IN THE COMPETITION APPEAL TRIBUNAL

Case No: 1381/7/7/21

Salisbury Square House
8 Salisbury Square
London EC4Y 8AP

Monday 29th January – Friday 22nd March 2024

Before:
The Honourable Mr Justice Waksman

Eamonn Doran

Derek Ridyard

(Sitting as a Tribunal in England and Wales)

BETWEEN:

Justin Le Patourel **Class Representative**

v

(1) BT Group PLC **Respondent**

(2) British Telecommunications PLC

A P P E A R A N C E S

Ronit Kreisberger KC, Derek Spitz, Michael Armitage, Jack Williams and Matthew Barry (On behalf of Justin Le Patourel)

Daniel Beard KC, Sarah Love, Daisy Mackersie, Natalie Nguyen and Ali Al-Karim (On behalf of BT Group PLC and British Telecommunications PLC)

Jennifer MacLeod (On behalf of the Competition & Markets Authority)

Tuesday, 20 February 2024

(10.30 am)

THE CHAIRMAN: Good morning. Some of you are joining us live stream on our website, so I must start, therefore, with the customary warning: an official recording is being made and an authorised transcript will be produced, but it is strictly prohibited for anyone else to make an unauthorised recording, whether audio or visual, of the proceedings, and breach of that provision is punishable as contempt of court.

Before we resume with the hot tub questions, we owe you a decision on timing of closing submissions. We have taken into account what each side says, and balancing how long you need to prepare the submissions but also how long we need to read them, and we are going to change it so that they will be due in on Tuesday 12 March at 6 pm.

MS KREISBERGER: I am grateful, sir.

MR BEARD: I am grateful.

THE CHAIRMAN: Thank you.

Yes, we will continue with Mr Ridyard's questions.

MR DAVID PARKER (continued)

MR MARTIN DUCKWORTH (continued)

DR HELEN JENKINS (continued)

MR DAVID MATTHEW (continued)

Questions by THE TRIBUNAL (continued)

MR RIDYARD: Right, so this morning we are moving on to the SAC combinatorial approach which is advanced by Dr Jenkins in her reports.

Dr Jenkins, we sort of sketched out yesterday, and I think we are all aware, broadly speaking, what this approach does. It allows a firm, and is designed to allow a firm, flexibility about how it recovers its common costs, but subject to the constraint that it does not over-recover its common costs across all of the products that we are looking at.

So we would like to start off with some general questions, which are sort of principle questions, before we get into some of the factual detail. The first one is really if a firm, just in principle, before we -- I know we will get on to the detail of BT Sport soon enough. But in general, is a feature of this activity, if a firm is making losses on one of these activities, that this combinatorial approach in effect allows the firm to hide excess profits in another activity because of the losses in the first activity?

DR JENKINS: I think it does not allow it to hide excess profits, because one of the combinations that you will always check is the standalone cost of the product of interest. So to the extent that there are direct losses on a product, on another product, that will not feature in the standalone costs estimate for the product of interest. The standalone costs will comprise the incremental cost of the product of interest, the common costs overall, which will not include any allowance for loss, and then there would be an agreed margin.

What it will do is potentially allow a higher proportion of common costs to be recovered from that product, but it does not allow the losses to be transferred to that product.

MR RIDYARD: Yes, but it does -- it gives extra flexibility on how much of the common cost is recovered on the product in question.

DR JENKINS: That is right, it will give some flexibility.

MR RIDYARD: Potentially up to the standalone cost level, up to the full recovery.

DR JENKINS: Yes. I mean, that is why you need to think hard about the combinations that you are looking at and think about what you are looking at in terms of what makes sense from -- in order to interpret the results, yes. But, as we will come to, in this case I do not think we have a situation where the combinations I have chosen lead to loss-making activities on any of those combinations, but it is allowing precisely the flexibility in a multi-product firm to vary which of the products you recover your common costs from.

MR RIDYARD: Mr Duckworth, or ...

MR DUCKWORTH: Shall I start?

MR RIDYARD: Yes.

MR DUCKWORTH: I think the point that Dr Jenkins makes, which is that standalone costs for the individual service by definition do not include profitability of any services, is correct, but that is generally not the binding constraint in the SAC combinatorial process. So you do end up combining, in this case, SFV services with, for example, bundles to work out what the binding constraint that results in Dr Jenkins' benchmark. So effectively you look at the results of all the combinations and you take the lowest combination, so the lowest value that comes out of all of the combinations, and that typically is not the standalone cost.

Then the issue that myself and Mr Parker have identified is not whether any of the combinations are loss-making, it is whether individual services within a combination are loss-making and they are combined with another service which is profitable, and that combination of a profitable service and sort of unprofitable service, unprofitable in terms of not making, or having a negative contribution margin, effectively reduces the overall contribution margin of that bundle of services, in this case actually the bundle of service.

That means because that -- this is all quite complex to describe, but the contribution margin from the overall bundle of services is reduced, that increases the ability to sort of recover common costs from the focal product, SFV services. So ...

MR RIDYARD: So you think --

MR DUCKWORTH: -- it is a complex mechanism, but in effect it does allow losses on a service which has been included in a combination to be recovered from the focal product.

MR RIDYARD: So you think that is giving too much flexibility to the way in which the common costs -- the amount of common costs that is recovered on the focal product?

MR DUCKWORTH: I think that is a particular flaw of the implementation of the SAC combinatorial approach by Dr Jenkins. I think there is a broader conceptual issue of whether a SAC combinatorial approach in itself provides too much flexibility, but even ignoring that broad conceptual point about SAC combinatorial in general, Dr Jenkins' implementation has this effect of allowing losses in certain products to effectively be recovered through pricing on SFV services.

MR RIDYARD: So at what point would you -- at what point would you say that the amount of common cost that has been recovered on the focal product goes across some threshold and that makes it unreasonable? A tricky question, I know, but ...

MR DUCKWORTH: I think we are back to kind of the LRIC+ discussion and looking at the degree to which an attribution of common cost -- well, you can compare the price to an attribution of common cost under a LRIC+ approach, which is, for example, an EPMU approach which allocates them evenly, and ...

MR RIDYARD: But that is --

MR DUCKWORTH: That is why there is a judgment on whether the price compared to that LRIC+ benchmark is significantly and persistently above in a way which does not reflect demand characteristics of the customers.

MR RIDYARD: But as I think through that answer, I mean, it seems that your dislike of the SAC combinatorial approach is it gives, to put it very simply, too much freedom to recover common costs on a focal product. But I think the counter case to that, the criticism the Class Representative's experts have of LRIC+, is that it gives almost no freedom. You know, it predetermines how common costs get recovered, and that is too much of a straitjacket. So we are sort of struggling with -- I can kind of see where both arguments are coming from, but we are struggling with the tension between those two positions. Is that a fair way of putting it? If I am missing something, then I would be very pleased to be put right.

MR DUCKWORTH: I mean, it is not so much a construction of the benchmark but how you interpret the benchmark. Dr Jenkins' interpretation is if you set, effectively, a mathematical upper bound of the most extreme recovery of common costs, which is consistent with profitability across the other services, if you are below that then there is no excessive pricing.

Our -- or my opinion is LRIC+ sets a benchmark, but then you need to kind of take into account broader market factors in deciding whether the degree to which prices above that benchmark are excessive, so it relies on some sort of ex post judgment once you have constructed the benchmark.

MR RIDYARD: Okay.

Mr Parker, do you have anything on this, or ...

MR PARKER: Yes. I think I have some problems with SAC combinatorial as an approach. I have some problems with the way that Dr Jenkins has implemented the SAC combinatorial. I think maybe a good place to illustrate the point about the hiding losses idea would be if we look at Box 6.1 of Dr Jenkins' first report, which is at {IR-E/17/185}, because that has some nice simple numbers which it might be helpful to go through to give an idea.

If we zoom in on the table. So what we have got there is, here we have a firm that has essentially three products, A1, A2 and B, abstract from margin for now. The question is, if there is £150 common costs across these three services, what proportion of those common costs should be recoverable from A1?

Now, you can see that A2 is actually a loss-making service, because it makes revenues of 20 and LRIC of 60. Then B is profit-making service, making a contribution to common costs of 90.

So SAC combinatorial would say: let us look at A2 by itself, that is minus 40. Let us look at B by itself, that is plus 90. Let us look at A2 and B together, and that gets you to plus 150, so 200 total revenues, 150 costs.

What is the highest contribution from these alternative bundles? It is just bundle B, product B by itself. So B is providing 90, and A1 is providing -- therefore should be able to provide 60 contribution of common costs.

This is the result that Dr Jenkins comes to on the following page. We do not need to go to that.

If you then put A2 and B together and say these are just one product, then A2 and B, you do not split out the costs at all, they are 200 revenues, 150 LRIC. That means that they are only providing 50 contribution to common costs. So on that basis you would allow A1 to have 100 --

MR RIDYARD: 100.

MR PARKER: -- recovery of the common costs.

So if you do not split out A2 and B, and if you do not split out all your combinations of services, you have the potential to be hiding -- to combine a loss-making service with a profit-making service, and that can lead you to under-recovery on that group of services that you put together, and therefore over-recovery relative to breaking it all out and identifying it properly.

So I think the way that Dr Jenkins has combined all the bundles together, including BT Sport, but just as a general principle, rather than doing every single bundle -- every single product by itself, can absolutely lead to this problem of if there are some less profitable, not making a full contribution to common costs services included in there, that can lead to then this finding of over-recovery on A1, and if A1 is SFV services here, it seems to me a bit uncomfortable to say, well, we should, if you are less -- if you have got some loss-making service put into that bundles contribution, you should therefore allow those losses essentially to be recovered from the --

MR RIDYARD: So this problem arises because of the need -- you need to consider more combinations in order to avoid this problem, is that right?

MR PARKER: Essentially you need to identify all combinations so you can make sure this is not an issue. I totally accept from Dr Jenkins' statement that it would be very complicated to do that, but it still seems to me that you should do that if you are not going to run into this issue, notwithstanding the complexity. Otherwise I think you are just saying it is too difficult to do properly, so we are not going to do it properly, and I am not sure that is the right approach.

MR RIDYARD: Okay.

I do not know ... Mr Matthew?

MR MATTHEW: Just -- because I know you asked about the concept, I will just make one observation on the context here, which is BT is under various regulatory rules about margin squeeze, so it does have obligations around making a profit at the retail level for fear of otherwise falling into some either regulatory or other -- falling foul of the margin squeeze rules. That is explicit in the case of the VULA products, but it is also a part of some of the other bits of the regulation that apply.

MR RIDYARD: Okay.

MR MATTHEW: It is a regulatory constraint that applies to some degree.

MR RIDYARD: Dr Jenkins, can you respond specifically to that criticism that you need -- I know you say you cannot look at each and every combination, because I know the combinations do multiply quite dramatically when you have multiple products, but what about this possible criticism?

DR JENKINS: Perhaps if we go to paragraph 6.142, so that is the same document, page {IR-E/17/224}. So that paragraph sets out the combinations that I am going to undertake, which you see in the middle of that paragraph, the list of them.

Perhaps before we go into the specifics around bundles and sport, it is again just to remind ourselves why are we doing this, what is the purpose of the combinations that we pick, and why do we -- why I do think these are the right ones for the Tribunal to consider when thinking about the appropriate flexibility for the pricing of one product in a multi-product firm like BT.

So the nature of the combinations, the question you ask each time when you look at a combination is: imagine that this is BT as a standalone provider of the combination products that you have identified, and so the question -- you start with: they are a standalone provider of SFV services. But then what you are thinking is: are there some -- have they over-recovered their common costs when we think about them being a standalone provider of more products as well?

When we calculate the standalone cost of one of these other combinations, the way we do it is we take all the incremental costs of the services that are in that combination, we include the common costs, which are the same in each scenario, and then the appropriate margin.

So, for example, when we take SFV services and bundles and add them together, we take the incremental costs of the SFV services, the incremental costs of bundles, the common costs of BT Consumer, and then the margin. Then we ask the question: with all the revenue they then recover from their SFV services and their bundles, does it appear that they are over-recovering their costs, including their common costs of that service?

Now, if they are at any point recovering more than their common costs, you want to have designed a set of increments that are going to capture that in a meaningful way. So the increments that I chose -- the combinations that I chose, rather, were starting with the SFV, capital S, Services, so the products in the claim, then including the other SFV products, so Home Phone Saver and BT Basic. I then had bundles as one additional service, which I will come back to. Then the standalone broadband service, the standalone mobile service and then other products.

Then perhaps if we just go over the page to 225, {IR-E/17/225}, Table 6.9, which also goes on to the other page but perhaps we do not need to do that just yet, that just sets out what, in a sense, are the different hypothetical businesses I am then testing in terms of the combinations of services that are going to be offered by the standalone business that I am looking at.

So then the question you ask is: should I have split out bundles so that it looked at Dual Play, Triple Play, Dual Play with sport, Triple Play with sport, all of those elements? The reason I did not do that is because actually what we are thinking about here is we are -- in a sense, we are not worried about what is going on in the bundles market, right, we are thinking that that is a competitive part of the vista, the competitive arena that we are looking at, and the strategy that BT implemented, they were not thinking: "oh, I want to set up a standalone sports business", right. "I do not want to be a sports retailer for the sake of being a sports retailer, I want to be a successful retailer of bundles of services, and in the competition for that I need to enhance my offering, which is currently mostly Voice and broadband, and include TV and sports in order to compete with other providers in that bundle market". So the right way to think about that is that I think about bundles as one service line, one -- and then I combine that with the other products.

So you can say, okay, well, then that masks the fact that sport for some part of its time was a loss leader, in a sense that losses were being made, but there is not a commercial sense in which BT was seeking to offer sport on its own. It was doing that in order to attract and retain bundle customers, and it was successful in that, and when you look at the bundle overall it is always above cost, you know, making a return. The return is lower by about -- here it is about 15% reduction for when you include sport, when you do not include sport, but that is the nature of competition in this area.

So then it is reasonable to use this set of combinations for testing the price flexibility that a multi-product firm would have in this situation.

MR RIDYARD: Right, so, Mr Parker, specifically on that, I mean, what is described here obviously clearly could be mapped out in your -- in the example that you took us to, of bundling in BT Sport with the rest of the bundles rather than looking at it separately. But is it accepted that that is the right way of treating the BT Sport losses, or should it have been done differently, in your view?

MR PARKER: So I think, not contradicting what Dr Jenkins just mentioned, it is not the case that BT Sport was only sold in bundles.

If we can go to the JES at page 262 {E/49/262}, that gives you the proportion of BT Sport lines sold in bundles, which was originally very high, but as you can see it comes down, it is quite significant towards the end, but it is material in every period. I think if one was going to do the SAC combinatorial correctly, one would need to look back, think about how you allocate those BT Sport revenues and costs to bundles and to different types of bundles, and to each of the bundles separately, including ones with BT Sport, ones without BT Sport. Then one would need to have a separate standalone BT Sport category where we are talking towards the end of 40% plus of all of BT Sport subscriptions are on a standalone basis.

So I do not -- sorry ...

MR RIDYARD: I am not following the table actually.

MR PARKER: So if I understand correctly, this is -- the top line is the number of bundled lines with Voice and sport, and the middle line is the number of BT Sport as a whole, and therefore the bottom line is the proportion --

MR RIDYARD: The balance, yes.

MR PARKER: -- that are sold in bundles, and then one minus that is the proportion that are sold standalone. I apologise, I was jumping too quickly, too fast.

MR RIDYARD: Yes.

MR PARKER: So I think really you should break it all up, because these costs are -- perhaps we could go to my fourth report at a paragraph I need to find. It is {IR-E/5/104}, Table 2.

This is -- if you look at the bottom three lines, I will not read them out, but you can see "BT Sport revenues", "BT Sport LRIC", and you can see the bottom line is there was a very, very significant difference between the two. In many periods that difference is higher than the entire revenues of SFV services.

So even if we are only talking about 40% being sold on the standalone basis, that is potentially an extremely significant offsetting factor, which essentially the SAC combinatorial, as implemented by Dr Jenkins, says these losses over here should be recoverable by higher --

MR RIDYARD: Yes, I think I see how the mechanics work. But the key thing here is Dr Jenkins sort of claims that you should regard BT Sport as being intrinsically associated with the bundles business, because it was almost a form of marketing to sell the other services within the bundles, whereas you are saying the fact that it was sold, some of it was delivered as a standalone, sort of violates that claim or that assumption. That is what is driving the results that you are then describing, is that right?

MR PARKER: Yes. I mean, I think there is a more general issue of just bundling all the services together, Dual Play, Triple Play, Quad Play, whatever. Potentially we do not know whether some of those were in fact profitable or otherwise --

MR RIDYARD: No, but if --

MR PARKER: -- put those together, and those are separate services. I think this is just a specific example, but for BT Sport I think it is particularly the issue when we are looking at a large proportion of standalone.

MR RIDYARD: Yes. Put it this way: if they had shown that BT Sport was never sold as a standalone, it was always part of a bundle of services, would you stand down on this point, or would you still be making this point?

MR PARKER: I think I would be making it less strongly. I think the question then would be: is that the efficient way to offer a sport product, as part of a bundle, given that you could, for example, get Sky Sports and a wholesale must offer obligation from Sky.

Now, BT has clearly made a strategic choice to do something different. Question whether that has proved to be the correct strategic choice. But it seems to me there are fairly clear, you know, sizeable negative numbers being attached to this, just looking at it by itself, so you would have to have a really strong belief that this was critical for driving sales of Dual Play, TripleDual Play, Quad Play, even if it was only ever sold as part of a bundle it seems to me.

But I do agree it would be less of an issue if there was no standalone. I think it is very clear when there is a whole chunk of standalone sport being operated.

But I do think there is a bit of an issue, just given the size of the numbers that we are talking about, (inaudible).

THE CHAIRMAN: Can I just ask a supplemental on that. Conceptually, then, does it follow that although you say "well, if it was always sold in a bundle, your point would be less strong, but then you would have to question very strongly the particular effects here.

But do you agree conceptually that the way that you should choose your combinations is driven by the way in which the individual products which make up the combinations are sold, or is that irrelevant? Because you say that -- I think you said it should be every single potential combination, even if that is difficult.

MR PARKER: I think my view would be if BT -- let us suppose BT Sport is always added to every bundle, and then you do not really have a Dual Play bundle at all, you will always have at least a Triple Play bundle, so you would have Voice, broadband and BT Sport. What I would want to do for doing the full SAC combi is to say, right, there is now a Triple Play bundle: Voice, broadband, BT Sport; there is a Quad Play bundle: Voice, broadband, other TV, BT Sport; there is a quintuple, quin play bundle -- is that a thing -- with all five services, and you would be wanting to look at the profitability, you would want to split out the BT Sport costs across these different combinations, look at each of the product combinations that is available separately, work out the profitability or otherwise of those, and the contribution that they are making to common costs.

I still think you need, to do the SAC combinatorial properly, you need to split it down to every single service, but that could involve a service which involves some BT Sport, a service which does not.

