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
(2) British Telecommunications plc **Respondent**

A P P E A R AN 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 Competiton & Markets Authority)

Monday, 19 February 2024

(10.30 am)

THE CHAIRMAN: Good morning. Some of you are joining us via the live stream on our website, so I must start 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. Breach of that provision is punishable as contempt of court.

Housekeeping

We have two housekeeping matters. First of all, can I remind the parties that on Thursday we are starting at 9.30 and we are finishing at 3.30.

Secondly, we have had the request from the Class Representative about the use of a whiteboard.

MS KREISBERGER: Yes, sir.

THE CHAIRMAN: Yes, but there is a question about whether -- where it would be and whether it can be picked up by a microphone. So is it intended to be that over there?

MS KREISBERGER: That is it, but I think we were waiting for permission before it was moved around.

THE CHAIRMAN: Well, first of all, let me see, Mr Beard, are there any objections to this?

MR BEARD: In principle, no, we do not have a great objection. The only difficulty is actually seeing the thing.

THE CHAIRMAN: I know.

MR BEARD: So that may be the practical point, because I can see that there may be a desire to have it behind the experts so they can draw on, it but then we cannot actually see it. Maybe it will come up on the screen.

Look, is the sensible thing to proceed, see where we get to, see whether it is actually needed, and so on?

THE CHAIRMAN: Yes. Is it expected that we are going to get into this -- we could get into this this morning?

MS KREISBERGER: I am not sure that is clear. I think it was really just as a back up.

THE CHAIRMAN: Right. Is it Mr Duckworth or Mr Parker in particular that wants to use it? You can just say now, just so we have an idea.

MR PARKER: It could be either of us, I guess. Perhaps more likely me in terms of illustrating some of the points. But as Mr Beard has suggested, I think hopefully it will not be necessary; any examples will be sufficiently simple that they can be done orally without reference to it.

THE CHAIRMAN: Right. Let us try and do that.

Now, where we have got to in terms of the witnesses, they will all need to be re-sworn, and Mr Matthew has not yet given evidence, so what I suggest is that we have Mr Duckworth and Mr Parker and Dr Jenkins re-sworn, then we will have Mr Matthew sworn, and then Mr Beard can just quickly go through to make him confirm his report and take any corrections. Right, so if we could do that, please. Thank you.

MR DAVID PARKER (re-affirmed)

MR MARTIN DUCKWORTH (re-affirmed)

DR HELEN JENKINS (re-affirmed)

MR DAVID MATTHEW (affirmed)

Examination-in-chief of MR MATTHEW by MR BEARD

MR BEARD: Mr Matthew, you have given two reports in these proceedings and you have also contributed to the Joint Expert Report. I am going to take you to those and confirm the references. You may have them in hard copy but I am going to call them up on the electronic bundles as well.

So your first report I have at {IR-E/19/1}. If you turn to page {IR-E/19/89}, is that your signature, Mr Matthew?

MR MATTHEW: Yes, it is.

MR BEARD: Is that report true to the best of your knowledge and belief?

MR MATTHEW: Subject to one correction, yes, it is.

MR BEARD: Could you tell us what the correction is, Mr Matthew?

MR MATTHEW: It was -- sorry, I do not have the paragraph reference.

MR BEARD: I think it may be paragraph 80.

Is it this report or is it your second?

MR MATTHEW: No, sorry, it must be the second report.

MR BEARD: Okay, fine. Let us do the second report then. If we could go to {OR-E/20/1} and could we go to page 44. {OR-E/20/44}. Is that your signature, Mr Matthew?

MR MATTHEW: Yes, it is.

MR BEARD: Is this report true to the best of your knowledge and belief?

MR MATTHEW: Yes, it is, subject to the correction.

MR BEARD: I think you said paragraph 80, which is page {OR-E/20/31}.

MR MATTHEW: That is correct.

MR BEARD: Could you just explain. I know some figures here are confidential, we are in open proceedings, so if there is any change to that figure, I do not want it provided to the court in open proceedings.

