am aware that it's not necessarily that easy to go and have a big consultation about this, it's precisely for this reason that in my approach to the appropriate grouping I actually gave the benefit of the doubt to BT. So I actually proposed a grouping which in terms of the economics of deciding the appropriate grouping would be beneficial to BT because it provides it the maximum flexibility to recover fixed and common costs, even though it could actually, given my proposal, shift fixed and common costs from WES to BES. The BES products are bought more by communication providers – in fact, almost exclusively by communication providers, not BT itself. Therefore, under my proposal that could result in more of a distortion of downstream competition. Despite that, I proposed the wide grouping precisely because I was aware of the practicalities and my view was that if I make a proposal which is favourable in general terms of the economics then that should be acceptable. I'm not sure that any other communication providers would necessarily have particularly strong views on that topic.

The other point to make is that we have to remind ourselves (and I appreciate that this is all thinking about practicalities) there are a number of things that we're trying to fix, there are other criteria than the practicalities. We have a significant issue which is in my view there has been overcharging of fully allocated costs in the orders of hundreds of millions. So one needs to come up with a practical test in the context of this dispute that attempts to fix this. I've tried to do it in a way that would minimise the practical difficulties.

- Q I think you are agreeing with me that ideally, before a regulator such as Ofcom decided upon a particular basket, it would consult with the industry?
- A I think I've answered that. I think that depends on the specific context. If you are thinking about a forward looking price control where you are looking at effectively setting a forward looking grouping for services, then yes there would be consultation. I don't think from that one can conclude that in order to apply the Houpis test there needs to be a wide consultation with the industry. I don't agree with that.
- 32 Q You would agree with me that BT, however, should have been given an opportunity, prior
 33 to this basket being imposed on it, to express a view?
 - A It was in Houpis one. As far as I understand, Dr. Maldoom had an opportunity to come and

say it shouldn't be this basket; it should be another basket. He didn't say that. I haven't seen any evidence from anyone saying we don't like this basket; we think it should be something else. I'm not quite sure what else could be done. As I say, when I actually derived my thinking deriving the basket, it was exactly for the reason that you mentioned, i.e. for the practical reason to try to do it in a way that would be favourable to BT.

THE PRESIDENT: Have I understood this? You are saying that if one were now setting a cost orientation obligation going forward, which incorporated that, it should make ideally clearer than just the one sentence, that there would be this FAC test applied to a basket, then it would be desirable to consult on what should be in the basket. Here, because that was not done and this is being done ex post, to address that you have adopted the basket that is most beneficial to BT and therefore takes account of the fact that there was not consultation? That is right, is it not?

A That's right.

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MR. SAINI: Can I ask you to put away that bundle, please, and go to bundle E p.169 tab 12. That is the 2012 document to which you were making reference a moment ago. Page 169 in the right hand corner. You will be familiar with paragraphs 7.62 and 7.63 but you may want to refresh your memory. You will see that some respondents were suggesting, at 7.62, that there should be an explicit price control imposed upon AISBO products, and we see at 7.63 that Ofcom has rejected that and it says that is because "the AISBO market is in relatively early stages of development and it is necessary to give time to the effects of a cost orientation obligation to impact on a competitiveness of the market before considering whether a price control is necessary". As an economist, what did you understand to be the reasoning of Ofcom at 7.63?

A I think there are two aspects to that. The first aspect is in relation to the stage of development, which I think is quite clear, and I probably understand and I agree that when we are trying to regulate the market at an early stage imposing a price control is challenging and can be very challenging, and I think that was my understanding as to why Ofcom did not show a preference for a price control. Then there is a second aspect which is around the impact on the competitiveness of the market before considering a price control and I think that is rather unclear in my mind. The impact on the competitiveness of the market, I understand there has been some discussion, is that the wholesale market is one possible market,. I understand that Ofcom's interpretation is that the impact on the -- I mean Mr. Myers' interpretation is that the impact on the competitiveness of the market implies the impact on entry upstream. That is one of the reasons to go for a cost orientation obligation