MR DUCKWORTH: Could I just add my views, which are broadly in line with Mr Parker's.

I think there is a danger that if you adopt Dr Jenkins' approach, where you would be trying to set up combinations which reflect your view of BT's strategy at the time, then BT's strategy, particularly with respect to sport, has definitely changed over time. They have effectively formed a joint venture with sport at the end of the claim period. But it introduces a high degree of subjectivity that, depending on your view of BT's strategy, you end up with a different answer from the SAC combi approach.

Dr Jenkins has kind of recognised that in the Joint Expert Report, {OR-E/49/140}. She says:

"While testing SFV Services against each individual bundle type or a sub-set of bundles could theoretically could result in different 'cost-plus' benchmarks, these differences would be capturing BT's relative pricing decisions within its portfolio of bundles, and would not be informative of the question of whether SFV Services were excessively priced."

So she is effectively saying: if you do a different set of combinations you get a different answer, but in her opinion that is not informative. But in many ways that is her opinion that it is not informative.

We are saying test the different bundles almost mechanistically and see what the SAC combi result is. Dr Jenkins is saying you need to spend time and judgment deciding what the right set of bundles is, based on your understanding of BT's strategy with respect to sport or with respect to other products, before you actually do the mechanical SAC combi approach. I think that just, to me, introduces a degree of subjectivity in the production of the benchmark.

MR RIDYARD: Okay.

Dr Jenkins.

DR JENKINS: I think what I have sought to do is give a pragmatic and useful cost allocation approach that is anchored in the evidence on the strategic choices that BT did make to help the Tribunal make this difficult decision around, okay, there is a range of prices that may be observed and how do we understand them?

So it is the case that if you start to add many other formulations of the type of business that you want to have as a potential combination, you make the SAC combinatorial approach infeasible to operate and then it is considered to be not helpful.

MR RIDYARD: Infeasible because there are so many or ...

DR JENKINS: Because there are so many, yes, because it becomes unmanageable. So the choice I have made is a thoughtful one based on the actual behaviour of BT and the rivals in the market and thinking about, okay, what sorts of businesses; does it make sense to check that combination?

Perhaps if we just go back to Mr Parker's fourth report, so I think it is {E/5/104}, and if we go -- so just to understand here what Mr Parker is saying, so this table tells you --

THE CHAIRMAN: Sorry, the table that we are looking at here, Table 2?

DR JENKINS: Yes, which is the one Mr Parker took us to. It is saying: okay "Sports", looks like BT was losing a lot of money there.

Then if we go down to the bottom half of that page where Mr Parker shows what bundles would look like if you excluded the sports revenues and costs and showing that that would be -- that the bundles without that is quite profitable.

I am sure BT would have been very happy if it could get all that bundle revenue and not have to invest it in sports and television, and the suggestion that instead of that they could have just offered -- sold through the Sky Sports products to their customers, they did not have to invest in sport, that obviously is all true. That is an option. But they would not have had any differentiating feature in this market if they were just reselling the products that Sky do with Sky's branding on those channels.

So BT determined that in order to capture this bundle revenue -- this analysis that has been done assumes that they would have retained all of their bundles revenue even if they had not had the sports offer.

Then you put that against -- if we go to {E/49/264}. So this is the evidence just within those customers that we know about that are switching within BT from SFV services to a bundle, and we see that for them a large proportion of them were switching to bundles, including sport, through this period. They were attracted by the offer that BT had.

Now, not all of them were, absolutely. But you cannot predict necessarily which of your customers are going to be the ones who take up the sports offer, but you want to offer a range of bundle services to your customers that are going to match the differentiated needs that they have and offer something different from your rivals in order to be able to attract them.

We heard that part of the competition they were facing was indeed from Sky, with a strong TV and content offer, also offering broadband and also offering Voice services. So they are bundling out and competing from the other end of the spectrum, and BT were finding themselves having to compete to retain the customers who start off as Standalone Fixed Voice customers but end as bundles.

So you cannot separate this in a very static way. The behaviour in the market is seeking to attract and retain customers through this period.

Now, what I have done therefore is treat the bundle element of the business as one piece and look at whether or not, if you look at a combination of services which include other products and that bundle business, there is any evidence that BT was earning revenues that were in excess of the costs associated with that, including the common costs.

I find whichever combination of the 49 combinations that I look at, at no point do I find that on any of those combinations BT was earning above its costs. There is no evidence that BT was over-recovering common costs through this period with the choice of pricing that it made across the range of those services that I have tested.

MR RIDYARD: Yes, it seems to me that there is judgment coming into all of these approaches, really, and I totally understand Mr Duckworth's criticism, and I understand what you are saying as well, Dr Jenkins, but on both counts there is an element of judgment there. There is also an element of judgment in Mr Parker sort of saying --

DR JENKINS: Absolutely.

MR RIDYARD: -- you would need to think, well, was this the best way of doing this? You think about money spent on TV advertising, maybe BT could have spent that better and you could get the same discussion. So I think we are stuck with some exercise of judgment in all of these factors.

That has been a very useful exposition, though, of --

DR JENKINS: I would just add on that point, as you say, there were a range of different allocation methods that are being presented to the Tribunal. The

SAC combinatorial is one of them. We have the LRIC+. I have also presented some other Fully Allocated Cost options, and also, I am sure we will come to it, the distributed standalone costs. Those are all -- every one of those involves judgment, right? You know, from the fact of how you treat the indirect costs, whether you can split them between incremental and common. If you can, how you then allocate. If you cannot split them between incremental and common, how you allocate indirect costs.

There will be the exercise of judgment, whether that is by BT, by the regulator, by the Tribunal, by us as an expert team to assist you. So I think one of the points is thinking about what are the ranges -- there is no escaping from the fact that there are a range of cost benchmarks that could be observed in this market given the multi-product nature of BT.

THE CHAIRMAN: Can I just introduce at this point a question which I wanted to ask you, Dr Jenkins -- I have a similar one for Mr Duckworth, but I wanted to seize that later on -- which is to just to have a brief refresher course on the number of different approaches you have taken here, bearing in mind that you said yesterday that your approach, which I think was at that stage concentrating on your primary approach, the combinatorial approach, had the virtue of transparency in the sense that it was possible to change certain variables in it if the Tribunal thought that something needed adjusting.

Can you just first of all remind us, well, if that is the case, what would be the variables or the inputs that are open to change where a different exercise of judgment might be required?

DR JENKINS: I think in that context it was about the split between incremental costs and common costs, and I think one approach is that -- in a moment we can go to the table that showed the assumptions I had made, the judgments I had made, about whether -- the proportion of a category of indirect cost, and what proportion of it should be incremental, and which proportion should be common, and there are ... So hence you can see very transparently how that feeds through into an overall judgment of incremental costs and common costs.

I think the question was: is there anything else other than judgment that helps here? I said there is a particular class of indirect costs that Ofcom has judged to be, at a minimum, common costs for BT Consumer, which is the TSO direct costs. That is a subset --

THE CHAIRMAN: A technical service something.

DR JENKINS: Operations, and it is the sort of back office which is used to support the functions of BT Consumer.

I have used that as my cross-check in HJ2, annex 3. You can find that. However, if what you wanted was to think about exercising judgment on the split between incremental and common costs, that would involve looking at the different line items of the SG&A and D&A costs, and then being able to say, okay, actually I think all of these should be low, or most of these should be low in terms of common costs, or only this one should be allowed to have any common cost element, and you would be able to do that. Whereas for the more granular approaches we have to take it as a black box. This is what was done. It is very hard to unpick any element of that or make any judgment.

THE CHAIRMAN: When you say the more granular approaches, you mean ...

DR JENKINS: The one from the Regulatory Financial Statements from 2009.

THE CHAIRMAN: Yes, I am going to ask you something about that much later on.

But just give me -- just remind me where we would find a representation of that, of your proportional allocation of what you say are the true incremental costs and what are the true remain remaining common costs.

DR JENKINS: The tables that were handed up yesterday. To answer your question, that is one of the areas, the fact that we do not have a good measure of common costs that BT has ever done. So there is a -- if one wishes to pursue a cost allocation approach {OR-H/204/2}, which requires one to know common costs, which is the approach I took, then you will exercise judgment.

The alternative, if you think it is very hard to split incremental and common costs, is in a sense the option taken by the Class Representative's experts, which is to use Fully Allocated Cost approaches.

THE CHAIRMAN: Before we get there, and forgive me if I am being a bit simple about it, which is that is an issue, this whole question of what are the true incremental costs across the board. We know the CR disagrees with you about that.

But assuming you left the proportion between the two the same, there is then the question of how you allocate the common costs --

DR JENKINS: Absolutely, yes.

THE CHAIRMAN: -- and that feeds straight into your combinatorial model.

DR JENKINS: Absolutely. I say you can use the combinatorial model to allow the flexibility to recover those common costs in a varying way where you recognise the proportion that have already been recovered, given the existing pricing on other products.

THE CHAIRMAN: But that is not something, as it were, that is a variable. We are not about to start saying: we will do another ten combinations. That is pretty much fixed in your methodology. It is really the input here which is what you regard as the common costs for these purposes.

DR JENKINS: Then the other alternative would be to use an allocator, a sort of fixed allocator approach for those categories, which is more of a Fully Allocated Cost approach.

THE CHAIRMAN: Which is one of the alternatives you have done? You have done the DSAC as a sort of cross-check.

DR JENKINS: I have done a, yes, distributed standalone cost, so that is still looking at incremental and common costs, and then it is saying that you take the common costs and you distribute them across all the products that are close to the focal products, so in this case it is SFV Services, capital S, plus Home Phone Saver, plus BT Basic.

So instead of saying they just go on to SFV, capital S, Services, you distribute them across the SFV products that you have. So that is still really a standalone cost approach. You are still saying I am going to allocate those common costs on to these products.

THE CHAIRMAN: Yes.

DR JENKINS: You are right to interject that one between the SAC combinatorial, DSAC. Then you get more Fully Allocated Cost measures, which is where you spread those common costs across all the products.

THE CHAIRMAN: You have not done that?

DR JENKINS: I did -- that is the approach taken by the CR, and I did one sensitivity in the JES. I will just get you the table reference. It is Table 6 and Table 9, so that is {E/49/259} is the page reference.

THE CHAIRMAN: Right, thank you.

Now, what you have not done, as I understand it, is take the approach taken by the Class Representative using the 2009 RFS, but then, for example, adding different increments each year or things like that.

DR JENKINS: That is correct, I have not done that.

THE CHAIRMAN: I just want to ask one more thing while we are on the subject of the RFS.

The RFS we have just spent some time studying has a main primary document which sets out in very great detail the precise way in which BT has gone about the process of allocating revenue and cost in relation to each of the individual product markets which gets split right down, effectively, into SFV and explains which sets of principles have priority over other principles. It does involve using LRIC, and it does involve, according to that document, causality as a key driver in all of this. I accept that it does not appear in relation to any of the figures, that you get something which ends up saying: these are the incremental costs, these are the common costs, and that is how we do them.

What I wanted to do, it is a little bit artificial perhaps, but had we been back in 2009, or had this been a current document or last year's document, in principle would there be any objection to using it as the starting point for building your competitive benchmark?

DR JENKINS: I think if that document were available up to date based on the actual costs and causality patterns across the whole of BT Consumer, not just focused on -- not just with the mindset focused on those where the regulator was focusing through SMP obligations, then absolutely one would consider what that -- that as a relevant piece of information about how BT thought about the cost of its business in the current -- at the time that that document was done.

THE CHAIRMAN: Yes.

DR JENKINS: Whether that is still the only thing that one would consider, if one were determining excessive pricing, that there was no other way it could have been done, that would still be compatible with the workably competitive market. There may still be room for discussion, but you would certainly consider it.

THE CHAIRMAN: Right, can I just explore that a bit more because you qualified your answer by saying, yes, you could certainly use it provided that it has got the costs data across the whole of BT Consumer as opposed to what the regulator wanted. The regulator actually wanted a number of different exercises across a whole range of products which of course included what we now call BT Consumer. But what would be wrong with looking just at the SFV calculation, including the attribution of common costs, that BT did assuming it was up to date, what would be wrong with that?

DR JENKINS: I do not think there would be anything wrong with that.

THE CHAIRMAN: Right. If that is right, and I appreciate there are nuances here, and I take your point you say, well there may still be other things that you would look at, but your real objection to the 2009 SFV as a building plot is effectively it is out of date.

DR JENKINS: Yes. That is ...

MR MATTHEW: Could I make a comment on that?

THE CHAIRMAN: Yes, you can, once I have just made a couple of notes. (Pause). Thank you, Dr Jenkins. Yes, Mr Matthew.

MR MATTHEW: So I would like to comment on two things. Firstly, that last point about the concept of an up-to-date RFS that covers this and then secondly, about BT Sport.

THE CHAIRMAN: Right.

MR MATTHEW: On the up-to-date RFS, I mean, I think it is important to recognise that what was done in 2009 was one allocation, so even at that time you have some common costs and what was in those accounts would have been the particular allocation adopted at that time for whatever purposes were in play. So as a conceptual level that still leaves the question of, well, would other allocations also have been reasonable, and I think the answer is yes.

Then the second point I wanted to make about the RFS is that of course it is reflecting a variety of different regulatory objectives as well as simply an accounting allocation. Those can include a variety of different things, but again, what you are trying to do is come up with a system that essentially mimics the regulatory decisions that are taken, helps new regulatory decisions to be made but where Ofcom actually or potentially has some oversight of how some aspects of this should be done, and Ofcom has looked into this from time to time to say, well we think you should do it a bit differently because we want more costs here or there, that kind of thing.

So I think my comment would be if you had an RFS today that had a particular allocation to SFV today, you would still have to go through the process of saying, in an excessive pricing context is that the answer? I think you would have the potential that different allocations might also be used.

THE CHAIRMAN: I looked in some detail at the allocations and of course you are right and you will know much more than me, but some of the particular principles are driven by provisions in the Communications Act which drill down. But I looked at the principles, for example, of causality which seemed to feature very strongly. I looked at the fact that BT in order to allow causality to drive the result for incremental cost as much as possible actually undertook staff surveys in call centres and places to actually try and work out what each member of staff was doing and in relation to what product which seemed to me quite a detailed exercise.

What is it that in terms of regulatory principles which govern this document would make it, as it were, not fit for purpose as a building block to get to a competitive benchmark?

MR MATTHEW: On that point that is exactly what regulators often do, especially in a regulatory accounts environment. So when they are doing those surveys to try and say what different staff members are doing drilling into a variety of things in effect they are drilling into understanding cost causality in a way that is not normally done in the statutory accounts and there are lots of good reasons to do that and essentially it is because regulators want to understand what the incremental costs of different services are.

The limitation is that does not include the common costs. All it is doing is saying, compared to statutory accounts, which will give you some direct costs and then a bunch of attributions on top of that, this is now saying, well, I can do better than that, I can tell you here is another group of people who are spending their time doing different things, I can do a more sophisticated version of activity based costing, I can take into account a variety of things. But it will still leave at the end a gap which is the bits that cannot be allocated and those are the common costs and there the attributions are an attribution. You have not shown causality of them because common costs are not causal in the way defined.

So that is what I mean when I say there is still a gap in which different decisions could be made and the ones that are made might reflect a variety of considerations. There is no single answer. That is one of the foundational points in economics with multi-products environments.

MR RIDYARD: The exercise might give us a better understanding of how big the common cost problem or issue is.

MR MATTHEW: Exactly.

DR JENKINS: I was just going to add, the questions you asked me before were around would one look at it if we had that and I definitely think it would be meaningful and useful to look at how that exercise had been conducted were it still available. I think even at the time that the RFSs existed they were not actually used very much commercially for actually informing pricing, but one thing is -- I do not know the extent which they were not looked at at all but obviously there will have been some information there.

So that is a sense where I agree with Mr Matthew and, as I said, it might be something that you look at but it is not going to give you the answer of what is the benchmark in a workably competitive environment.

THE CHAIRMAN: Thank you both very much indeed. There are some follow-on questions which I will have for Mr Duckworth in due course, but I want to go back to the line -- the points which Mr Ridyard was making and then we will catch up.

MR MATTHEW: Sorry, could I just make my quick point about BT Sports. I will be very fast.

MR RIDYARD: Yes.

MR MATTHEW: I am sure you are aware, but the question of whether or not BT Sport should be treated essentially as part of the broadband business was deliberated in depth and at length by Ofcom in its evaluation of the VULA margin squeeze which was a question around essentially placing -- there was a decision that there should be a regulatory obligation on BT to maintain a retail margin on VULA which means superfast broadband which was the new thing at the time of this claim period. Essentially this is all happening around 2015.

The issue of what costs should go into that were very important so the idea is were BT's retail prices for superfast broadband enough above the wholesale prices such that BT was making a profit in that part of its business.

So they looked in depth at which are the retail costs that BT faced, because that is what has to be covered and by far the biggest question there was well what should be the treatment of BT Sport costs (which were substantial)? Ofcom after some deliberation decided to include the BT Sports costs that had not been recovered from other sort of standalone sales through that retail margin. So that very plainly established that BT Sport costs were being treated as part of the broadband business, and the reasons for it were, as Dr Jenkins has explained, because in large parts BT's foray into that area was driven by the wish to promote its broadband sales.

THE CHAIRMAN: Thank you. I think that is probably a convenient moment to take a break as it turns out. Thank you very much.

(11.34 am)

(A short break)

(11.49 am)

MR RIDYARD: So the next topic we wanted to discuss was the disagreement between Mr Parker and Dr Jenkins, in particular, on whether any given level of common cost recovery on the services should be mapped against SFV lines or all Voice lines.

Mr Parker, maybe you could -- because you describe this as a mistake in Dr Jenkins' approach. Could you just introduce the topic and just summarise your point of view on it.

MR PARKER: Yes. So if we go back to the Box 6.1, we do not need to turn it up, but the example, that is basically saying, and this is the intuition behind the SAC combi approach, there is some common cost recovery on product B, that was 90, the total common costs 150, so that allows the remainder to be -- it gives you the view that 60 could be -- would be a legitimate thing to recover from SFV services.

What Dr Jenkins has done is to say: that 60, I am going to allocate that not to SFV services, but to both SFV services and other products in the combination, so across SFV services and bundles or A1 and B.

So this is not the approach that is set out in Box 6.1. I do not think this is the SAC combinatorial approach. It is essentially dividing the gap, the common costs that are not being achieved from bundles, and saying, well, I will reallocate that, some of it, to SFV and some more of it to bundles. I just do not think -- that is not the approach we are trying to take.

If you resolve that, what you see, and no need to do so, is this gap should be applied to SFV services. You see this extremely large potential recovery, which we might just want to have a quick look at.

MR RIDYARD: I think we can -- we get the point. If you allocated a certain number --

MR PARKER: I think that tells you something about the inputs that Dr Jenkins is using and the validity of those inputs.

So that is why I think there is -- this is the wrong approach, or it is not the SAC combinatorial approach, it is something else.