MR MATTHEW: Thank you for the guidance. So the correction is that we had taken this from Jenkins 1. This is the sentence with the highlighted figure, the penultimate sentence. I understand that that figure has since been corrected, so the point I have used it for here no longer applies. The difference was that we had originally understood that this was a reference to the number of SFV customers who in 2022 had been part of the BT SFV base in 2014, but I think it is the other way around.

THE CHAIRMAN: Yes, that is the point that was in the correction, yes, thank you.

MR MATTHEW: Correction. So my report stands to be corrected.

THE CHAIRMAN: So that point goes.

MR BEARD: Finally, could we go to the Joint Expert Statement which is {OR-E/49/1}, please. Mr Matthew, you have contributed to this statement. If we go to page {OR-E/49/6}, I was going to say is that your signature, but in fact there is a compression on the page that means that your signature has been edited out. Mr Matthew, did you sign this?

MR MATTHEW: Yes, I did sign it.

MR BEARD: Are your contributions true to the best of your knowledge and belief?

MR MATTHEW: Yes, they are.

MR BEARD: We have -- I am grateful to the Class Representative's team -- we do have a hard copy of the signature, I am not sure it needs handing up, but at the

bottom there should be a signature from Mr Matthew.
Does the Tribunal need a copy of the signature?

THE CHAIRMAN: I do not think so. We can take it as read.

MR BEARD: He has confirmed it for the purposes of the Tribunal.

Do you have any corrections in relation to that report?

MR MATTHEW: No.

MR BEARD: Thank you.

Those are the reports and contributions by Mr Matthew to the written materials that have been submitted in these proceedings. I will hand over now to the Tribunal, if I may.

THE CHAIRMAN: Thank you, and I will hand over to Mr Ridyard.

Questions by THE TRIBUNAL

MR RIDYARD: Okay, so let us get started. Just a brief reminder of what I said at the beginning of the sessions last week. I am going to be leading the questions but the answers should go to all the Members of the Tribunal, of course, and to remind you that your duty is to help us to do our job, and it is a responsibility that, as I said last week, we take seriously and we expect you to take seriously too.

So we want to start off -- today's topic of course is the limb 1 assessment of whether prices were excessive or not. We ought to start off with some quite general questions around the regulatory context and the sort of policy context, almost, of a finding of excessive pricing.

The first question, and maybe we could address this to Mr Matthew in the first instance, is: does the possible impact of a finding of excessive pricing in terms of chilling effects or ability of competitors to compete, and wider considerations, should that inform or should that affect the way in which we look at the question of whether a price level is excessive?

MR MATTHEW: Thank you. So, yes, this is the subject of both of my reports and in those reports I lay out a number of the economic considerations which go to this very topic. The essential flow of what I say is that when it comes to evaluating when is a price excessive under ex post competition law, you should be taking account of the economics of why that might be a bad idea.

I think there are three major points I make and I will step through them in turn. The first one is what I think is a generally accepted point about the value of allowing prices and the profit incentive to work freely in markets. So it is one of the most fundamental things about a market economy, that the price levels are what drive resource allocation, and particularly importantly the incentive to make money is what drives large parts of competition. So the reason why firms seek to offer keen prices all the time but also to deliver the services customers want is to win market share and to make money out of doing so. That is why they seek to offer good service quality, it is why they seek to invest in platforms in products that people want, it is why they innovate in a whole range of different ways in terms of the products they offer and the way they can get to customers, it is because they are going to make money out of it.

If you play with that, if you start to intervene on prices, the risk is you are undermining that incentive, because it is no longer the case that profit incentives drive decisions. Instead it becomes, well, if I do X, I now have to think about a -- if it was a regulated sector what the regulator might do; but with relatively low thresholds for the application of excessive pricing rules, you have to think about, well, what are my competition law risks, and that could have an important chilling effect in those markets.

Now, it is not just the sort of general dynamics that are in play here, but also these matters have particular importance in the case of dominant firms, and the reason is simple and very well understood, which is if a dominant firm sets prices above competitive levels, the hope, and, in quite a lot of cases, expectation, is other firms will see that and they will start to plan to enter those markets and expand in them if they are already there.