1 was that that would encourage more entry upstream. I understand that. Had I known 2 nothing about the case and I read this, would I automatically have interpreted it like this? I 3 would not necessarily but having read it and read it, and I have read it quite a few times, I 4 think I consider it could be interpreted like that. Let us have a look at what Mr. Myers says about Ofcom's approach in 2004. You can 5 Q 6 perhaps keep that open if you want to. You will be very familiar with it. If you go to Mr. 7 Myers' statement, which is back in Bundle D at Divider 13, and if you can please go to p.45, 8 and at para.112, if I may read that with you from the top: 9 "Ofcom's decision in the 2004 LLMR statement not to impose a price cap took 10 account of dynamic efficiency by giving time for the effects of the costs orientation 11 obligation to impact on the extent of competition in the market". 12 And then you can perhaps read the remainder of that to yourself. (After a pause): 13 Yes. Α 14 O Ofcom appears to have made a policy decision in 2004, that Mr. Myers describes, not to 15 impose a price cap. You accept that? 16 A I am not quite sure what you mean by "policy decision", but took a decision not to impose a 17 price cap. If you can explain what you mean by "policy" in this context? 18 Q Because the policy was that they wanted to see how competition would develop in the 19 market before they decided whether a price control was necessary. You accept that? 20 Α As I said in my previous answer, I think that is one way to interpret it and I understand that 21 this is the way that Mr. Myers is interpreting it now, because we are talking about this one 22 sentence which is not Mr. Myers' statement. As I said, and I do not want to repeat myself, 23 that won't be necessarily the obvious interpretation I would give to understand the impact on 24 the competitiveness of the market, but I accept that is one way to interpret that statement. 2.5 Q You are not suggesting, and I do not think it is Sky's case that Mr. Myers, when he explains 26 the policy that Ofcom was taking, is not being truthful. He is genuinely giving his 27 understanding, is he not? 28 He is, but I also note that Mr. Myers, himself, if you actually look at the statements, used Α 29 words like "might" and "may", and "it seems to me". I understand that Mr. Myers is doing 30 the best he can given the information he had to actually to put that position out. I think 31 Mr. Myers accepts also that "dynamic efficiency", "productive efficiency", "trade-off' and 32 the words "allocative efficiency" never appeared in the statement. 33 Q Is it not clear, Dr. Houpis, just looking at 7.63, which you should have open in front of you, 34 that Ofcom wants to see how the wholesale market will develop in context. Is that not

1 absolutely clear? 2 Α I think I have answered that question, but I can have another go. 3 THE PRESIDENT: Dr. Houpis said that it was not clear to him when he read it first. Mr. Myers 4 has explained what was meant and he is not suggesting that Mr. Myers is not being truthful. 5 So that is what was intended to be stated in that paragraph, and I do not think there is any 6 reason to adopt any other interpretation. 7 MR. SAINI: Dr. Houpis, I want to consider a separate issue now, which is that in the joint 8 experts' report there is a debate between yourself, Dr. Maldoom and Mr. Myers as to 9 whether or not the DSAC approach will necessarily promote dynamic efficiency and 10 whether or not it will damage allocative efficiency. You recall that, do you not? 11 Α 12 Q And it has gone on for many, many pages. Perhaps we can pick it up in bundle D, the 13 expert bundle. At the beginning there is a separate joint expert statement in relation to cost 14 standards, which I believe begins at 1.1. 15 I am at the right report, but which specific page? Α 16 O It is 1.1, and I am just going to give you the page number. I want to deal, first of all, with 17 the question of allocative efficiency. Can you go within this joint expert report to p.11. At 18 the top it says, "Is it likely that the prices of WES/BES services led to allocative 19 inefficiencies?" You say, "Yes, Dr. Maldoom says "Unlikely", and Mr. Myers says 20 "Unclear". Equally, if you can go ahead a few pages before I ask you the question, to p.16. 21 At the bottom of the page you will see the question is, "Is the potential cost over-22 recovery/allocative inefficiency under the Ofcom test compared to the Houpis1 test 23 material?" You say, "Yes", Dr. Maldoom says, "Unclear", and Mr. Myers says, "Unclear", and then if I can just finally ask you to look at p.18, there the question again is, "Does the 24 2.5 Houpis 1 test reduce the risk of allocative inefficiencies compared with the Ofcom test?" 26 Dr. Houpis's view is, "Yes", Dr. Maldoom says, "Unlikely", and Mr. Myers says, "It 27 depends on the circumstances". The wording that Mr. Myers uses there at 18, if I can just 28 focus on that, because he uses this wording repeatedly when questions are raised. He says: 29 "As commented above, deriving allocatively efficient prices is complex, raises 30 substantial estimation difficulties and is prone to regulatory failure." 31 Then he goes on. I do not believe you disagree that the matter of deriving allocatively 32 efficient prices is not a straightforward matter, is it? 33 Α If you can put that - are you asking whether theoretically, or in what context? 34 Q In this particular context, Dr. Maldoom has said, "Unlikely". Mr. Myers is saying it is not