MR RIDYARD: Dr Jenkins, maybe you could explain why you allocated it across all lines as opposed to just the focal product.

DR JENKINS: Yes. So if we go back to thinking about what is the SAC combinatorial approach doing, when we look at the different combinations, as I said earlier, the way to think about that is this is an alternative standalone business with a subset of the current products that BT is producing. So we start with just SFV services, and then we build up adding different additional services, but we are thinking about it as it is a standalone provider.

As I said, when I test overall for each of my combinations, different combinations, I find in no example is there a situation where the revenue that is actually earned by BT on that combination is above the benchmark that is derived from incremental costs, common costs and margin, the margin, the relevant margin.

So no sign of excessive pricing. But then we come to the question of what the implicit price benchmark should be. So then I need to look at by how much below the potential benchmark price, benchmark revenue, sorry, is actual revenue, and then what I do is I work out, well, how much would prices have to rise in order that you are at the standalone cost for that combination? Because in my scenario I am not finding any evidence of excessive pricing, yet I am thinking through, well, what would the benchmark be?

So when I think about that question of how do I recover that revenue, which is -- or how do I spread the common costs, I think about what is the combination that I am looking at.

So in combinations where the only Voice service that is being supplied by my standalone business is Standalone Fixed Voice, then I used Standalone Fixed Voice lines as the denominator to spread those costs. But where I have a broad combination that includes Voice, however sold, then I say, okay, well how do participants in this market actually price? They actually price the same price for these Voice services across all of those Voice products.

So I then say, okay, I would ask the question, spreading those common costs across all the Voice products, which would give a benchmark for Standalone Fixed Voice and also Voice, however else sold.

So I think I differentiate depending on the nature of the standalone firm that one is looking at and bringing in the actual commercial practices that we observe in BT, which is it would think of recovering a certain amount of costs from whichever Voice customers it is supplying at that time. That is why I do not think it is an error; it is a reasonable and useful way of implementing the SAC combinatorial approach in this case.

MR RIDYARD: Okay, if you do -- it is just simple arithmetic, really, is it not? If you do a chunk of common costs that you are allowing someone to recover over something, if you recover over 3 million customers as opposed to 9 million, obviously the amount you recover from customers is going to be three times higher. So if you do allocate this common cost just to the SFVs, the much narrower base of customers, and then you obviously get a much, much higher ceiling, I mean, is that something which is embarrassing or revealing about anything?

DR JENKINS: I think it in a sense goes back to some of the questions we were discussing yesterday about if you are thinking about a truly standalone operator that is only supplying very few SFV lines, then how does one square that when we are faced with common costs of BT overall? So one of the advantages of this approach is that it keeps -- for those big combinations, which are in a sense the constraining and binding constraint in this way, it is recognising a broader Voice increment which allows -- gives a -- it is better matched to the scale of the common costs. So to that extent you could see it as also adjusting for the fact that the Standalone Fixed Voice element is shrinking over this period.

MR RIDYARD: But as I understood it, Mr Parker, he draws attention to what the calculation would look like if -- what he thinks would be the correct application of your approach, and allocated it all to the SFVs, and then you get this very, very high price ceiling, and he says: look at how high that ceiling is, does that not just show you how unreliable or ridiculous the SSE approach is?

DR JENKINS: Yes, I just think it is very hard to think how one would implement that. So you are thinking of a standalone business which is supplying Voice on a standalone business and Voice in a bundle, so you have to somehow fully separate these customer bases. That is why I have not done it that way. I have said whatever price you would set in that way to recover common costs, you have to think about that being the same price to these two types of customers. There is no way to hermetically seal across these two groups. So you need to have a price for the Voice services that are being supplied there and what the common cost allocation would be to that, whether it is sold standalone or in a bundle. I think that is the right way to think about allocating common costs in that combination.

MR RIDYARD: So you are saying you would never get -- you would never get to a situation where you allocated this common cost just to SFV.

DR JENKINS: If you are a standalone business that is supplying a combination which includes Voice sold in bundles, yes. If you only supply Standalone Fixed Voice, so if anyone wants a bundle you say: please go away and be served by someone else, then it makes sense, then I have done that. But when you are thinking about a provider who is supplying Voice both standalone or in a bundle, then you need to spread the common costs across all Voice.

MR RIDYARD: Mr Parker.

MR PARKER: I would not agree with that. I think the first point is that that the SAC combinatorial is a conceptual benchmark. So exactly how BT chooses to behave is not relevant to the simple proposition of if you make some common costs over here, what is left over you should assign over here. All it is trying to do we can abstract from particular notions of how BT is behaving.

But then I think on the argument that BT behaved in such a way, that is the bundle pricing fallacy, and that is the discussion we had I think last week. BT has every flexibility. This is just saying -- all the SAC combi is trying to do is to say what would be a reasonable price which would not be excessive for SFV services? The answer is 13 times Mr Duckworth's benchmark, 7 times BT's current price level.

It can get very, very large, and in some ways it is just -- I think it is a symptom of a multiple of things. It is a symptom of I think the common costs have been over-estimated, I think it is a symptom of I think margin has been over-estimated, and I think it is just -- it is a weakness of SAC combinatorial in a world where you have shrinking customer bases, because when you have a very small customer base what it is saying is it would be completely legitimate to recover all the revenue gap on the increasingly small number of customers.

You can see I do a similar example for standalone broadband in a period where there is hardly any standalone broadband customers, 40,000 or something, and the numbers come up as it would be completely reasonable under SAC combi to increase prices by 6,500% for those customers because you have got to recover the common costs. That is the idea.

I think that, to me, points to a really kind of fundamental problem with the SAC combi generally and with the inputs that Dr Jenkins has used.

I think another thing that it points to is if you said you could raise the prices to here in order to recover your common costs, that is an assumption -- there is an assumption built in which is that you will not have an elasticity response from the customer base.

MR RIDYARD: It depends how you think what this SAC combinatorial answer is doing. If it was just saying: this is the ceiling and anything below the ceiling is going to be okay, it does not mean to say that you have the power to get to the ceiling, it just means to say -- it just means you have a huge amount of flexibility about how you price.

MR PARKER: Yes, I think that is fair enough, and I suppose the fact that the ceiling could be so large suggests that it is not a test that is very precise, given the inputs that Dr Jenkins has used.

MR RIDYARD: Or simply it is a test which gives a lot of flexibility on how you recover common costs.

MR PARKER: It certainly does that. Maybe that goes back to the conversation yesterday of really what level are these common costs.

As an aside, I think Dr Jenkins was talking about some of the judgments she had used. One of the judgments she did not point to, but it is probably just worth mentioning, is the judgment that all common costs are common to all services of BT Consumer. So however you measure them, another way of thinking about the common costs, and the way you really should think about it in the SAC combinatorial approach, is to say: there are pair-wise common costs between the combinations of services, so there are common costs between Voice and broadband, there are common costs in principle between broadband and mobile, between broadband and TV, and so on, all the sort of -- all of those.

Then you should look at the triple combinations, so maybe there are combinations of, I do not know, broadband, sport and TV and some common costs to those. So you should build up all these common costs and you should run the SAC combinatorial across -- in a more fine-grained way, looking at the specific common costs associated with each set of increments.

So another judgment that Dr Jenkins has incorporated into her analysis is that all common costs are common across all services, and therefore only need to do one analysis, but that is just another factor to bear in mind.

MR RIDYARD: Dr Jenkins, I would like you to come back on two points there. One is that one, this comment about: are common costs, do you treat them as common across everything, and you say does that matter? Secondly, I would like you to respond on this point about if you have a narrower or indeed -- and/or shrinking group of customers at some point, under the SAC combinatorial test you are going to get a very high ceiling for them if they are recovering a given amount of common cost against an ever-shrinking base, and whether that is -- whether you see that as a problem or not.

DR JENKINS: So I think the SAC combinatorial is a set of principles of thinking about how you address what is a quite complex question, which is to say we have a multi-product firm, it has direct costs and indirect costs. How do we judge what would be reasonable in a workably competitive environment? What I have sought to do is make that tractable and pragmatic and reflect the features of the market that exist.

So I do not think there is a rubric of this is the way SAC combinatorial is done, such that you would not take into account what actually happens in the market, because the rubric does not include that.

I do not see it as that different from the FAC approach that we have discussed, which involves a lot of judgments, causality, you add information about how things are actually done. All of -- any approach to allocating indirect costs is going to require information and judgment based on how businesses actually conduct their affairs. So I think, as a matter of principle, having it informed by how the market actually operates is a strength not a weakness.

In terms of if you have declining -- a declining number of lines that you are looking at, it does have -- it does indeed have that feature that if you look at the standalone -- if you look at that as a standalone business on its own, and you continue to have all the costs of BT Consumer, that can lead to very high apparent potential prices.

In the SAC combinatorial approach, that is why you do not stop there, you look at these other combinations, and by picking up broader combinations that recognise that those common costs would be spread across the other Voice customers, as people move away from Standalone Fixed Voice to Voice sold in other ways, effectively avoids that challenge and sets a quite reasonable cost-plus benchmark from this approach.

MR RIDYARD: Does it avoid that challenge? Because you could get a phenomenally high allowable margin on a very, very thin slice of service. It would not -- it would give an alarmingly high percentage profit, if you like, or allow the profit margin, but it would not do much to pay off the common costs. It still would not make much contribution to total common costs.

If the slice is thin enough, then it would not be doing much in terms of generating a lot of revenue, it would just have a very high margin.

DR JENKINS: But the question is: given the other prices and looking at all combinations, what is the price, the highest price one can charge for Voice services such that that costs are recovered? So while there may be one or more combination where there is not much constraint coming from that, there are combinations where that is relevant. So it is the fact that you do the combinations that obviates some of that challenge.

Now, I do not disagree that you can end up with these very high prices on those narrow segments, and so then you look at even in the DSAC approach there can be some element of that, that you are recovering common costs over a wider number of lines, but it is still affected by this decline. Other than that, then you are in Fully Allocated Cost territory.

So I think the combinations -- the approach by looking at combinations does address this problem to a great extent.

MR RIDYARD: Then the other one was the common costs.

DR JENKINS: Oh, that is right. I think that problem of principle affects any cost allocation, arguably. Like if someone is thinking about allocating common costs, one ought to be dividing them up into all these different forms of common cost and what do they attribute to, and I do not think -- I am not sure that was done for the RFS, I do not think that has been proposed to be done.

I think, again, the approach I have taken has sought to identify common costs for BT Consumer which -- I have the citation in 7.122 of the joint statement. Let me just get you a page reference, {E/49/133}. Actually over the page, {E/49/134}, so the first full bullet on that page.

So when Ofcom, in the VULA margin and the superfast broadband cases, where they were looking to identify what were the fixed and common costs of BT Consumer, did explicitly classify the TSO fixed costs as being fixed and common to all BT Consumer services since they be expected to remain invariant even if BT were no longer to have the BT Consumer business as a whole.

I have used that as my lowest common cost estimate, in a sense to say there may be other common costs that are linked to some combinations, but I think this is a reasonable basis to say they are common to SFV services and the rest to BT Consumer.

MR RIDYARD: So you are saying you think the common costs that you have described as common are common across the whole lot, rather than just being subsets?

DR JENKINS: Across the whole lot. There may be other subsets, and all the rest of it, but particularly in the cross-check that I have done, I have chosen the costs that Ofcom had identified as invariant.

MR RIDYARD: Thanks.

Mr Parker, did you want to come back on those points?

MR PARKER: I think perhaps Mr Duckworth should comment on the last point. It is more his area than mine.

MR RIDYARD: Thanks.

MR DUCKWORTH: I think we had this debate yesterday. I think this relies on kind of one statement from Ofcom in a decision about VULA margin squeeze, which is the VULA products or the retail products where you have Triple Play products, including TV, sport, broadband and

Voice. Ofcom allocated costs on a LRIC+ basis, so it did not really need to get down to the level of deciding what costs were fixed and common.

I think the evidence is that when you are looking at kind of small-scale players, they do not incur the level of costs suggested by -- Dr Jenkins' is kind of a minimum level of fixed costs in order to deliver services. We will come on to the implications of that for DSAC.

In terms of costs which are common to subsets of services and not to the full portfolio of BT services, we had a discussion yesterday about economies of scale in Voice provision, which is part of BT's arguments against projecting forwards from 2009, but that implicitly assumes that there are some fixed and common costs to the provision of Voice services.

So in that context, BT is arguing with some sort of service-specific fixed cost, but then when Dr Jenkins is carrying out her SAC combinatorial, there is no reference to costs which are fixed and common to the provision of Voice services or costs which are fixed and common specific to television services or to broadband services.

So I do not have full visibility of what is in the TSO costs. I have looked at what Mr Cackett has said in his testimony. I have looked at -- I referred to the analysis that BT itself did of TSO costs in terms of doing unit costs, and to me that suggested that there are some costs which are not truly fixed and common across all services within TSO.

But I do not have the full details of what is underlying the TSO costs, so I think we need to balance a statement made by Ofcom in one context against other evidence that suggests that some of these TSO costs may not be fixed and common across all services.

DR JENKINS: I would just say the top line of the page that is still showing is there are three categories of TSO costs: direct costs, which can be allocated to specific market-facing units, and that explicitly discusses like for a TV or something like that; TSO indirect costs, where there is believed to be some causality, and they are also generally allocated; and then TSO fixed, which is the element I have taken, and it is that specific element of TSO costs which Ofcom has identified as being fixed and common and remaining invariant.

As Mr Duckworth says, in this exercise Ofcom was looking to find as much as it could that was variable to allocate, so it was leaving behind as little as possible that it identified as truly fixed and common, and it is that that I have used as my cross-check to my own assessment of what looks like to be the common costs of BT Consumer, you know, things that I have included, which would include some contribution to marketing because the BT brand would be an example of something that would be common across all the services that BT Consumer would serve.

MR RIDYARD: Okay. Right.

So the next topic was the DSAC approach that has been used, the distributed standalone cost approach which has been used by Dr Jenkins.

Actually, Dr Jenkins, you did give us a brief summary of that earlier today already, so maybe I could pass that over to Mr Parker or Mr Duckworth to say what are the concerns with this approach, given that Ofcom has used this as a way -- as a pragmatic device, anyway, for dealing with the complexity of these situations.

MR DUCKWORTH: So Ofcom did use DSAC as a cost measure in a particular context, which was the regulation of wholesale network services where there was an overall price cap in place on those services which prevented, across a portfolio of services, BT making excessive returns.

There was in addition a cost orientation requirement on individual products preventing a very disproportionate recovery of fixed and common costs, but giving BT a lot of flexibility to recover more or less fixed and common costs from particular services.

This was in the context of what is now called business connectivity market, so connections to large corporations. Then, as I mentioned yesterday, there is a degree of heterogeneity in that market. You have some SMEs, you have some very large corporations, and so the use of DSAC to allow a certain amount of flexibility within an overall price cap seems justified in that you may want to recover more costs from large corporations, or a greater proportion of common costs from large corporations, compared to, say, SMEs, and Ofcom judged that that would be potentially kind of welfare-enhancing to give BT a degree of ability to kind of price discriminate between different users.

MR RIDYARD: So you think the flexibility that Ofcom had in mind there for BT was greater than the flexibility that they should be offered in respect of this case?

MR DUCKWORTH: I am putting that that is the kind of context of how DSAC was used by Ofcom, and previously Oftel, in that environment. I think that is different from an excessive pricing case, the first point being that we do not have an overall price cap on the kind of total portfolio of BT Consumer services here, whereas in those contexts there was no ability for BT to make excess profits overall because any sort of -- under a price cap, a sort of basket approach, any sort of increase in price for one service would require another service to have a kind of offsetting decline in prices.

So there was a degree to which overall excessive pricing was not an issue. The issue was to try and give BT flexibility but not unbounded flexibility. Unbounded flexibility could potentially be used in ways which were sort of anti-competitive, potentially, given this was a market where competition was developing.

So that was the context in which Ofcom applied DSAC.

I think the context is quite different here. What we are trying to do is understand the costs of production and a reasonable attribution of fixed and common costs under workable competition, and part of that is understanding the constraints placed on BT potentially by alternative operators.

Dr Jenkins has looked at a DSAC approach and said, well, let us look at the standalone costs of a relatively small increment here. It is, as she described earlier, it is the kind of SFV services in the class, plus BT Basics, plus Home Phone Saver, and said, you know, I will look at the -- Dr Jenkins' estimate of the standalone costs of providing that service, I will look at the common costs for providing that service and distribute that over those lines.

My -- I have got two concerns with that approach. The first concern is effectively it is assuming that a provider who just provides Voice services and does not provide bundles, including Dual Play, Triple Play, is effectively a binding constraint on BT. I do not think that reflects the competition in the market, I do not think -- there is an example of an operator who solely provided Voice products during the claim period and then did not provide any of the other services. So competitive constraints on BT's ability to kind of recover fixed and common costs did not come from someone just providing Voice services on a standalone basis.

So that is kind of a conceptual point.

The second point is if you look at Dr Jenkins' assumptions on the standalone costs of providing just Voice services, those do not look credible given the scale of the Voice lines alone without including the kind of Dual Play services. So again, we are back to this assumption that if BT were to provide just Voice services on a standalone basis, they would incur this large proportion of fixed and common costs, the sort of -- well, taken from Dr Jenkins' table, the sort of £282 million common costs as well as the direct costs and any indirect incremental costs just to provide Voice services.

That is just not a sort of a credible answer for the costs of providing Voice services. If BT were to just provide Voice services and not any kind of Dual Play or broadband services or sport, then it would be able, in my opinion, to flex some of these costs that Dr Jenkins has considered to be fixed and common to reduce those costs. So TSO costs or a fixed recharge must have some degree of flexibility to reduce those costs if you were going down to a standalone business just providing Voice services.

MR RIDYARD: There are quite a few different points there.

Dr Jenkins.

DR JENKINS: I am not sure I will pick up all of them, so do prompt if there are any further you would like me to comment on.

I think actually just the latter part of Mr Duckworth's answer, which is the fact that there may be competitive constraints such that a business does not charge the price that would be fully reflective of the benchmarks that come out of this. I do not think that is necessarily surprising nor of concern, since the point here is to ask the question: what would be the cost -- reasonably attributable cost benchmark against which to judge whether or not the prices that we observe are consistent with workable competition?

So where we are taking the upper bound of those, which we are, because what we are asking is, versions of pricing where we recover common costs predominantly from the service of interest. So the fact that the price is below these benchmarks generally is a sign that there is effective competition, workable competition, that is constraining that price below that reasonably attributable cost benchmark.

So I do not think you can say that the cost benchmark needs to match observed pricing. That is not the exercise that we are looking at here.

MR RIDYARD: The competition is coming from bundle suppliers, so you do not need to think about --

DR JENKINS: Bundles and other SFV suppliers at the time. They were facing competition on -- both for the Standalone Fixed Voice and also that these customers, the reason these customers are falling over time is because predominantly they are switching to bundled products.