The risk you have, if you start to control prices, drive them down to costs, and perhaps drive them to levels consistent with what we might call a fully competitive market, is you crowd that out, there is no longer anything to shoot at. That is a risk generally, but also in these markets where the regulatory record shows Ofcom has permanently been alive to the risks that overregulation might stymie the emergence of retail competition in telecoms, both generally but also in the most recent reviews in relation to SFV, because Ofcom was plainly concerned in the case of VOCs, but also in the case of SPCs, where those concerns were strong enough that it led them to take the view that it was not right to intervene on those prices. All the examples of intervening in a way that undermines the competitive dynamics.

So there are good reasons why people -- many people would suggest from an economic standpoint that it is wise to be cautious about intervening on excessive prices.

The other two do follow from this. The second point I do make in my report, and it is based on personal experience, is the flip side. So once you start to intervene on prices, it becomes very hard not to be involved in the markets in one way or another. You just cannot help becoming part of the drivers of what firms do. Even if you try and do it on a one-off, people will then say, well, now I am thinking about a new investment with some new market development, what are the new rules? They will go to either their competition lawyers or whoever and say, well, what are the rules that apply to me? Those are very difficult.

It is quite instructive when you look at the regulatory world, which obviously has to grapple with this on a day-to-day basis, some of the early regulation tried to be relatively light touch. That was the origin of some of the RPI minus ex price cap idea, instead of price cap and let things work. But actually what has transpired is just too many things become involved with it and too many demands get placed on the regulator, and in the case of ex post, those things would read through if it was the case that you had a large number of these instances.

What will happen is you will get markets where a decision is made, the price is too high, bring it down, and then something will happen and people will want to know what the rules are now, and that is going to be difficult to manage.

I will say in passing that regulators, of course, precisely in order to deal with these kind of difficulties, have a very wide range of different powers to do so, and have grappled with those with gusto, but also with a full recognition that what they do is not perfect either. The solutions are not great. That is partly why, if you go to most groups of regulators and ask them the question, well, what is your trade off, do you prefer competition over a price regulation? They will say, well, where it is in the long-term interest of customers, which it will be a lot of the time, we try and bring in competition where we can and focus regulation on the points which are a genuine natural monopoly. Certainly Ofcom's experience has been a story of 20 years of doing this with great success to a large degree, but some parts where they believe perhaps it has not worked out so well. So the solution also has problems.

Then, finally, an issue which is very important with ex post competition law is of course that the rules apply to the whole economy. So if you take a threshold for what counts as an excessive price and set that threshold, let us call it low, I am talking qualitatively, you are exposing dominant firms, potentially dominant firms, firms that believe generally they are not dominant but fear they might be in respect of one subset of their services, with risks that their prices might be illegal, and because pretty much everybody does sell at price that chilling effect could be very large.

Sector regulators also have chilling effects. They have to care a lot about the impact of their decisions on the markets they regulate, and they also seek to build reputations as not being over-regulators. That is why, for example, Ofcom is rightly proud of its statements that it will only intervene as bias against intervention. It makes a lot of sense even within the market. But at least they are operating in an environment where their decisions are contained to the sector they are working in, so they do not have to grapple with the issues about what does this mean for all other dominant firms which may be doing compliance, or firms that think they might be dominant. So chilling in relation to excessive pricing could be large.

Where does it take you to? Well, my view is a cautious view about what counts as excessive pricing, which is consistent with the case records so far, consistent with the views of most economics commentators, and certainly consistent with my view, and the way to give force to that is when you are dealing in a case like this where there is no price increase, it is simply somebody -- a firm is said not to have reduced its prices in line with reduced costs, it certainly has not been -- tried to raise them in the way that has been observed in some of the other cases --

MR RIDYARD: Mr Matthew, we do not need -- thanks for the answer so far, but I do not think we need to go into the application specifically on what is happening here.

Can I just, let me just interrupt you -- well, I have interrupted you, but let me just ask you a clarification question on what you said, which is perfectly clear and it is in your report as well.

We are talking here about limb 1. Excessive pricing is not illegal, is it? So do all these considerations, are you clear that they apply to the limb 1 consideration of excessive pricing as opposed to the broader question of whether such pricing is unlawful?