- straightforward, it depends on the circumstances?
- A In my view we have two tests, and what we need to decide is which one of those tests is more likely to lead to an allocatively efficient outcome. The purpose of the Houpis 1 test is not to derive the set of prices which would maximise allocative efficiency. That is not the objective. The objective is to ensure that you have a level and a structure of prices which is more allocatively efficient than the structure you would get if you only applied the Ofcom test. To my mind that is the relevant benchmark. By definition, if the Houpis test gets you closer to the set of prices that maximise allocative efficiency it would be preferable to the Ofcom test alone.
- Q Let me ask you the question more directly. Let us deal both with allocative efficiency and dynamic efficiency together, because they are forms of economic efficiency that are debated amongst the experts, are they not, in this case?
- 13 A I think they are, but I think it's quite important to consider them separately.
 - We will consider them separately in a moment, I just want to ask you a general question, first of all: putting oneself in the position of the Tribunal, and bear in mind you are an independent expert here, it looks like, on the basis of the joint expert reports, and in particular the questions that Mr. Pickford put to Dr. Maldoom, there is room for reasonable disagreement between the economists as to whether allocative efficiency would be promoted by your test more than the DSAC, and there is room for reasonable disagreement as to whether or not the dynamic efficiencies of the DSAC test exceed the dynamic efficiencies of the Houpis test. That looks to be the position, does it not? There is a reasonable disagreement between the experts.
 - A I'm not sure what I'm of course there's disagreement, otherwise we wouldn't have written ten pages explaining the reason for disagreement.
- Q I am not saying there is not a disagreement, the question is what is the nature of the disagreement. The Tribunal is going to have to make an assessment.
- 27 A Sure.

- Q Is the Tribunal facing a position here where you are saying that when Dr. Maldoom and
 Mr. Myers express reservations and they think things are unlikely or it depends on the
 circumstances or matters are unclear, they are definitely wrong, or is it your view that they
 have their own views which are respectable economic views, but you respectfully disagree?
- 32 A I must say, I'm not ----
- THE PRESIDENT: I am sure Dr. Houpis is very respectful of the other experts, but I think he is saying he disagrees. I do not think it is fair to ask him whether he thinks they are being

reasonable or unreasonable, but he thinks that they are wrong and that his view is clearly the better view - is that right? That is the way I understand it.

MR. SAINI: I suppose the question is, and I will put it more directly: is this an area where, and we are looking particularly at allocative inefficiencies here, your view is that there is no tenable economic argument in support of the position taken by Dr. Maldoom and Mr. Myers?

- A Let me just try and be clear on this point: Mr. Myers has made some statements which rely on the theory, the theoretical point about economically efficient prices. As I explained, for me the question here is not for us to come to an agreement as to what is the theoretically efficient structure of prices. That's not the question I have been asked. I don't think that's the question they have been asked. The issue we face here is we have two tests, we have to decide, the Tribunal has to decide which one of those tests on the basis of the economic efficiency criteria is more likely to deliver an economically efficient outcome. In my view, on that question there is clear disagreement between me, Dr. Maldoom and Mr. Myers, and I think I've set out what my views are. That is, I think, the relevant question. We have not been asked and I don't think it's a relevant question to say what's the theoretically optimal structure of prices. That's not the question before us.
- 18 THE PRESIDENT: Would that be a sensible point at which to break?
- 19 MR. SAINI: Certainly.

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- THE PRESIDENT: Secondly, would it be wise to start at ten o'clock tomorrow, if that is possible? I see from the timetable there was some thought that Mr. Myers might start on Friday and then he would be held over until the following Thursday. I do not think that is a very sensible approach in any event.
- MR. SAINI: There have been discussions, Sir, amongst counsel, and I think the consensus was that Mr. Myers should have a clean start, if possible, next Thursday.
- THE PRESIDENT: Yes, because otherwise he is in purdah for several days and he has to do his job with Ofcom.
- MS. ROSE: So far as Mr. Holt is concerned, he has a slight difficulty on Friday, so we would appreciate it if the Tribunal was able to sit a little early tomorrow so that we can finish his evidence tomorrow.
- THE PRESIDENT: We will sit at ten o'clock. Are you all agreed, as regards Dr. Houpis, who goes next?
- 33 MR. SAINI: Mr. Thompson, I think.
- 34 MS. ROSE: And that is it.

1	THE PRESIDENT: You are not cross-examining on this point. On that basis, if Mr. Holt starts
2	just before lunch we should be all right, should we not? If necessary we can be prepared to
3	sit until five tomorrow, but with a break in both morning and afternoon.
4	Very well. As you know, Dr. Houpis, you cannot discuss the case with anyone, and we will
5	adjourn until ten o'clock tomorrow.
6	(Adjourned until 10 a.m. on Thursday, 7 th November 2013)
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