Now, the way that DSAC works as a cross-check, it does mean that for the same proportion of common costs, as the number of lines fall for all SFV products, you end up with the fact that you can get very high benchmarks because you are recovering those common costs on a smaller group of customers.

If we go to {E/17/234} in my first report -- could we have {IR-E/17/234}, to be fair. We need to see the last two years.

You see that towards the end of the period -- now, this is the baseline common costs. If you use the low common costs, then for the later periods the benchmark comes down to 40 to 45, and that you can see, I will not take you there, but that is in my sensitivity Table 6.10.

What you know, at the beginning of this period there are still plenty of SFV customers, around 3 million, but by the end, where we are only focused on SPCs, there are only around 300,000, and that is reflected -- that is part of the explanation of why this benchmark is going up.

Now, what we have done -- what I have done here is distribute those common costs, not only over the Class Members, this chart is showing you the impact on Class Members, but the other common costs are being recovered from the Voice Only customers who are protected post-commitment, so those lines, the Home Phone Saver customers and BT Basic customers. So that is where the rest of the common costs are being distributed in this approach.

So certainly at the beginning of this period, I think this is definitely meaningful in the sense that you have a good chunk of lines. As you go towards the end of the period where you have fewer and fewer lines, then the DSAC may not be as useful a cross-check on the SAC combi as it is at the beginning of the period.

MR RIDYARD: Okay. Mr Duckworth also made some comments about the context in which Ofcom and Oftel used DSAC and whether that was applicable to the current situation. Any reactions to that?

DR JENKINS: I think as a principle you can apply the distributed standalone cost in any context that you are thinking about standalone costs. I think Mr Parker's suggestion was to broaden the set of services over which you distribute the common costs, to include bundles as well, on the argument that, as I agree, many of the Standalone Fixed Voice customers are switching to bundles.

Now, my answer to that is okay, once you add bundles in here, this is basically becoming a Fully Allocated Cost approach. So absolutely it is something to look at and I do present some sensitivities on that, but because of the way distributed standalone cost works is it says broaden the increment you are looking at, the services that you are looking at, and then, in a sense, distribute using a Fully Allocated Cost principle, using some allocator, distribute the common costs across that element, and what I have actually used is an equi-proportionate mark-up, an EPMU approach for this.

So if you add all the bundles as well, you are just back to asking the question: how should we allocate common costs across the range of BT's services? Then we could use a range of allocators at that point.

So I think you can use the concept of thinking about a broader increment than just the service of interest. I think if you are doing that, the group that I have chosen is the right group. It is all the Standalone Fixed Voice customers. Therefore it is another useful piece of information to judge the pricing flexibility that would be observed in a workably competitive market.

MR PARKER: Could I maybe comment? Because Dr Jenkins was talking about my DSAC sensitivity, so perhaps we could turn up {IR-E/5/111}.

I think my main concern with DSAC is really that it is just arbitrary to the choice of the increment over which you are going to distribute your common costs. So Dr Jenkins has broadened it out to include Home Phone Saver and BT Basic. All I have done here is just to illustrate, you could pick another arbitrary combination by also including bundles, and if you do that then you get a much, much lower benchmark. You can see that in Table 8. By the end of the period we are talking about magnitudes of a difference of sort of 250%, if not more.

I do not think this really tells you anything, to be honest. I think it just tells you that if you pick an arbitrarily small combination to recover your common costs over at any level of common costs, that will give you a high number relative to picking a broader combination.

I think to the extent that all firms in this market seem to be operating on a multi-product basis, I am not sure why you would restrict your attention just to SFV services. So, for me, this does not really add much. This is just a different way of cutting the common cost cake that Dr Jenkins suggests is the right level of common costs.

MR RIDYARD: I think this is a theme that we keep coming back to in a lot of these discussions, that with versions of standalone cost you end up giving more flexibility, which is the advantage claimed for it by BT and its experts, but it is ...

MR PARKER: I think it would not arise in workable competition. This goes a bit back to the Bliss idea, that you have a whole bunch of services and people are coming in and serving across all these services. The market will find competitive price levels, including allocations of common costs a la Bliss, but -- because if you try to recover too much on one service, other people think: I can do a bit better, I can undercut and get more customers, even though I am making slightly less recovery of common costs.

I do not think that saying, well, if we restrict attention just to this and say this is the costs, and we could end up at a price in the £50 range, is actually consistent with where a competitive market would get you, or indeed this not terribly competitive market, in my view, has actually got us to.

So I think the idea that a workably competitive market could give you more than double where we currently are seems a bit surprising, particularly in the context of Ofcom having already intervened at some lower levels.

MR RIDYARD: We next have a set of questions about scale and fixed cost allocation. In a way, we already partially covered this yesterday, incidentally, to the discussions we were having then, but I think it would be useful just to go over these points again.

The context for it I think in the discussion -- in the joint experts' report was really whether -- it was related to whether this question about scale was revealing something about Dr Jenkins' view of the common costs being too high.

Why do I not ask Mr Parker to start on this. What is your perspective on thinking about what scale reveals about the nature of common costs and whether that does provide a good benchmark?

MR PARKER: I think it does. So if you take the view that all common costs are common across all services and all retail telco services, which I believe is Dr Jenkins' position, then you should not be able to operate at a level below that full allocation of common costs, and even then you still have to cover your direct costs, your indirect costs, your incremental costs and so on.

So for me it tells you something about -- that Dr Jenkins has very substantially overestimated the level of the common costs, because people would not be able to survive at the level that they are operating these services if the level of common costs was the level that Dr Jenkins suggests.

MR RIDYARD: But then your examples of people operating on a small scale were the Post Office and SSE, was it not --

MR PARKER: -- Mr Duckworth's report at pages 39 and 40 of the second report. There is Post Office, there is SSE.

There is even Plusnet, which is operated on a sort of standalone arms-length basis by BT, which again ... The SG&A and D&A costs of Plusnet are less than Dr Jenkins' estimate of standalone, you know, of fixed and common costs required.

So I think there are multiple data points there. I think we had a bit of a discussion about that these firms would be able to operate on different scales or different scopes, and so on, but that just tells me that those costs are not fixed and common, because it is different.

MR RIDYARD: The way this was expressed yesterday was maybe that the Post Office and SSE were not small-scale businesses, they were also benefiting from their own larger scale -- the platforms that they developed in the Post Office business in its business, and in SSE with its energy business, and whether there was a question mark about whether these truly are standalone players in telecoms.

MR PARKER: I go back to: Dr Jenkins' view is that these common costs are fixed and common across retail telco services, then the fact that SSE has an energy business and Post Office has a postal business is not relevant to those costs, it is basically as soon as you get into retail telco it is £400 million up-front, and that is the minimum you have to spend. So I do not think that other businesses that you do off the side are necessarily relevant to that.

MR RIDYARD: Dr Jenkins, what is your view on that?

DR JENKINS: Yes, as we did discuss yesterday, and Mr Matthew also contributed on that question, is that there is not a true standalone SFV provider in the market. Without rehashing everything again, it is that if you were to say that Post Office may not be a telecoms business, SSE may not be a telecoms business, but they are competing as a retailer of services to households, they are doing that in different ways, and if you actually went into SSE and said what are the common costs? So, okay, again, if you said, well, what is the incremental cost of providing energy, electricity, gas, insurance, telecoms, all of those things, what are your common costs that are across all of those, including the brand, the customer management systems, the central office costs? Nobody has done that exercise to say what is the common costs of providing those services, which would then give them some flexibility about how they then recover those costs across the different services and customers they offer services to.

So I think here we are looking at what are BT's common costs, and that is what I have sought to estimate here.

MR RIDYARD: Yes.

Mr Matthew, anything to add to that? We do not need to repeat stuff we have already done yesterday.

MR MATTHEW: Yes, just -- so I will not repeat the point. We are trying to estimate standalone costs here, and the standalone costs for the Post Office could be a lot higher than the costs they have attributed to it in their business.

Just another comment about Mr Parker's point generally, though. I may have misunderstood, but if the point is the standalone cost should always be recoverable from any individual element, so the way you think about a platform, a multi-product platform which has several products which has a large common cost, say, you work out, yes, it is true the standalone costs of the individual components might be fairly high, but in general you do not expect firms to be able to set prices at their standalone costs. So the point is they are recovering those costs across all of the products, not just one of them. If you are a supermarket you do not recover all of your costs through bread.

So that is a feature of the way multi-product platforms work, and what you are trying to do is evaluate where are the boundaries for flexibility and its fit for purpose value. You do not need to test whether each individual component would be able to make -- cover all its common costs in relation to that part of the business alone in order to say, well, the common costs are therefore only reasonable if that is what you can do.

MR RIDYARD: Yes, I see that. But in a way, that is the criticism of using standalone cost as a ceiling for pricing when there is an allegation of excessive pricing, because --

MR MATTHEW: So this takes us back to the issue we are wrestling with, which is there is a fundamental problem in economics, a well-known one in regulation, which is when you have a multi-product platform where there are significant common costs, there is no single right way to attribute those and it is particularly hard to get round it. That is why, in most cases, people would be doing all the sensitivity checking when they are trying to rely on a particular allocation, because it is known that no single allocation is necessarily right or -- and that it is an intrinsically unstable basis on which to reach a finding.

That is why I think in *Phenytoin*, I am not surprised they did a standalone costs cross-check to their findings for that kind of reasoning, and it is what you would usually expect in this situation. Dr Jenkins' approach is one pragmatic way to deal with it, the other way is to use cost allocation but do lots of sensitivities. But what we are dealing with is a very difficult problem, and if it is not resolvable it takes you to the reliability of the cost-plus method in this case, which may not be that helpful, ultimately.

DR JENKINS: I would just add that I have not relied on a standalone cost alone. It is the combination, standalone cost across the combinations, which is precisely seeking to lessen the amount of flexibility by recognising that some of those common costs are recovered through the demand side constraints that you observe by the actual revenues that are recovered from the other services.

So you do bring in that, and then have still some flexibility there, but it is recognising, just as Mr Matthew said, that in reality common costs will not be recovered from just one service, they are contributed to from the other services, and it is only what is left after that that would then form your cost benchmark point of determining pricing.

MR RIDYARD: Understood, thanks.

I think I would now like to go on to the questions which I skipped over yesterday, which is back on section 5, number 5 of our list, at the bottom of page 1 and top of page 2.

This is where we had some questions about the notion of workable competition, and these are much broader questions really, but would like to try and explore the extent to which your expertise here can help us to get some practical guidelines, really, on how we should deal with the concept of workable competition and a sort of cost-plus benchmark.

So the first question, which maybe I could put to Dr Jenkins, is: should we be thinking that there is a range of prices that is consistent with workable competition, or should we be trying to get to a more precise answer to that question, and what is the reason for your position?

DR JENKINS: I think there are a range of prices that are consistent with workable competition and I think over the last day and a half we have discussed -- sorry, there are a range of prices consistent with workable competition, and there is certainly a range of cost-plus benchmarks in terms of how a business thinks about its cost base and how different businesses might think about how they recover the costs of their business from their different customer groups.

So I had in my answer jumped to saying if we are thinking about within workable competition, the extent to which prices that reflect costs can vary. I think under workable competition there is a wide range of ways in which businesses think about recovering their costs, particularly where there is a reasonable level of common costs, it does not need to be high, but just a reasonable level of common costs will drive a wide range of pricing potentials.

So there is not a single conceptual benchmark in a competitive market where you have a multi-product firm with economies of scope and, in addition, in our situation, you have these demand inter-relationships between the products themselves. So these inter-relationships are not just coming from the supply side in terms of sharing costs, they are also coming from the fact that how you price one product affects the demand for other products, so that leads to a wide range of potential outcomes.

MR RIDYARD: Specifically there you are referring to the possible incentive when setting the price for Voice Only to encourage people -- or the price you set for Voice Only might affect the probability of that customer trading up to a bundle.

DR JENKINS: Yes, that is right. So going all the way back to last week, that recapture incentive discussion which was agreeing that in a competitive environment, where firms sell products that are substitutes, they have an incentive -- they can have an incentive to raise the price on one product to -- because they are going to encourage or recapture customers that switch to the substitute.

MR RIDYARD: Mr Parker, can we get your thoughts on this question?

MR PARKER: Yes, so I think the simplified version is let us suppose we do not have any common costs or they are not material, then I think we are talking that there is a single cost-plus benchmark, so you have got direct costs, what we are calling indirect incremental costs and we have an appropriate margin, and that is what competition should drive you to. So I think it is a good benchmark for what would arrive under workable competition, as I think I probably mentioned the previous week.

Then there is the question of what do you do in a world of common costs. I think in a world where common costs are not terribly material, which given the evidence we have seen and the smaller providers I think is where we are, I think it largely boils down to there is a cost-plus benchmark with a little bit of common cost, but however you attribute those is not going to make a lot of difference.

If Dr Jenkins is right as to the common cost, then there is a much more kind of serious issue or discussion to be had about how do you allocate those common costs out to get to the right benchmark.

I think that if all the services in the market were competitive, then the Bliss paper essentially tells you there is an answer. So if you go into a supermarket and the relative prices of the products in there are pretty similar, competition drives supermarkets to levels of cost recovery on products that are pretty consistent across firms.

So I do not think I would say -- I do not think it would be right to say because there are large common costs somehow in a workably competitive market there is a very wide level of flexibility.

I think if you see this is the level of common cost recovery given that you have measured everything else correctly across N minus 1 of your products, then that probably does tell you something about the benchmark for the nth product. I am not convinced here that the sort of SAC combinatorial version of that has been done correctly but it is essentially giving you the conceptually same outcome, but you would have to do it with all the services. You would have to get the right common costs and so on.

I think for me there is a cost-plus benchmark with an appropriate allocation of common costs. That is what a workably competitive market would give you.

Then I think the question of flexibility is more around the measurement of the relevant inputs and how much wriggle room you think you need to add beyond that.

MR RIDYARD: Let us explore that a little bit. Let us put our common cost problem to one side and say we do not face it. There are no common costs in an industry. How confident are you there? You seem to be very confident that the competitive level is just a long-run -- the cost. But I mean, does that work when you have firms of different levels of efficiency or scale and so forth? Could you not get some firms, some inframarginal firms with much higher profits than the marginal firms?

MR PARKER: Yes. So if you have greater efficiency, if you have higher quality than your rivals, you as a firm will be able to make profits above the competitive level and not in a nefarious way but in a way that I think is completely legitimate. I think that still gives you -- the conceptual cost plus benchmark there is direct costs of the marginal firm, indirect incremental costs of the marginal firm, margin of the marginal firm. Everyone should be able to have similar cost in terms of weighted average cost to capital if they are doing the same sorts of services.

MR RIDYARD: So the firms who are not the marginal firms could be earning well in excess of cost in this workable --

MR PARKER: That is right. Let us suppose there is a firm that is making returns in excess of that benchmark, what is the reason for that? Is it to do with efficiency? Is it to do with quality? Is it because you have not actually taken the inputs correctly? So one of the things, one of the topics that we have been discussing is the sort of rebalancing idea between access and calls. If you were just looking at one of those you may miss the issue that there is the possibility of some rebalancing, so you should look at that sort of combination of products together.

Another example, we have talked about the introductory follow-on idea. I think that has come up in the context of mobile phone handsets and ex post termination charges. You might subsidise the handset because you know you are going to make the termination charges. I know we are talking 20 years ago now and this was really a relevant consideration but I think that is also something you should include in that cost benchmark.

But I still think that gives you a benchmark against which you can then do an exploration of, is there a reason to think that we have got this rebalancing going on that has not been taken into account that we have an introductory follow-on case, that the firm in question is clearly more efficient than its rivals, that it has a superior product or something uniquely attractive.

I would put all of that -- I would calculate the benchmark, it is in context of sort of how one might do it in *United Brands* and obviously that is not for me to say but the way I have been thinking about it is I would calculate the benchmark and then I would look at those factors in the context of significant persistent. So I would say, is it significantly above? Is there some reason why that is okay, because of efficiency, quality and so on.

So that is where I think I would I think --

MR RIDYARD: The size of that gap could be anything, could it not? I mean, it does not have to be a small difference, does it? If you had a big variation --

MR PARKER: If you had a super efficient firm that was demonstrably much more efficient than anyone else the size of that gap could be very large and therefore I would say it is not significant and persistent --

MR RIDYARD: Even though it is not significant.

MR PARKER: In that world because we have got a kind of objective reason. I think this is -- I cannot remember whether it is case 1 or case 2 of the kind of Tribunal's approach in *Hydrocortisone*, but there is a clear reason why, if you can establish the evidence for it, why the firm in question is just much more efficient than its rivals and that you would want to take that into account.

So I think -- I get the benchmark. I would try and measure the benchmark as accurately as possible and then I would try and work out is the firm above the benchmark? What are the reasons for that? Is there an obvious pro-competitive justification for that and that would all go into the assessment of significant.

MR RIDYARD: Yes, Mr Matthew.

MR MATTHEW: Could I comment?

MR RIDYARD: Please.

MR MATTHEW: It is a fascinating theme.

In my view the range of possible outcomes and structures that would be counted as workable competition is much more diverse than Mr Parker has described and that is shown up, as I discussed yesterday, if you just -- you need to go no further than retail telecoms, the bundle part, which is workably competitive, to find very diverse pricing strategies, a high degree of differentiation in the sort of strategic positioning of the main players, differences in customers' demands for different aspects of the services being provided and differences in search costs.

Those can very quickly, as that sector shows, lead to very diverse outcomes in prices and they do not all tend straight to one single cost item. I think that is not only because there are common costs, I just think that in a lot of markets which are oligopolistic which feature those kind of aspects which is going to be a lot of markets you will simply not find it to be the case that if I know what the cost is I can predict exactly what the prices will be or even very closely. We just get a lot of dynamism.

MR RIDYARD: Let me just stop you there. Do we have good evidence on that in the telecoms market and/or do we have good evidence on that more generally from the economy as you suggest?

MR MATTHEW: On the telecoms market, I am just speaking from just general observation that when you plot telecoms prices you see a lot of variation. Some of it is different providers. Some of it is different provider. So, for example, TalkTalk typically is seen as the cheaper operator in the market and has positioned itself differently and has perhaps different aspects to its services that go with that in terms of service quality and things like that.

MR RIDYARD: I am sorry to interrupt, I am not disagreeing with you or doubting what you say so much but just saying is there material on the file that we can refer to to test this proposition for ourselves?

MR MATTHEW: I do not have the reference but I understand in the evidence week there was reference to some charts that show quite wide variation in the prices. It would not be too difficult to find other plots from other cases if they are not on the file where it shows you get a diversity of pricing.

So, for example, I am aware of there was a review done into Hull Telecoms a while ago that I was part of, which is not interesting because Hull is a separate mini market that has its own little monopoly, but the reason that is interesting is because it actually has some retail market power because there is not the same wholesale base competition.

So what happens in the BT part of the world is used as a reference point so you see plots there of a variety of different prices when you are trying to do those kind of comparisons.

I am also aware that in the case of the end of contract notification paper which again I do not know is on the file, but it is an Ofcom review into the differences in how well people who shopped around a lot were getting out of the market compared to those who tended not to renew their contracts. I believe there were figures there saying quite large differences depending on which group you are in on average and then within that there will be a further dispersion. I think from memory the difference is £10 to £13 a month, so bigger than we see here in SFV.

So in terms of the broader economy I do not have evidence. I just believe that if you look in a lot of markets not very hard you will find quite a lot of variety in the sorts of prices you get.

Just a point, these are dynamic over time. I was thinking about this the other night and I was thinking about something if you use Amazon Prime, for example, you pay a subscription, this is the TV service. I do this because my children watch it a lot, and you pay a subscription and they give you a bunch of movies for free and then you pay for extra ones and you can see quite a lot of difference in how much people are charging for the movies and it does vary.

The sort of thing that sort of falls into place there is, suppose you have got an independent movie an Ingmar Bergman film often you will find it has quite high prices and the reason for that is there are a small number of people who value the Ingmar Bergman film a lot so the price goes up. Whereas if you set a low price then a few more people would watch it but not very many and you might change those decisions over time, so people move around a lot.

So I think you do get dispersion in competitive markets. My second observation was just going to be coming back on the profit point. You do get workably competitive markets that generate more than zero economic profits which I think is the reference point Mr Parker was referring to.

One would be if one firm is much more efficient than the others it will earn a rent from that. Then the others will not and overall the market will generate a positive economic profit and that firm will make a positive economic profit.

But there are other cases it could just be first mover advantage. So again, I would need to do research but I believe that in quite a few cases where one firm sort of starts off being the big one and attracts entry in competition over time, fizzy drinks was mentioned earlier, you have a position where that firm may well retain its leadership position for very long periods of time, possibly decades, and the competition clearly does set the market price and the market outcomes but that firm's first mover advantage might persist to some degree for a very long time as it has the brand image and people are used to using it but you still count it as a workably competitive market down the line.

Other very simple examples would be a lot of oligopolies will have imperfect competition and end up setting prices above costs and it is often not the case that entry is so easy and free that that will compete the other way. So you can get a wide range of markets where it is not true that full contestability is the benchmark for workable competition. That is the benchmark for fully effective competition that drives out all profit.

MR RIDYARD: I think we should leave it there. We will continue with this topic after the lunch break. Thanks.

THE CHAIRMAN: Thank you very much. 2.05, please.

(1.05 pm)

(Luncheon Adjournment)

(2.05 pm)

MR RIDYARD: Right, we have a couple of questions to finish off on this topic of the notion of workable competition and what it means for the cost-plus benchmark.

Mr Duckworth, did you want to contribute on that topic, or ...

MR DUCKWORTH: I do not think I have anything to add to what Mr Parker said.

MR RIDYARD: Mr Parker, did you want to comment on what Dr Jenkins and Mr Matthew had said there?

MR PARKER: I think there was a discussion about sort of ranges of prices being observed. I think I would suggest two things. One, yes, range of prices are observed, but I think if you look at ARPUs where you have got these multiple products going on, that will cover the product mix, and that will kind of control for those sorts of differences. So ARPUs are all the bundle products, for example, Dual Play products. Then, so I think it would be sensible to look at an ARPU measure against a benchmark if there was some price dispersion.

MR RIDYARD: I am not sure I understand that. I mean, ARPU is an average, so how can it help you understand dispersion?

MR PARKER: If there is dispersion then you should look at an ARPU. I do not think that is what is going on here, because we are in SFV services, and it is fairly clear that we have -- you know, certainly from an access perspective, the list price is the ARPU, and it is just one unit, and then we have some added information on calls, and so on, which gives you the average across all the customers.

So I think you can boil down that price dispersion to the ARPU and then you can compare that against the benchmark for those services, again, on average.

I think there has been a bit of a discussion about the role of the persistent part of the test, because I think it is right that in competitive markets you will see some firms at times making higher profits than the competitive benchmark. If the competitive market is working well, that should not be persistent, because whatever the source of that competitive advantage is, it should be being competed away, and so you might innovate for a short period of time. Rivals then -- you do well, greater than average returns for a period of time, and then rivals copy, and then you try and get ahead again, or they try and get ahead again, and so on, and you end up with this. It is likely that you would not see persistency. Or if you do see persistency and significance at the same time, you have to ask yourself why is it that this firm is able to maintain prices above the cost-plus competitor benchmark for a long period of time?

MR RIDYARD: If the competitive benchmark -- so that is saying why should one firm be able to beat -- have costs which are below the competitive benchmark for a long period of time.

MR PARKER: Yes, and that goes to the discussion I was suggesting earlier, which is you then need to dig into why that is and whether that is for legitimate reasons, for competitive reasons, greater efficiency, quality, and so on. But I do not think the observation that competitive markets give you periods of time where firms are above the competitive benchmark invalidates the idea that if you see prices for one firm significantly and persistently then there is a question to be answered and explored.

MR RIDYARD: Yes, but that still leaves the question of what do you do about it once you have done your exploration. If you accuse a firm of excessive pricing, then it is likely to be a profitable firm. So how do we know whether it is profitable, because it has exercised market power, or whether the level of profitability is consistent with the variation that we might expect to see in a workably competitive market?

MR PARKER: I think you can reduce the variation down to the -- by using the averages, and then I think you should look at all the potential explanations to see whether they hold, and I am sort of slightly anticipating the conversation we are about to have but we can start that off. Is there a reason to think that BT is more efficient than rivals? I am not sure we have evidence to suggest that is the case. Are SFV services, do they exhibit substantial levels of innovation? I do not think that is the case, and so on.

So I think I would want to do it by looking at the benchmark, doing the best benchmark we can, looking above that. If it is significant and persistently above that, then start looking for what is the reason for that. Can we think of an objectively justified reason, essentially, for why that might be the case.

Having taken all that into account, then you can say, well, are we -- do we think there is a good reason -- is there enough variation out there, a sort of natural variation would be one factor to take into account, as would measurement error of certain of the inputs to the cost benchmark, or in principle to the price measure. So I think, for me, all those things go in the mix and they go to the significant and persistent test.

MR RIDYARD: Dr Jenkins, in your reports, when you look at the cost benchmark, you do take the view that there is likely to be a variety of outcomes which are consistent with workable competition, and so when you construct a benchmark against which, you know, to judge BT's pricing, you opt for this 90th centile approach. Can you explain why you have taken that approach and why you chose the 90th centile as opposed to the 75th or some other number?

DR JENKINS: There are two considerations I think with respect to the variation, the ranges that we have been talking about when we are thinking about cost-plus. The first of those, which we have spent plenty of time talking about, is in a sense the cost element, that there is a range of options that might be taken to how you allocate costs in any business, and then there is the plus element which is what is the reasonable rate of return that we might expect. It is with respect to the reasonable rate of return that I have then looked at comparators for the return on sales metric that we have agreed we need.

MR RIDYARD: Okay. So then we are going to come on to that in a few minutes' time, so it is premature to start talk about the 90th centile in this context.

DR JENKINS: I think 90th centile refers to the rate of return element.

MR RIDYARD: That is useful. So did you have any last comments on the cost-plus bit before we go on to our next topic?

DR JENKINS: I think -- I mean, possibly it is how I thought more about that rate of return, but the basic principle holds, which is if there is variation and that variation is driven by a range of elements, in the sense that businesses take risks when they invest, when they offer services to customers. They are seeking to meet the needs of their customers and seeking to do it better than others. They invest, they invest in brand, they invest in the -- they hire people, they do all of that, and then offer their services, but they take a risk in that. They do not know for sure that is going to be successful.

Sometimes people are successful and sometimes they are not. Sometimes they make a good decision, sometimes they do not. There is a little bit of the flavour that it is like at the average is the right way, and if you are above average you somehow have to justify that. You have got to have an explanation for it, as opposed to that there is a variation in the outturn that you observe in life for the choices that get made and the way you are approaching a competitive environment where you do not know exactly what all your rivals will be doing and you do not know everything about your customers.

I think the premise for workable competition then cannot really be the average with an implicit view that anything above average has to be explained. You would be taking more of an upper end of that, which is you can have that you are getting the natural reward for the risks that are being taken, you judged it well, you -- not necessarily more efficient than others, but that you actually had things turn out the way that you hoped they would, whereas with another throw of the dice they may not have turned out that way.

MR RIDYARD: We can all get lucky on one occasion, but if you find you are getting lucky time and time again, because I think that is how Mr Parker would respond to this point, he would say, well, yes, there is all sorts of random variation on any one roll of the dice, but when you roll the dice a hundred times and you have consistently done better than your opponents, maybe there is something else going on.

DR JENKINS: Then you actually have to -- in the context that we are in, you will be effectively setting a price benchmark for businesses going forward and it is very hard to know. So you know, it is this ex ante, ex post bit. They say, well, ex post we are going to assess you against the average. Ex ante, you are going to state your prices, knowing that there is some risk involved in that. So that is where we will get to come back to where we started, which is how you affect the incentives to actually compete and invest and take risk if you say, well, ex post anything above the average is going to be judged that you have to have a very good explanation for why you turned out to be lucky, even for a few years, then that is going to not necessarily reward businesses for the risks that they actually take.

MR RIDYARD: All right, okay. I guess we might well come back to this theme, if not exactly this topic, when we get on to the rate of return points.

Before we do that, the chairman has some questions for Mr Duckworth.

THE CHAIRMAN: Yes, I just want to catch up on some things I discussed with Dr Jenkins this morning, but before I do that, just a quick follow up point to Mr Parker.

Mr Parker, just before the break, and actually now, you said, well, there is no -- there should not be a difficulty in reaching a single competitive benchmark as opposed to a range of them, or something like that. Things like quality, efficiency, gains, innovation, that can all be fed in later, as it were, or logically later. But as I understood it, you were feeding those in still within the excessiveness analysis, rather than the unfairness analysis.

I do not want to spend too long on it. It is partly a matter of law, but I just wanted to see if that is what you were saying?

MR PARKER: I think that is where I put them. I do not think United Brands is sufficiently clear as to exactly where you might do these. I mean, in the formulation of the Court of Appeal, as long as it has to be somewhere, like economic value, but my suggestion would be you put those in the excessiveness point, and it goes to -- it is not just anything above the average, but is it significant and persistent and what is the reason for that.

THE CHAIRMAN: I was going to ask you about that. So the way you would build it in, if you do it under limb 1, is you would have to take it into account when working out whether the price in question was significantly above.

MR PARKER: Significantly and persistently, exactly.

THE CHAIRMAN: Persistent is just a time thing, is it not? That is just saying is this going on for a reasonable period of time, rather than it is a flash in the pan.

MR PARKER: Yes, and so that is easier I think to interpret. But conceptually it is an important part of it because it goes to, as Mr Ridyard was saying, a firm may get lucky this year, but if they get lucky several years in a row that might suggest something rather different is going on.

THE CHAIRMAN: Yes, all right.

MR PARKER: But I would put everything else in the "significant" bucket, because I think one might say actually, given everything here, yes, prices were persistently above the competitive level, but for these other reasons -- quality, efficiency, innovation, whatever it is -- we do not think they are excessive. I think you then, if you like, the analysis could stop at that stage, and you would not then need to make a finding at that point of unfairness one way or the other because it would not be excessive.

THE CHAIRMAN: If it is not excessive that is the end of it.

MR PARKER: Exactly, yes.

THE CHAIRMAN: Fine, thank you.

Mr Duckworth, what I wanted to go back to was a continuation of the questions that I asked Dr Jenkins about on the detail of the RFS 2009 exercise. Now, the documents that I had been looking at were first of all, and you made some references. We do not need to turn it up at the moment, but it is all in E/13. It is the primary accounting documents which have pages of detail about how they go through the thing.

I looked at some of that, but would it be possible just to remind us of when they finally, finally did all the causality-driven allocation of incremental costs, and they are left with the pure common costs, how they actually did that in the context of this model?

MR DUCKWORTH: So in this model there is no explicit division of costs into incremental costs and fixed and common costs. So there will be some cost categories, so I give the example of the labour costs of the customer care staff. If you think about sort of reducing demand for customer care staff you will get to a point where you cannot reduce the number of people you have anymore, because you need someone always to be there to pick up the phone even if there is only one customer to offer a reasonable quality of service. So within that cost category, which is labour cost of customer care staff, there is an element which is a common cost.

THE CHAIRMAN: Yes.

MR DUCKWORTH: However, because this is a Fully Allocated Cost methodology, what BT would do is look at the activity of those staff, what are they doing, are they in a customer care centre, are they responding to fault requests on Voice lines, or are they responding to fault requests on broadband lines, are they making any sort of outbound calls to try and market services? Look at what the people do and allocate in proportion to those activities.

So you will say they spent 40% of their time responding to faults on Voice lines, and so I will allocate 40% of their time to Voice lines, in doing so recognising that there is a degree of kind of fixed cost or kind of minimum costs within that call centre, you effectively allocate those common costs in proportion to the incremental costs.

THE CHAIRMAN: Right. Thank you.

I have just got one extremely technical point on this, which you will probably tell me is irrelevant, but can I just ask you to look at {E/13/900}. The top bit is talking about different kinds -- it is all under attribution of costs, and one of them is "Corporate Costs", and it says:

"... some corporate expenditure for which no specific apportionment bases can be readily derived. These corporate costs are apportioned to activities and plant groups so as to reflect the value added by management effort as reflected in the pay and fixed assets ... So any individual Market will be charged on the basis of all corporate costs divided by pay plus a percentage of fixed assets ..."

Is this something we need to be concerned with, because I was not sure that that was an illustration of what you have just said, or this is something, as it were, extremely granular, and dealing with only one very particular part of common costs?

MR DUCKWORTH: I think it is relevant because corporate costs, we kind of had a discussion about the degree to which sort of central costs are fixed and common. This is saying, or my reading of what this is saying is it is very difficult to go into the finance function and say: how much time did you spend on finance functions which are related to providing Standalone Fixed Voice services? So that sort of activity-based costing is difficult. But it is a -- we think, or BT thinks that there is some sort of relationship between the value added by each of the markets and the costs incurred here, and so it will apportion based on the measure of value added, and the measure of value added is effectively related to the kind of proportion of fixed assets, so you allocate more -- I am just reading this quickly -- to those bits of the business which have large fixed assets, particularly the network, as a sort of proxy for some sort of costs of causality, even if that cost causality is difficult to pull out.

THE CHAIRMAN: Thank you.

Then can we just go to {E/13/951} in the same document. There is a whole section on LRIC here.

MR DUCKWORTH: Yes.

THE CHAIRMAN: I am just again taking an example at page 951.

Under Figure 5.3.5, it says:

"The distribution of the fixed common costs that are shared between Core and other increments is apportioned over the Core components using equal proportional mark-ups to derive DSACs."

So there it looks like we are back to EPMU.

Then it says it:

"... attributes the [fixed common costs] to the components in proportion to the amounts of the cost category included within the LRIC ..."

Is that then reflecting the proportion to the incremental costs?

MR DUCKWORTH: Yes, that is my understanding. Similar to Dr Jenkins' approach for a DSAC approach, you kind of work out the incremental costs. You look at the appropriate fixed and common costs and allocate them for a DSAC methodology based on an equi-proportionate mark-up.

THE CHAIRMAN: Thank you very much. Then finally on the detail, what that document does not contain itself are the actual figures for the relevant five market submarkets that make up SFV that you --

MR DUCKWORTH: Yes, that is right.

THE CHAIRMAN: But in your report you have got sort of one table just dealing with all of those costs.

MR DUCKWORTH: Yes.

THE CHAIRMAN: Does that -- all I really wanted to know, which document does that come from? I have seen a document saying review of retail markets, and I was not sure where you got it from. That was all. I am not saying ...

MR DUCKWORTH: The document with the actual output of the system that is described here is the Regulatory Financial Statements --

THE CHAIRMAN: Yes.

MR DUCKWORTH: -- which is a separate document published annually. Along with the kind of annual publication of the Regulatory Financial Statements, there is all of this documentation explaining how those were derived.

THE CHAIRMAN: Yes. You have got -- have you got a reference in your report to the particular bit of the financial statements that you have been drawing your figures from?

MR DUCKWORTH: Yes. It should be in my report. Yes, it should be referenced. If I can find it, preferably --

THE CHAIRMAN: You can give me the reference later on, or I go back and find it. Because what I was referring to, the primary accounting documents, that is all in the statements of principle, how it is all done. It is not the actual financial statement itself.

MR DUCKWORTH: That is right. Then there are a series of sort of subsidiary documents to the primary accounting documents giving some of the details about cost attributions.

THE CHAIRMAN: Right. Thank you.

Now, what I then wanted to go to with you, Mr Duckworth, more substantively, is this. I asked Dr Jenkins about the extent to which any inputs in her SAC combinatorial test could be altered, if that was something that we were interested in doing in the future, and she gave me an answer.

So far as your model is concerned, because it is a different kind of model, yours would be capable of alteration really on the basis of how you have made the increments year-on-year.

MR DUCKWORTH: Yes, that is right.

THE CHAIRMAN: That is it; that is because of the nature of your model.

MR DUCKWORTH: Yes, it is effectively impossible to go in and recreate alternative Regulatory Financial Statements for 2009, but it would be possible to look at the indexation that I have applied and look at alternatives for that. For example, I have made a very high level assumption and said that is conservative, that unit costs will increase in line with inflation.

You could alternatively sort of try and decompose that change into different factors that you think should be driving the change in unit costs over time. So we discussed yesterday, for example, a sort of economy of scale point, and Dr Jenkins set out one way of approaching that which seems reasonable, and you can make some explicit assumptions about efficiency gains over time based on some of the evidence I present. You could also look at the degree to which there have been quality changes over time and make an adjustment for that.

Some of those quality changes, some of the gives are recognised in the direct costs, but other quality changes, particularly the onshoring, are a change in the level of indirect costs, and so you could make some assumptions about how those kind of feed into unit costs over time.

So I think there is scope for the Tribunal to look at how to change the indexation over time but, as I say, it is very difficult to change the kind of --

THE CHAIRMAN: The underlying model. Right, I follow that.

Now, just before I leave the questions I wanted to ask you, Mr Duckworth, Dr Jenkins, although she has various different approaches, did not try to re-run your model with different increments on a yearly basis, but just remind me whether you have done Dr Jenkins' combinatorial model with different inputs?

MR DUCKWORTH: I have not. I have set out my real barrier to trying to work out costs on -- whether it is on a SAC combi basis or a Fully Allocated Cost basis is not having the granular cost information to really understand cost causality and the corollary of that, the degree to which some costs are fixed and common, so I do not think there is value in me trying to take Dr Jenkins' model and tweak it to come up with a sensible result.

THE CHAIRMAN: Right, thank you.

My final question is this, and I am going to be posing it to Dr Jenkins shortly, is that you -- I am sure you are aware, you may even have been here when Mr Cackett gave evidence --

MR DUCKWORTH: Yes.

THE CHAIRMAN: -- and when he gave evidence of what I just neutrally described as an informal exercise of attributing costs, including common costs, to SFV for the purposes of various exercises. There has been some solicitors' correspondence about all of them. I am sure you are familiar with the issue that has developed.

MR DUCKWORTH: Yes.

THE CHAIRMAN: Is there anything you want to say about that?

I am asking because I was the one who made the observations, so it seems right that I should put the question to you.

MR DUCKWORTH: So I am speaking from a position where I have seen one spreadsheet in the disclosure which provides some values which -- you know, the source in the spreadsheet is given BT's UE, which I take to mean unit economics, which seems to me to be a relatively disaggregated sort of cost allocation as described by Mr Cackett.

I think one of the most important points of Mr Cackett's testimony was that one of the first things done when trying to kind of derive unit economics is to look at costs which are specific to different services and sort of think about where those should be attributed. So if you have -- I think he gave the example, I might not get this completely right, but the example of people who work on TV services, and when thinking about unit economics you take those people who work on TV services and attribute the costs to products which include TV services and (inaudible) to SFV services in this case.

So from that description, and from the spreadsheet I have seen, the one spreadsheet in disclosure which seems to have some (inaudible) of unit economics, I think that would have added value and would potentially add value if I had had more visibility of how those unit economics had been produced and may have changed my view on the appropriate way to estimate the benchmark.

THE CHAIRMAN: Right. But beyond that observation, it does not go any further in the sense that we have got your model and we have got Dr Jenkins'.

MR DUCKWORTH: My understanding from the weekend before I went into purdah was that there was a request for sort of the underlying source data on unit economics, but obviously I have not seen that, so I do not know whether that has become available.

THE CHAIRMAN: That is something we can take up with counsel. Thank you very much, Mr Duckworth.

Dr Jenkins, if I can just go back to you. I wanted to ask this, which was a separate element of one of your disagreements about the 2009 model as extrapolated and the question of what was happening to costs, costs on the basis of across the whole of BT Consumer, and I think somewhere you did a chart of those costs. If you can just ... Sorry, to fling this at you.

DR JENKINS: That is alright, that is fine.

THE CHAIRMAN: Because one of the points that is made is how do we know that costs have not gone up radically during this period by more than inflation, in which case it would be a very good extrapolation.

DR JENKINS: So in I think {OR-H/204/6}, so at the top.

THE CHAIRMAN: This is the document from the other day.

DR JENKINS: From the other day. So that table at the top you see you have got SG&A and D&A there for BT Consumer. So those are the indirect costs that in a sense the RFS is allocating out. It is like the -- and maybe if we go back one page to table 2, this gives you -- you have the total revenue of BT Consumer, total costs, then you have got the direct costs, the cost of sales, and you know that the cost of sales is sort of between 70 and 75% of those. The next line gives you the sum of those two numbers that are on the table, the indirect costs for BT Consumer over the period, over the claim period.

Then I think I also took you to some analysis I had done which is for the period before the claim period, so that is sort of bridging between 2009 and the start of the claim period, which also showed that BT Consumer's costs had risen. That one. I think it is in my second report, let me see if I can find it. I think that is {E/18/133}. So it is at paragraph 5.76, the bit on this page.

THE CHAIRMAN: That is right, and you did refer to this the other day, I think.

DR JENKINS: Yes. So this only relates to SG&A, and I do not know that I have dug out the information for D&A. I may have.

THE CHAIRMAN: That is all. I just wanted to be reminded about that.

You dealt with some of the graphs in that recent letter, but your overarching point here is, as I understand it, if you look at indirect costs rather than costs as a whole over the whole of BT Retail, then you say there have been increases?

DR JENKINS: That is right. For BT Consumer in its indirect costs there have been increases since 2009, and they are above inflation. So you have to be sure that all of those increases are nothing to do with the Voice services, because these indirect costs are across the whole of BT Consumer.

THE CHAIRMAN: Of course they are, yes.

DR JENKINS: So that would be -- Mr Duckworth's position would be whatever else is happening, that is what they are spending the money on, and that is why I pointed out, well, no, they are improving billing services, they are onshoring their customer care, they are doing lots of things that are about -- they are improving the brand, they are thinking about keeping BT's brand alive so customers feel connected to it. All of those things are elements of SG&A that would indeed be relevant across the board.

THE CHAIRMAN: Right. Thank you.

Then just on the issue arising out of -- or the possible issue arising out of Mr Cackett's evidence. Is there anything you want to say about that?

DR JENKINS: So as I understand a lot of that evidence, it is examples where parts of BT, you know, whether for regulatory purposes or looking at acquisition of different groups of customers, is looking to do some allocation of indirect costs at a customer level. So what there is not is any formal audited approach to that, we all agree on that.

For the purposes for my analysis, which was to understand incremental and common costs, it also does not help with that, because what it does is take the indirect costs categories and it just allocates them, like doing -- it is an FAC approach, and I think if you look at the sorts of levels of allocated cost that you see in those, and I have not spent a lot of time looking at them, but I have looked a little bit since Mr Cackett's evidence, you see that in aggregate what it seems to be getting at is somewhere between allocating indirect costs on a revenue basis or a per customer basis.

So it is as if they are saying, okay, let us look at our costs, and I think it was even part of Mr Cackett's evidence to say the way we were thinking about this long-term shift in the market that was going on, that we wanted to encourage our customers to be taking multiple products. So they are thinking about their cost base as being related to the customers that they have. So that is like -- that would be like allocating indirect costs on a Fully Allocated Cost basis using customer numbers as your driver, as your allocator.

THE CHAIRMAN: Yes, all right, thank you.

As a result of that, I just -- sorry, Mr Duckworth, but I do want to come back on one point, and I want to try and isolate what the absolute difference is between you and Dr Jenkins on the question of the validity or otherwise of your indexation of the 2009 RFS, because the point is made against you that if we look certainly at one species of costs, they appear to be rising significantly more than the rate of inflation, in which case does that not suggest that simply increasing the relevant figures by the rate of inflation will be insufficient?

MR DUCKWORTH: I think there is quite an easy answer to that, which is if we are looking at SFV services, we are looking at the incremental cost of SFV services, and a proportion of fixed and common costs related to SFV services.

Fixed and common costs by their definition are relatively fixed. You would not expect fixed and common costs to suddenly shoot up over time in a business. If costs are increasing very rapidly, then it suggests that that has been driven by -- well, quality improvements, which I accept quality improvements should be included, but driven by changes in the output of that ...

THE CHAIRMAN: Sorry, changes in the ...?

MR DUCKWORTH: The output of that firm, and we definitely see that in the period 2009 to 2015/16. Dr Jenkins has repeatedly talked about things like the provision of television services, which attracts customers to bundles but does not attract customers to SFV services. It is not a fixed cost which is relevant to the provision of SFV services. They were not provided with BT Sport. If they are Voice Only customers, there is no way they can sort of get access to BT Sport over a sort of Voice line.

So there are costs which are increasing, but they are costs which are increasing which are not related to the provision of SFV services. So you just should not say BT Consumer's costs are increasing overall as it is expanding its output to deliver Triple Play bundle services of television, broadband and Voice, and you should recognise that as an increase in the cost of productions of SFV services. The two things are not linked.

I think the other point I would make is we have examples of a forecast, and the annex to Mr Cackett's statement shows a forecast of SG&A costs from 2020 onwards for a business which was in a relatively steady state. In fact, customer volumes were increasing slightly by a year-on-year reduction in SG&A. Mr Cackett said in his testimony that was due to the fact that BT Consumer was always seeking to reduce the costs of provision over time, or reduce its SG&A costs over time.

Now, that was a forecast, part of their kind of medium term planning, and so it might not be achievable, but it does indicate that BT itself or BT Consumer believes that costs on a like for like basis over time actually decrease rather than increase, and so where there is an increase in cost even in the period 2009 to sort of 2016, where there are significant cost transformation programmes, it is not about the cost of providing SFV services increasing over time, it is about BT Consumer doing new things to attract customers for Triple play services.

THE CHAIRMAN: Unless there is some more generalised cost in terms of customer care, or something like that, which gives --

MR DUCKWORTH: Yes, if there is a quality improvement for SFV then, yes, that would feed through it. I sort of described earlier, you could try and look at the different factors, quality improvements, efficiency gains, inflation, and try and -- and changes in economies of scale or economies of scope over time, and try and disaggregate that and come up with a forecast based on looking at those factors separately.

THE CHAIRMAN: Thank you.

MR PARKER: Could I add one point. Sorry.

It might be helpful to look at Figure 4.1 of Dr Jenkins' first report which is {E/17/76}. The data Dr Jenkins was describing looked at the SG&A costs for BT Consumer as a whole from 2012-2015/16, and what is happening over that period you will be able to see is the green line is going up, so an increasing amount of product sold as bundles, and then the black line going down, so SFV lines.

One explanation for the increase in SG&A costs as a whole is there were just more bundled products being sold, bundles are more expensive to provide. There might be a lot more marketing going on to attract bundle customers as opposed to SFV customers.

So I do not think you can draw from the fact that SG&A costs as a whole went up that necessarily SFV costs would have been going up over the period on a like for like basis. It could well be that it is due to additional indirect costs, indirect incremental costs attached to bundles.

(Pause due to technical issue)

MR RIDYARD: I just wanted to test that last point that Mr Parker made and also similar to one of Mr Duckworth's points too.

I think Mr Duckworth accepted the notion that BT Sport was successful in persuading -- in allowing BT to take more bundled customers, to attract more bundled customers, because the attraction of what it was offering was greater. But if those new BT bundle customers were previously SFV customers, in other words, they traded up from SFV to bundles as a result of that, how does that fit into the point that you are making, because it does affect the people who historically were SFV customers, even though it does not affect the ones who did not switch. I had not really thought it through, but there seems to be a dynamic thing there going on which we need to take into account.

MR DUCKWORTH: I think that is kind of precisely the point, that people who valued BT Sport, along with broadband, did switch, and there is a causal relationship between those customers who became Dual Play or Triple Play customers and BT Sport, but the customers who did not switch remained SFV customers and did not have any benefit from BT Sport and the investments that BT made in BT Sports.

BT had invested in some other way of attracting customers. Maybe, I think giving vouchers to Sainsbury's, for example, as a way of attracting customers to take up a bundle service. That cost would be attributed to the people who actually took up the service. There is no reason why money being spent by BT to attract customers for one service should be recovered from customers who do not benefit from that service. It is not the costs of producing the SFV services, it is the cost of producing, acquiring customers for another service.

MR RIDYARD: Even though some of those who were attracted to the BT Sport offer previously were Voice customers.

MR DUCKWORTH: Then some of those customers would be attracted to a bundle provided by Sky. I do not think anyone is arguing that because Sky is spending money on its content rights, some of those costs should be recovered from BT SFV customers.

THE CHAIRMAN: Dr Jenkins, last word?

DR JENKINS: I think the costs of BT Sport are not in the indirect costs, so let us just make sure we are all on the same page.

MR RIDYARD: But the overheads -- some of the overheads that might be associated with it.

DR JENKINS: Just to be clear, the costs of BT Sport are not in the indirect cost.

The point is that BT is competing through a range of things that it does to retain and upsell its customer base, so this -- it is this idea that, as you say, it is a dynamic idea that BT cannot say, oh well, what we are going to do is we are going to have the better billing system and the more functionality, but we are only really offering that to these more dynamic customers, and the other ones, you know, we do not need to do that for them. We can keep going with what was there in 2009 because those guys are not really doing anything. That is not how it works. How it works is they compete by improving their offer to their customers.

Some of their customers take up those improvements quickly, others take a bit of time, others move away to other providers in competition with BT. That is part of the drive of why they are actually investing.

I think it is exactly right to say, in a sense, this picture and the fact that there is somehow a world suggesting that if BT did nothing, they would have continued to have these customers, even if they had not done anything, they would have continued to have their SFV customers. Whereas in reality they may have lost even more of those or if they did not retain those bundle customers, the actual costs to the fixed Voice customers that are left would have been even higher because those bundle customers are sharing those costs.

So, if anything, I think it helps see why thinking about customer levels makes a lot of sense in this market because of the nature of the competition through this period.

THE CHAIRMAN: Thank you very much.

MR DORAN: I just have one question for you, Mr Duckworth, if I may.

We are effectively trying to work out the trading benefits from normal and sufficiently effective competition at a period that starts five years after the 2009 RFS. It would be very helpful for me and possibly for us if you summarised, given we have been talking about a huge amount of market change, I do not think there is any disagreement between the sides on that point, whether the adjustments that you make can be tuned sufficiently given the difficulties over the actual evidence base to reflect that market change because as I say, the claim period starts five years later and BT at the time of this RFS is not even selling bundles if I have understood the timeline properly. So there is a huge amount going on.

It would be very helpful if you could just summarise why we can be confident that when we get to the, if you like, the legal test which is prices actually charged and costs actually incurred that we can feel confident.

MR DUCKWORTH: So there is a lot of change going on within BT Consumer which is primarily related to bundles. If we are looking at the costs of providing SFV services there are some quality improvements, some of which are captured in the direct costs but they are relatively small compared to the transformation that is going on in the bundle sector. So the costs of delivering services to SFV customers remains relatively constant. Because Dr Jenkins talks about innovations in sort of billing systems, in sales and marketing. This is a group of customers who are buying the same product year after year.

MR DORAN: Sorry, forgive me, but if I remember correctly, I cannot now remember if it was Ms Cheek's or Ms Blight's evidence she said that there about 180 variants for the pricing for some of these Voice Only products. So there was a lot of effort being put into retaining the Voice Only customers and offering them a more subscription model.

I absolutely accept on the other hand there would be an awful lot of people in the customer care service who were shifting their attention from Voice Only to doing bundles, so I absolutely accept there is a degree of balance but it is not the same product, as I understand it, from 2009 on the Voice Only side to 2014/15.

MR DUCKWORTH: There is a standard line rental product which is broadly in the same product. There are some additional gives added on to that. There are some changes in the kind of the call minutes included in the line rental, but basically it is the same service. There are some retention deals, Home Phone Saver, for example, which is excluded from the Class. I do not think there is the same degree of kind of change in the quality of the service delivered to Standalone Fixed Voice services over time accepting there were some changes in quality but it is not the same degree as in the bundles services where (a) there is a shift from buying standalone broadband and standalone Voice as two separate services.

There is the investment in television, there is a move from standard broadband to superfast broadband.

There is a lot going on in that side of the market. Yes, there were changes in the Standalone Fixed Voice market, but the changes are much more sort of marginal, incremental. So my position is if you look at the total costs of SG&A across BT Consumer, that has been driven by all of these changes that are happening in bundled markets where --

MR DORAN: You think it is on the bundle side primarily?

MR DUCKWORTH: Yes, where BT is facing lots of competition, and on the SFV side of the market, which is a legacy declining market, there are far fewer substantial changes in the cost of providing that service.

MR DORAN: You did say yesterday that you regarded it as a conservative approach you had taken, and I took "conservative" to mean that it was not an unduly strict approach in relation to BT, and you would say that is covered in the points that you have just made.

MR DUCKWORTH: Yes, in particular because the evidence suggests that BT year-on-year can make efficiency gains in delivering a steady state set of activities, it is just on top of that it delivers more activities to support the fact that it needs to compete strongly in the bundles market. So the second factor in the initial part of the period outweighs the first factor, which is costs transformation, efficiency drives over time.

MR DORAN: That is very helpful to balance them out in that way and in a single piece for us, thank you very much.

DR JENKINS: If I could add something, Mr Doran. I think your question, one of the other changes that goes on through this period is actually quite a big change to the way the packages were designed and --

MR DORAN: I think that was the point that Ms Blight or Ms Cheek was making.

DR JENKINS: Yes, I think it is in Mr Bunt's third witness statement. He goes into some detail about responding to what is going on in the mobile sector, and that BT actually shift the way they design their call packages quite substantially from different charges per minute for different times of day to more unlimited bundles.

That would be an example of elements of change to the SFV service which would require central office support, finance, product design, all of those features, that is not clear that that would be captured when you use 2009 data. So it is not just that it is increased, you sort of have to believe that of that increase it is almost like none of it is really related to the fixed Voice service, it is all related to the other changes that are going on. I think there are too many examples of things that are changing, and the general increase in competition, that will mean BT is very likely to be spending money on their fixed Voice customers just as much as they are the bundle customers. Home Phone Saver is another example where they designed and investigated that. So I think your point is a good one.

MR DORAN: So you think that Mr Duckworth's conservative approach is actually unduly strict on --

DR JENKINS: Conservative the wrong way, yes.

MR DORAN: Quite. Given the amount of change going on in BT which would affect the Voice Only side of the business?

DR JENKINS: Yes, you would need to do more work on the actual costs that were incurred in order to be able to say, actually, for these customers none of these cost categories actually are relevant for the SFV customer group.

MR DORAN: I am sorry, the final point. So just to make sure that I have understood properly, some of the cost incurred in this market change, I think I understood you saying that Mr Duckworth would direct our eyes more to the bundle side of the market. You think one should actually properly locate them related to the SFV -- to the Voice Only side of BT's customer base. It is not as clear cut as --

DR JENKINS: It is not as clear cut, that. If you think about product design, product development staff, where the position would be, well, most of them might be spending most of their time on bundle elements. That could be true, while at the same time it is also true that the amount of cost for product design and product development for SFV customers is higher than it was in 2009. Both of those things can be true, given the increase in costs that we observe.

MR DORAN: Thank you.

THE CHAIRMAN: We will take our break now, and then rate of return when we come back.

(3.08 pm)

(A short break)

(3.15 pm)

MR RIDYARD: Okay, so we are moving now to talk about the rate of return considerations. We want to start with some rather general questions before we get into the detail.

The first one is very general indeed, and it may be there is not much to be said on this, but we wanted to know whether you think that economic principles can help us to locate where arguments should fit as regards limb 1 and limb 2 of the legal test.

Mr Parker, do you want to have a go at that?

MR PARKER: In terms of where the rate of return should fit?

MR RIDYARD: Yes.

MR PARKER: So I would put it in limb 1. I think it is --

a rate of return is essentially an opportunity cost of capital, where you have a capital employed that you can properly measure. A return on sales is essentially what you do when you cannot properly measure capital employed, but it is trying to get at the same thing. So I would say that is a type of cost. I think you put that in your benchmark, and then you look at significant and persistent above that. So I put that all in limb 1 and then I would leave other matters for limb 2.

MR RIDYARD: Nice and clear.

Dr Jenkins, is that your position as well or?

DR JENKINS: Specifically with respect to the rate of return question, yes, I agree that it is part of the cost-plus benchmark, and I think in my second report -- I will just give you the reference, {E/18/147}, in that 5.111 paragraph at the top part half of the page. Just some thoughts around when you are thinking about how you select the elements of the benchmark, to the extent that you have selected elements of the cost-plus benchmark which give -- which recognise the flexibility that you might observe in workably competitive markets, then you might not add any further significant consideration in limb 1 at that point, like having taken -- having allowed for common costs to be recovered from product -- looking at the extent to which prices would allow common costs to be recovered and taking an upper end of the rate of return that is consistent with workable competition, that would give you a relatively good measure of a cost-plus benchmark from which you could conclude something on excessiveness, rather than use lower end benchmarks with the potential for quite big differences to prices, and then a lot of judgment having to be exercised about that difference.

That is more about significance and persistence I think within limb 1 than actually a limb 1/limb 2 boundary.

MR RIDYARD: Okay.

Mr Duckworth.

MR DUCKWORTH: Just to say my approach in constructing the benchmark is very much in line with the way that Mr Parker has set it out. The cost of capital is effectively an opportunity cost, it is a real economic cost, and that should be added on top of the costs as recorded by accountants, effectively SG&A, D&A. So I think that then tells you that is a cost based benchmark, and I think there is a distinction then between that true opportunity cost and then potentially some of the returns you might see in the market, or in observed returns by firms, and we need to be careful that we do not mix up those two things.

MR RIDYARD: Sorry, I missed that last point.

MR DUCKWORTH: So I think there is a single opportunity cost reflecting the cost of capital, and then there is variations in prices, and hence returns, compared to costs, and we should not mix up the first thing, which is a single measure of opportunity cost, and the variation you see in returns in the market.

MR RIDYARD: Okay.

Mr Matthew, did you have anything?

MR MATTHEW: As a general view, as I was explaining yesterday, my position is across all of this you need to take a robust view, and indeed a cautious view, when you come to calculate the cost benchmark, allow the return on top of that, and the delta, all with a view to recognising the risks and dangers and need for caution when it comes to a straightforward case of, well, are the prices above cost, with nothing else going on, in a situation where prices have been coming down, remain flat, and are very different from the sort of pharmaceutical cases that sort of precede this.

MR RIDYARD: Right. We just mentioned that the rate of return is -- or Mr Duckworth mentioned that it is similar to the sort of cost of capital idea. Now, I think it is agreed here that given the nature of the businesses, the retail businesses we are talking about, the asset-like nature of them, you all agree that it is not feasible to do -- to go down the cost of capital route, so instead we have to take this return on sales as some kind of proxy for what would otherwise be a return on capital number.

Are there any important factors that that choice -- and that choice is unavoidable, I think, but are there any other important factors that we should be taking into account which would affect -- which means there is not a straight read-across from this case, if it was a cost of capital case, to the return on sales case?

Dr Jenkins, do you want to start on that.

DR JENKINS: I think the main consequence of that fact, that we are going -- we all agree that it needs to be return on sales, and Ofcom took the same approach, is you do not have a clearly accepted benchmark for judging those returns, so there will be judgment required in that, and you are going to have to look for comparators to benchmark that rate of return, and by definition you are going to be looking at ex post outcomes from other parties, you are not going to be looking at an ex ante view of what an investor might expect, given movements in the stock market, you are going to be looking at ex post returns, and you are going to have to exercise judgment on what is the right benchmark for that.

MR RIDYARD: So is that more difficult than in cost of capital cases?

DR JENKINS: I think in cost of capital cases you still have plenty -- there would still be plenty to discuss about what the right cost of capital benchmark is, and you would still have the ex ante/ex post question, so you might have an ex ante expectation of cost of capital, and then you might observe outturns higher than the cost of capital and you would still have to address whether or not that was indicative of excessiveness, but there is a sort of clearer framework for those questions I think than in a rate of return environment.

MR RIDYARD: Mr Duckworth, would you agree with that?

MR DUCKWORTH: I have already agreed with that. I mean, I think underlying either approach is the same sort of conceptual framework. In a return on capital employed you have got your capital asset pricing model which gives you a very clear framework for determining the return on equity, and there is less difficulty in measuring the cost of debt, and I think having that framework means that you can take the empirical evidence for a very large number of companies over a very long time period and effectively extract the key information you need, whether that is the equity risk premium or market risk premium.

Here we do not have the same ability to take data from across a whole economy and extract the single parameter or the parameters of interest here, so we are in a more difficult position because we do not have that sort of underlying framework and the ability to pull information out of some very noisy data, so we end up addressing the noisy data directly, and that does cause us some issues.

THE CHAIRMAN: Mr Parker, anything else to add on that?

MR PARKER: I agree with both of the previous comments. I think it points to a return on sales exercise. It is all about the quality of the comparators that you are going to use to try and see what an appropriate return on sales might be.

MR RIDYARD: Right, and we will indeed come onto the choice of comparators in a moment.

Maybe this would be a good point to ask the question about the 90th percentile, because you mentioned, Dr Jenkins, that you think there is more -- in fact there has been some agreement that it is a slightly noisier process when we are looking at return on sales measures compared to a kind of capital -- cost of capital scenario.

Is that what leads you to say that you should take this position on the -- only declaring something to be excessive if it is well out of the norm?

DR JENKINS: Yes. Maybe if we turn to {E/25/72}, which is the annexes to my first report. So this is -- we could -- I have used a number of different comparator datasets, and I am not necessarily now -- I am sure we will debate whether the firms I have selected are the right comparators, but I think whichever group I have selected, you observe the same feature when you are looking at returns on sales, which is with a wider number of companies you see quite a variation in observed returns over a 5/10-year period.

So here I have sort of given various points on the distributions, between the minimum, the maximum, 10% percentile, medians and means, and then 75th, 80th and 90th, because I suggest the 90th percentile as the right one to pick, but I also do sensitivities on that 75th, 80th percentile.

I think when you are looking at actual outturn returns, there is just a wide range of factors that can drive particular observations in terms of luck, either positive or negative luck, something going wrong, something unexpected, and so if you choose average levels from an outturn distribution and you say that should be your benchmark, and by implication you are saying anything above that benchmark can be judged to be excessive, you are implying that sort of half the population is having returns that could constitute excessive.

Now, then maybe it would be, well, it depends, how many years are you above average? As we have already heard, then you would investigate, and how lucky were they, how efficient were they? All of these questions. When in fact what we observe is there just is a lot of variation in outturn returns. Therefore a much more reasonable benchmark, I think, for determining excessiveness, is at the -- is to take the upper end of the range, I suggest the 90th percentile, and, as I say, I test 75th, 80th percentile, and I think that gives a reasonable benchmark such that one is allowing for, as we discussed earlier, the fact that in a competitive market in a sense beating your competition, which is earning above average margins, is in a sense what we are encouraging -- what one wants to see in competitive markets. It generally means people are improving their offer, better targeting, however it is that they are achieving above average performance.

Therefore if you say anything above average constitutes excessiveness, I think that is not an appropriate test for determining excessive prices under an abuse of dominance rule.

MR RIDYARD: Mr Parker, do you want to respond on that?

MR PARKER: I do not -- I think one should use the average, but I do not think that just because a return is above the average, that that necessarily leads to it being excessive under limb 1 of *United Brands* for reasons we discussed earlier, which is it would need to be persistent, it would need to be significant, and it would need to not have any of the countervailing objective factors that we were talking about.

So my view, I think I said earlier, I think I would use the average for the benchmark, and we can come to some specific issues with the numbers that Dr Jenkins has used, and the comparators and so on, but I think I would use the average, and then I would -- then I think it is for the Tribunal to use its judgment as to how far above the average are you ... and one of the factors that you might want to include in that judgment is what level of variation do we think there is that you would naturally observe?

But as discussed in relation to CAPM, CAPM gives you a number, and return on sales aims to -- is sort of attempting to proxy for CAPM. In an asset light industry we do not really know quite what the capital employed is, but we are still trying to get to a number, and I think it is sensible for both those reasons to use the average and then to think about variation in the significant and persistent --

MR RIDYARD: That is disagreeing, I suppose, with Dr Jenkins, but is it a disagreement that matters? Because it all depends what considerations you then take into account when you find someone who has beaten the average. It depends how you then exercise the discretion about persistence and significance.

MR PARKER: I would say there are two -- there is a sort of general and specific point. I think the general point is if you use a lot of discretion in the benchmark then you may never get to look at it, because you can say, well, the benchmark is so high that anything goes. Then the Tribunal come and take a further view as to all the factors in the round, and it seems to me I would rather -- it is for the Tribunal ultimately to make the judgment, and I think it is more sensible for you to take that view on the facts in the round.

I think there is a specific thing here, which is Dr Jenkins uses her margin estimate in the SAC combinatorial. There is a -- using a high margin in the SAC combinatorial basically says you need to make that high margin across every product, and if you do not, so if you are not making 25% on bundles, you are not making 25% on Home Phone Saver, you are not making

25% on standalone broadband, and so on, that is all a gap that needs to be filled by SFV services, because that goes into the sort of revenue gap. Because essentially it is saying: there is this target margin, you need to make this target margin. So it is kind of saying: I need to get the upper bound margin, the 90% of our margin on every one of these products. If I do not, that is a gap. Then I put all of that on the SFV services, and unsurprisingly that gives you a very large amount which needs to be recovered from SFV.

So it is not a sort of neutral assumption, I think, in terms of how that is, because it is not just about SFV services actually in the SAC combi, it is about the returns that are required, or the target returns that need to be made across all the services.

MR RIDYARD: Okay. I will come to you, Mr Duckworth, but let us get Dr Jenkins' response on that specific point there.

In terms of the maths that is right, it sounds right?

DR JENKINS: Yes, it is right. In terms of why is that the right way to think about excessive pricing, here we are talking about returns on sales, which is for the entity that we are interested in as well as the sub-products, I mean the sub-products that an entity provides. In a sense, when you are thinking about the cost-plus benchmark, which is whether the SAC combi gets -- that is what the SAC combi is delivering to you. If you use the 90th percentile then you are saying that in workably competitive markets, even where we observe pricing towards the upper end of the range that is observed, then that is consistent with what we may well observe in a workably competitive market. Now, the consequence of that is then, yes, you would say it is acceptable for BT to earn up to that level before you would judge its pricing to be excessive on any of the products which it supplies.

So I do not think there is anything new in the way it has been implemented in the SAC combi, that is the consistent way to do it, and it is predicated on this view that the right way to think about excessive pricing, and the useful limb 1 test, is one that in a multi-product firm allows for the fact that costs can be recovered in -- flexibly in a competitive environment, and that it is better to set the benchmark for what ex post outturn returns need to look like at the upper end of the observed range.

MR RIDYARD: Mr Duckworth.

MR DUCKWORTH: I was going to make a slightly more sort of methodological point, which is I understand Dr Jenkins' approach is saying not only should we look at sort of a central value of effectively a proxy for the return on capital employed, but we should also look at the variance in returns from the sample. I think then that requires choosing the sample, not only because you think it has a similar level of capital intensity, but also it has a similar level of expected variation in returns that you would expect in workable competition in this particular market, and I think that is a much stronger test.

But I also do not know how you would apply that to select comparators which have similar variation to what you would expect BT to have in the kind of UK telecoms market. It seems like a -- that is kind of a second factor which you need to bring in when selecting your comparators, and I do not see that in Dr Jenkins' selection of comparators. She has not gone through and said, okay, not only am I selecting comparators which are likely to have the same sort of average return on sales as BT Consumer or SFV services, but also the variation that that comparator set has is similar to what I think the variation would be reasonable for BT Consumer to have. I just do not see that being made.

So you could select a sample in markets where, for whatever reason, there is lots of differentiation, or it is an oligopoly market, you have very high variation, and that might not apply to SFV services or BT Consumer as a whole, so that is --

MR RIDYARD: How would you even make that judgment?

MR DUCKWORTH: Well, that would be my question. So Mr Parker's approach, which is, as I say, to take the specifics of this case and work out whether you think the variation away from a mean sort of return on sales appears in the Tribunal's judgment to reflect legitimate variations, or is potentially a sign of excessive pricing, I think that is easier to do on the facts of the case, rather than trying to find a comparator set to understand what you think reasonable and legitimate variations might be.

MR RIDYARD: Okay. Yes. It seems quite difficult whichever route you take I think, but, yes.

Mr Matthew, did you have anything on this?

MR MATTHEW: Obviously, following the remarks I made previously, I would take the view you should be taking the top end of the reasonable set of benchmarks. I do not have any comments specifically about the sample here versus other benchmarks that I know we are going to come on to, but essentially there is likely to be quite a wide range of benchmarks which are consistent with workable competition, and you should be aiming to take the top end of that range to reach a reasonably robust threshold for saying now we can start the process of thinking about whether prices actually are excessive.

That is both for the general reasons I gave about the need for caution in straightforward cases of setting higher prices than costs in the normal course of business, but also just to take the idea of -- if you just said, well, we will take the mean, we will take the middle point, we will do a reasonable approach, and then we will do a subjective judgment later on, that is precisely the sort of rule -- obviously the Tribunal will take its views on these things, but that is precisely the sort of rule that if I go back into compliant appraisal for the other firms that might be potentially dominant in the economy, and you tell them, well, the rule here is basically people will take a range of possible outcomes, take the middle, and then you have to argue your case from there, it seems to me to expose quite a lot of potential risk in this area and therefore would have a chilling effect.

MR RIDYARD: Yes, okay.

I think why do we not go on to the comparators more specifically now, because I think some of these broader points will come out of that discussion too. We want to use comparators, we want to choose a good one, so what, in principle, are the ways of going about that?

Mr Duckworth, do you want to kick us off on that?

MR DUCKWORTH: So if we were thinking about companies which would be likely to have the same return on sales, but underlying that there is the sort of return on capital employed framework, then I think we should be looking for companies with a similar risk profile in capital asset pricing model terms and a similar level of capital intensity.

MR RIDYARD: Right, so you think it is important to choose comparators which have a similar light -- an asset light nature.

MR DUCKWORTH: Yes. If we say it is an asset light business, and there are difficulties in measuring the sort of the true economic assets used to provide its business, we should try and look at comparators who are likely to have the same level of capital intensity, i.e., they are likely to be asset light as well, but also likely to have similar levels of sort of economic assets, which may not be measurable in the same sort of way.

MR RIDYARD: So if we end up, contrary to that advice, with some companies in our basket which have got more capital employed, what is the problem with that?

MR DUCKWORTH: That companies with more capital employed you would expect to have a high return on sales, because return on capital employed, it varies depending on the risk profile, but that variation is relatively small. So if the capital intensity is 100%, the assets are effectively 100% of the revenue, the annual revenues, then you would expect a return on sales of 10%. If capital intensity is 200%, i.e., the assets are 200% of the annual revenues, then you would expect a return on sales of 20%. So capital intensity will drive the expected level of return on sales for a company with the same level of return on capital employed.

MR RIDYARD: Do you agree with that, Dr Jenkins?

DR JENKINS: I think if we go to {E/49/267}, I did have a look at precisely this question. It is a good scatter plot there. There is obviously a lot of measurement error in terms of capital, and that is part of the challenge we have here, asset light businesses. So this is using all the MSCI World, the businesses that constitute that database, and looking at the correlation between the capital intensity measure you get and EBIT margins, so there is an upward slope to that, but it is not very highly sloped. So there is a positive correlation but it is not one-for-one in any sense.

So there is some risk if you do not match your capital intensity correctly, but I do not think it is so big that you need to be overly worried about that. There is clearly a lot -- for any given capital intensity you get a very wide range of EBIT margins in outturn.

MR RIDYARD: So should we be less worried about it in the light of this beautiful scatter plot, Mr Duckworth?

MR DUCKWORTH: No, I think we should still be concerned about it. This is kind of -- as Dr Jenkins says, the first issue is there are a lot of difficulties in measuring assets on a robust and reliable basis, and so the book value of the assets as presented in this database may be a poor reflection of the kind of underlying assets which that these firms enjoy here, things like brand value.

The second point is it looks on this chart to be a relatively weak correlation, but actually you see broadly what you would expect. As capital intensity increases by 1, then you get a sort of significant percentage increase in EBIT on average, which is precisely what you would expect from a capital asset pricing model applying a return on capital employed.

So, yes, there is a lot of noise. Some of that is measurement error, some of it is variation in returns, and I think we all sort of recognise there are outturn variations in returns. But what I am trying to capture, which I think is something slightly different from what Dr Jenkins is trying to capture, is this kind of average view of what the cost of capital is for the company and that is kind of on the red line.

MR RIDYARD: So you are saying the slope of the red line is broadly what you would expect a priori.

MR DUCKWORTH: It is difficult to say exactly, looking at it.

DR JENKINS: It is in the top, the coefficient point.

MR DUCKWORTH: Okay. So the coefficient is slightly lower than you would expect. Yes. But you have also got some companies with what looks like zero capital employed, so potentially there are a lot of measurement issues in here, but you would expect a single digit --

MR RIDYARD: I know there is much going on here, but, yes, okay.

Then, I do not know, Mr Parker, do you want to offer views on this?

MR PARKER: I think the points have come out. I am not sure I draw much from the scatter plot. It is a combination of capital employed that is not necessarily well measured, there is no account taken of risk, and then from year to year the actual return will vary up and down, but competition should drive you back to roughly ... you are making your return on capital equal to your

WACC. But if you are not measuring return on capital -- if you are not measuring capital employed right, and you are not measuring return right, so that is not -- I think it is just not really telling you anything. There are too many things that are not captured in this scatter plot.

MR RIDYARD: Not captured accurately, but, I mean, any benchmark we use is going to have to use real companies with real complications in the way in which they collect the data.

MR PARKER: That is right, and I think I would focus on comparators that are as close as possible to the service in question, so as close as possible to retail telecom services, and ideally SFV services and businesses that are similar to that. I am not sure that the data in the -- which database is this? It is the MSCI World database, is that right? Sorry, I have lost the reference.

MR RIDYARD: I think it was. Yes, it is in the title, MSCI World ...

MR PARKER: Oh, yes. I am not sure those are necessarily very good comparators. I think also if you are using capital intensity, when the problem is we do not actually know what the capital intensity is because it is an asset light business, I am not sure this tells you very much. So I think we should look at other measures, of which there is quite a number, including some offered by Dr Jenkins and some offered by Mr Duckworth.

MR RIDYARD: Dr Jenkins, what is your view on the choice of a good comparator?

DR JENKINS: The evidence that I put together was actually -- it is relatively standard, what I did, and it reflects the facts that the world is not perfect, the data is not perfect, and hence why I think it is important to take broader samples, even though taking broader samples, that brings in some comparability challenges, which we can discuss, but because -- particularly because we are taking outturn evidence, if you take very few comparators and you take outturn measures, you have to be really careful that they are not overly influenced by -- as we can see in the chart just here, that you can get a wide range of variation in any given period from that.

So we would not look also at other comparators, but there is some benefit from looking at broad averages from benchmark activity or broad distributions and, as I say, this is a very standard approach that is adopted by competition authorities and regulators when faced with the question of how do we work out a benchmark for return on sales. The two sort of samples I have used, because while this chart shows you all of the MSCI World constitutes for the purpose of looking at the relationship between capital intensity and EBIT margin, for my actual comparator for BT, the appropriate rate of return for BT in this case, I have looked at two different datasets focusing on telecoms firms, and then also looking at a set of comparator firms which have the same or similar capital intensity measure, and the same sort of band of capital intensity measure.

So notwithstanding you can get a lot of variation, I did also seek to match comparators not by industry, but by capital intensity, and that would be similar to the cost of capital idea, that what you say is investors look around and they look for, okay, similar risk profiles, similar capital, and what they expect to see the return for that. So that is how in these finance benchmarking you do not always have to stay within your industry when you are thinking about the benchmarks.

So I produced a range of samples from which I gathered benchmarks, and if we go to {E/17/209}, so Table 6.2. Now, here I am reporting the 90th percentile, and in my annex, if there is any particular one where the full distribution, it is desired to see that, then you can get that from the annex.

But you see actually across -- this is the table for the telecoms sector, and the first line is diversified telecoms or wireless telecoms from the MSCI, and then I strip that down just to diversified telecoms. Then a sample of European telecoms firms from an academic database, and then European telecoms and cable TV.

Then if we go over to page 211 of the same document, {E/17/211}, Table 6.3, this is where I have benchmarked against capital intensity the ratio of depreciation and amortisation to OpEx, and depreciation and amortisation to revenues. Those are three different measures of capital intensity that I can match to firms across the database from the MSCI World database.

So as you can see, I have got quite reasonable numbers of observations, around 20 -- I think for this table it is around 20-25 firms, because they are multiple years of observations. So I am taking -- I am aggregating across those to then get a 90th percentile benchmark, and I think there are benefits to that aggregation just from a standard benefit of aggregation where you have got uncertainty and variation that the averaging process gives you a benchmark that you can use.

MR RIDYARD: So all the answers of around 23/25% --

DR JENKINS: Yes, exactly.

MR RIDYARD: Okay.

DR JENKINS: Then I go and benchmark that against what actually happened in this situation and what happened with BT, and find that those rates are actually not out of line with what you would expect to see, so that seems like a reasonable benchmark to use here for --

MR RIDYARD: We will come on to that in a moment.

Mr Parker, how does this contrast with your approach on the benchmarks?

MR PARKER: I think this might be a question for Mr Duckworth first.

MR RIDYARD: Yes, Mr Duckworth, sorry.

MR DUCKWORTH: So shall I explain my approach?

MR RIDYARD: Yes, please, yes.

MR DUCKWORTH: My approach is to try and find very close comparators to BT and also take a view in the round. I think we all accept there is some uncertainty here.

The first comparator, and this is what I use for my point value, is the return on sales for SFV services themselves in 2006, and that was at a point where SFV services were price regulated, and at the same time there was, as recognised by Ofcom, significant entry and expansion into the Voice market. So my view is that is a reasonable measure of the return on sales, at which point competitors who have similar costs to BT are able to profitably enter and expand into the market.

I also cross-checked that against the returns that similar companies in the same market, so provision of retail services in the -- retail telecoms services to residential users in the UK, show their returns on sales, so Sky, TalkTalk, Virgin Media and similar.

I also looked at return on sales for similar businesses in the UK who offer access to network services, such as the Post Office -- sorry, not the Post Office -- Royal Mail and energy and water utilities.

MR RIDYARD: Can you take us to your results just so we have them on the screen.

MR DUCKWORTH: If we turn up {IR-E/6/81}, this shows the EBIT margins as reported in the Regulatory Financial Statements, and I take 2005/6, Figure 5, so at the bottom of the page, I take 2005/6 as the last year where the services were charge controlled.

Then turning to page {IR-E/6/85}, I look at EBIT margins for UK communications providers across the claim period. I place less weight on the returns for Sky, which is the top line, as I consider that is a largely a pay TV provider, so I focus on the other lines for Virgin Media, Phone Co-op, TalkTalk and Utility Warehouse, which are relatively small providers.

I also look at allowed margins in the retail supply for other regulated network services, which are set out on page {IR-E/6/85}. So they are ...

MR PARKER: I think it might be page 88 on the --

MR DUCKWORTH: Sorry, page {IR-E/6/88}. So when Ofcom was looking at the returns for Royal Mail, it looked at a review of returns of a range of comparator companies, which suggested a wide range of 5-10% in the EBIT margin. CMA looked at the energy market and observed margins of 3.5%, EBIT margins of 3.5%. Ofwat looked at or allowed a net margin of 1% for quarter retail in the PR19 charge control.

So I based my estimate on the first chart that I showed, which is the EBIT margins reported in the financial regulatory statement, but I also cross-checked that against information from competitors in the market and also from regulatory decisions on the appropriate return on sales.

MR RIDYARD: So let us go back to the first one first then, which was the one you most -- your lead position, as it were.

The most -- I suppose the most obvious question to ask there is it was around 10% for the first three years and then went up to over 20% by 2008/9. You said that you chose 2005/6 because although -- well, because BT was being price regulated then, but it was not scaring off competitors, so it was a high enough price or high enough profitability to attract entry.

MR DUCKWORTH: Yes.

MR RIDYARD: Dr Jenkins, what is your ...

MR MATTHEW: Can I just pick up that one, because it is covered in my report.

MR RIDYARD: Yes.

MR MATTHEW: For me that is not a good benchmark, 2006, because it is the price under regulation. The reason for that is Ofcom removes the price cap in part because it was concerned that continued price regulation would undermine the evolution of competition which of course it was very strongly trying to promote.

So the point I make in my report is that is the price that came out of regulation and what Ofcom is doing here is they are deregulating it, allowing it to rise because that was part and parcel of ensuring that that competitive market that was very much hoped for would in fact emerge, and then it gets to 2009 and at that point deregulates entirely, notwithstanding the returns being earned.

MR RIDYARD: Yes, but do you disagree with Mr Duckworth's view that competition was alive and well in 2005/6?

MR MATTHEW: Reading off the Ofcom assessment, it was definitely coming. At the time BT I think had around 77% share still in about 2006 which did fall. I think they are down to about 66%, and I am working from memory here, by 2009. So it was definitely coming through.

But what you see at the time is very characteristic of the way Ofcom generally has approached regulation in telecoms, is a very strong sense that what they are trying to do is create that retail market here. It is all part of a much bigger strategy to try and drive competition as deep into the network, by which I mean into the different vertical stages as they can, and throughout they are recognising well, to do that we need to do various things to make sure that they are getting space to make sales, to win products and establish those positions that we can then subsequently hopefully roll back regulation as in fact they did and move further up.

MR RIDYARD: Sorry to interrupt, but the danger of that is that Ofcom wanted to promote competition, to sort of kick start competition or promote it, however you want to describe it, and in doing that one could argue that it deliberately allowed some fat in the system to allow that process to thrive and generate and in that case it may be that the prices to which or the return levels which increased in those subsequent years is given an unrealistically high benchmark and one should go back to the 2005/6 one which, as I said earlier, did not appear to have scared off competition completely. So how would you respond to that counterclaim?

MR MATTHEW: I would say that in 2006 yes, you have got the emerging competition coming through but if you had continued to price regulate that may well have led to further falls in the regulated price for BT Retail which would have choked, that these risks for choking that off. So it is not a margin that was consistent with effective competition coming in or workable competition coming in.

MR RIDYARD: Just say that again. You are saying that the 2005/6 level was not consistent with allowing competition to develop because the prices might have gone lower but if they had stayed where they were in 2005/6 would competitors have decided this was not for them?

MR MATTHEW: My understanding is on what actually happened to prices is that prices did come down for SFV customers over this period, as indeed they continued to do right up till around 2014 from memory, so SFV prices are coming down and essentially the risk with continued regulation is it can drive down prices even further because if the wholesale cost is going down then retail cost price base cap with a 77% share will take it down with it, and you were risking the prospect of choking off the competition that they were trying to support. So at that point, 9% in 2006 for me is a return that is not consistent with the emergence of competition. Whereas the later ones are more consistent.

MR RIDYARD: I am not sure I follow why -- I can see that if prices had come down further from the 2005/6 level, then that might have started to get to the position where competition could not have been sustained in the way that Ofcom wanted. But I am not sure why that makes the 2005/6 level that Mr Duckworth has used is the wrong one.

MR MATTHEW: It tells you the 2005/6 level is essentially a level that is consistent with a monopoly supplier with the full economies of scale that go with that at that point in time. I mean, we have heard -- there has been a little change since 2006 so there is a second question about how far it is useful to track back that far in any case.

That is in my mind the output of a regulation of what at the time was still not too far off being the monopoly, not an absolute monopoly but at least the monopoly until quite recently, subject to losses from Virgin.

What you are trying to do is move from that to a more competitive environment and so, as Ofcom has done more recently in other cases, when you do that you allow a deregulation, you allow returns to be higher, you put more juice in the system, as it were, and that is part of the process of bringing workable competition into play. Whereas if you continue with prices down to cost as a utility regulator would do, yes, you will get prices down to BT's costs and BT will earn low margins but you will not get competition coming in as effectively as it otherwise would do.

MR RIDYARD: So you are saying the incumbent operator has to earn margins above the competitive level in order to allow smaller players to compete in the market at all.

MR MATTHEW: I would put it slightly differently. I would say the margins you need to get to the competitive level are higher from the incumbent than would be the case if it is regulated in the way that it used to be.

MR RIDYARD: Mr Duckworth, any responses and comments on that?

MR DUCKWORTH: Ofcom recognised that we had emerging competition when BT with, as Mr Matthew says, a market share of broadly 80% or somewhat less than 80% with a margin of 8.9%. So with large economies of scale and with a margin of 8.9% you still had entry and expansion in the market.

I then do not quite understand why you need to effectively give BT a further margin in order to incentivise further entry and expansion. I think if people are coming in at that level of margin, then it suggests that the companies, despite BT Retail's large economies of scale at this point, could come in and compete with it.

MR MATTHEW: That was the judgment made at the time, so it was thought that that was necessary and that you would not have got the same growth in competition without allowing that extra juice in the system.

MR DUCKWORTH: I kind of recognise with Ofcom having a set of statutory objectives, one of which is encouraging competition, that it might choose to balance those objectives by, as Mr Matthew said, introducing a bit more juice in the system in order to try and encourage long-term sustainable competition which in the end would drive down returns, but I think we are asking a different question here, which is: did the returns at 8.9%, are they so low that they would not allow entry and expansion, and Ofcom was judging that there was sufficient entry and expansion to partially deregulate the market at this point, on balance, taking into account its broader statutory duties. But I think that is a different question from the ability of rivals to enter and expand at this level of margin.

MR RIDYARD: Dr Jenkins, you were about to say something.

DR JENKINS: Yes, what I would say is the big change is the risk profile for BT. So 8.9% is at a point under regulation where it has been determined that there is not a lot of competition and then you move into an environment where it faces competition.

Now, there is a lot of evidence that returns go up when you face competition. There is a lot more risk over your customer base. So I think using the regulated level as a proxy for what you expect to see in workable competition is problematic here, and when you get to 2009 you have Ofcom look at the market and say it is competitive, so that level of return is consistent with what you would expect to see given the competition that is observed.

If we just go back to {E/25/72}. So this is from the MSCI, the diversified telecom services, but you see that 8.9%, that is very much at the low end of what you would expect to see in a competitive telecoms environment.

So I think obviously in the situation in the early 2000s with BT's position in the retail market where it was judged not to face very much risk that was the level that had been judged to be appropriate by Ofcom but I do not think it is a good benchmark for the question we are asking here which is: in 2015-2023, given the competition that BT is facing, what is a good measure of the rate of return? It should be judged not to be excessive against and I have flagged that 2009 number at 20.9% as something which is not out of line with the results of the broader benchmarking I have done.

MR RIDYARD: There is a bit of a paradox in all of this which is -- let me put that to you all and see your response. Very sort of loosely regulation is there to try with a monopoly industry, trying to replicate competitive outcomes as well as possible. So what seems to have been said here is that when you regulate the monopoly or near monopoly firm this level of 9% return on sales is hit upon, and then it is being said that in order to generate -- not to bring actual competition as opposed to a regulatory approach which is trying to mimic the effects of competition, in order to bring actual competition in you need to juice it up and raise those rates by a lot, a substantial amount, to twice that level because only that will sustain actual real life competition.

But that seems a bit paradoxical, does it not? What are you getting for your money? What is the point of having competition if it is going to cost twice as much, to put it in a very, very, no doubt incorrect but nevertheless provocative way.

MR MATTHEW: I do understand the point and the argument is you believe in competition to do its work over time, so you believe that competition over time will deliver more efficiencies, better products, better pressures and it will also quite importantly not result in the continued need for regulatory decisions that probably do quite poorly in a number of aspects of how well markets are delivering for consumers. That was the point I made yesterday which is regulators well recognise the limitations of their ability to micromanage markets to get the best outcomes all the time. So you want competition because it delivers better in a range of areas. It is just when you start in a market with some economies of scale with one firm with 100 or a very large percentage and say, I am going to set prices equal to those costs, you are going to make it very hard for that competition to come, so you have to allow that to happen.

This is the story of what Ofcom has been doing for the last 20 years effectively, is they have been allowing that relaxation to enable these competitive forces to emerge and then that has worked really quite well most of the time. It is continuing to happen today. They are doing it in relation to the actual underlying networks now where they are trying to encourage new people to build new networks, again in part by not driving down the prices and the returns to the minimal amount.

MR DUCKWORTH: Could I step in because I was formally an employee of Oftel a long, long time ago and I have worked in UK regulation, not to the same degree as Mr Matthew, but my understanding of the paradox, as you put it, is effectively Ofcom is saying there are some long-term dynamic benefits from competition and those are around sort of innovation as well as the ability of competition to keep profitability at a reasonable level and it is worth -- Ofcom's view is it is worth consumers having slightly higher prices in the short-term if those are necessary to deliver the long-term benefits of dynamic competition, and Mr Matthew gives the example of the 2021 Wholesale Fixed Telecoms Market Review where Ofcom took quite a deregulatory approach to certain services in order to incentivise investment because they felt that investment was going to deliver long-term benefits to consumers.

So it is a trade-off. They say we could keep prices low in the short-term but we would lose the longer term benefits, so what we will do is allow prices to increase somewhat in the short-term because we believe the benefits in the longer term are worthwhile.

THE CHAIRMAN: But if that is right, if it is a short-term measure, how does that affect what we have to do here in terms of excessive pricing because maybe it requires a sort of figurative shot in the arm and then if that judgment is right you are going to get the competitors coming into the market and then everybody's prices are going to go down. But this seems to be used as one justification for keeping a relatively high margin all the way through all through the years which we are examining, so how does that work?

MR MATTHEW: I think on the facts that is exactly what did happen, is the establishment at retail competition was sizeable and successful and that is why Ofcom felt the ability to say there is not even SMP at all in 2009 and it has continued to take that view except in relation to 2017.

So the job was achieved in the sense of delivering a competitive retail telecoms market in general. What then happened was obviously Ofcom took a view about the particular interest of the SFV customers, the rump that was left many years later and has taken a somewhat different view about whether it is right to protect them from whether -- it would be good if they cut the prices there. But generally the system has worked quite well.

I do not think it is right to say the necessary benchmark for: "was retail competition successful?" ,is did BT Consumer's returns drop down to the levels they were at the time of regulation? It is just too hard to draw that back. There are a lot of things going on in the market but BT was indeed the largest player and, as we discussed earlier, there are lots of other markets where the first mover might be able to sustain some economic profits for quite long periods of time and possibly indefinitely in a world which is consistent nevertheless with workable competition.

In a sense what Ofcom is doing here is just allowing that to happen because, and I agree with Mr Duckworth's characterisation, because the benefits, among other things, the benefits of dynamic competition are perceived to be very high.

MR PARKER: Could I maybe add something on this?

MR RIDYARD: Yes.

MR PARKER: So if we can go to Mr Duckworth's second report which is {E/7/59}. If you like we are looking at the other end of the process. This is what BT has actually been making. When it comes up. Here we are. I think we do not need to have the confidential version. No, perfect. {IR-E/7/59}.

So this is the actual returns that BT was making on all its services in BT Consumer. The dark green line is including the SFV services. The light green line is stripping out the excess that we say is there on SFV services to get, if you like, an unadulterated version of the returns that it is making. On the other products, of which the vast majority is going to be bundles because we know that about 80% of all BT Consumer's revenues are bundles. So if you look at that the average returns there across the period of the claim are not a million miles away from the 8.9% that Mr Duckworth has identified as being Ofcom's starting point back in 2006.

So in that sense this is I think quite a good cross-check of where Ofcom started and where it was hoping to get to. These markets, and I think BT's view is that bundles are competitive and therefore these are a competitive outcome primarily driven by bundles, the various different bundles markets.

I think from the perspective of SFV services we might think probably there is more -- one would expect a lower return on sales because in the rest of BT Consumer there is a lot more capital. Essentially you have got EE is included in there. You have got various -- so that that -- you would probably expect this to be a slight overestimate on the return of sales you would need to make in a competitive SFV market. But it seems to me that is not a million miles away from the sort of average that Mr Duckworth is using.

It is quite a long way from the 25% that Dr Jenkins is using in every single year, and obviously that gap then feeds into the SAC combinatorial in terms of the amount that -- the missing profit or contribution that then needs to be recovered from SFV services.

MR RIDYARD: Thank you. We will return on this topic tomorrow. But that is time to --

MR BEARD: Could I just raise a housekeeping point. It is only just looking at the agenda. Obviously we have a full day on the hot tub tomorrow and I do not in any way want to limit scope of questioning but is it realistic that we are going to be going all day on the remainder of these questions?

MR RIDYARD: Unlikely I would say.

THE CHAIRMAN: We have also been giving thought to that. We do not think we are going to be here all day on the hot tub side of things.

MR BEARD: So that naturally leads to the next question which is, are we going to roll into cross-examination tomorrow afternoon, say? I mean, I am more than happy to do that but I just think it is useful if we all know where we are headed in terms of timing and so on.

THE CHAIRMAN: Just one moment, please. (Pause).

Mr Beard, for our part we would be content to roll into cross-examination tomorrow on the basis that it is possible that it is not that the hot tub is going to finish half an hour early, it might finish significantly earlier than that, I am not saying necessarily by lunchtime but perhaps just after lunchtime, and I think that it would be better if we go straight into cross-examination. If that means that things wind up earlier on Thursday, well then that is fine.

MR BEARD: That was my thinking, that if we could finish by lunchtime, say, on Thursday or whatever, that would be to everyone's benefit.

THE CHAIRMAN: Yes. Then depending on when we start cross-examination tomorrow, then prima facie you will split the time between you.

MR BEARD: Yes, yes. I mean, I do not anticipate at the moment that I will need as long as I had with Mr Parker in total. I imagine most, if not all, of my questions will be for Mr Duckworth in any event.

THE CHAIRMAN: Yes. Thank you.

Anything you want to add, Ms Kreisberger?

MS KREISBERGER: No, that works very well. I will also have less cross-examination than post the last hot tub.

THE CHAIRMAN: Good.
10.30 tomorrow then, please.

MS KREISBERGER: Thank you, sir.

(4.32 pm)

(The hearing adjourned until Wednesday, 21 February at 10.30 am)