MR MATTHEW: So my personal view is -- I am really talking here about generally when is a price illegal, so if you go through limb 1 or limb 2 or some combination of the two. But I think my thinking is, and what this case really makes quite interesting is, how do you give -- if you believe that there need to be testing thresholds before prices are illegal, how you give force to that is a conundrum, and I think the limb 1 tests are at least the starting point. So while it may be that you could have a separate consideration under limb 2, I do not know, but under limb 1 it seems to me that these considerations point you towards, firstly, if you are using a cost benchmark your cost foundation should be robust and not -- we will come on to it -- but not, for example, based on a particular allocation of common cost which might be doubted. Instead what you are looking for is, well, what is the highest of the range of plausible cost comparators? So --

MR RIDYARD: You are saying -- sorry to cut you off again, but I think we need to move on. You are saying that those things you think should give a conservative -- take a conservative approach.

MR MATTHEW: Yes, for all the limb 1 tests. I think also it is -- there was a very interesting discussion last week about what is meant by workable competition, which is actually a part of the limb 1 valuation, which I do have views on. But I think my point there would be when it comes to evaluating what counts as workable competition, when you are simply trying to look at a price level, nothing else going on, no market manipulation or any of those things, which is the case here, you should take an expansive view. My report actually has a very rough chart on this, it is on page 62, which has -- we do not need to go to it, but it has a graph where I have essentially laid out a very simple oligopoly model, and it shows prices predicted by the model variable for a number of firms, pretty standard stuff, and it plots it against what happens to the average cost of a number of firms as well, which raises some interesting issues of its own.

But that, in a nutshell, immediately shows you what counts as workable competition, what are your comparators here --

MR RIDYARD: Sorry, we have got questions on workable competition and the comparators later on, but I think that is a useful introduction, if I may stop you there.

Can I hand over. Maybe Mr Parker would want to comment on that?

MR PARKER: Yes. So I think I would start in a different place, which is that there is a prohibition on excessive pricing under Chapter II of Competition Act '98, and that is a market -- it is an economy-wide piece of legislation. Presumably it was intended to apply in some circumstances. The *United Brands* test looks at limb 1 on is the price excessive, and then limb 2, unfair in itself or unfair relative to competing products.

So none of that, as I understand it, takes into account sort of chilling effects on the ability of competitors to continue to compete. So I am not really sure where the points Mr Matthew raises arise in a competition context. I can see that in a regulatory context, where you have a regulator with a wider set of responsibilities and judgments that it needs to take into account, then we are in a different world, perhaps, but I am not sure how much that reads across to this particular instance.

In relation to chilling effects, I think the question for me is the extent to which any case can be distinguished on its facts from any other case, and we do not have a long history of these sorts of cases, but I have not heard, I do not think Mr Matthew has presented evidence, that the judgments in *Liothyronine* and *Hydrocortisone* have had a chilling effect on pricing by dominant or potentially dominant firms throughout the economy, but that would seem to be part of the contention that he is saying, is, well, if you use -- this power exists, but if you use it, it could have this chilling effect.

My feeling is those cases are quite specific on their circumstances, and if I was not a pharmaceutical firm engaging in the sorts of behaviour that was coming up in those cases, I am not sure why I would feel they had any read-across to my day-to-day activities.

Similarly, here, we have some specific circumstances that apply to this case which I do not think apply elsewhere. For example, this is a legacy product which is sort of dying out. There are an increasingly small number of customers taking this product, and BT, as a former statutory monopoly, did not have to compete up-front for those customers, the vast majority of them have been there throughout the lifetime of the claim and before.

So I do not think that necessarily a finding in this case would have a chilling effect on anyone else who was not in that position -- and that is a very narrow group of potential firms -- on the ability of competitors to continue to compete. I think the question is could you conceive of, and I think we will come back to this probably, but could you conceive of the SFV services market becoming competitive in the future? It seems to me that that is not obvious at all, given the size of the market, the fact that people even before the claim period were stopping to serve to new customers, the focus of -- that customer demand in the sector as a whole has moved to bundle products, and so on.

So I am not sure that an impact on competitors to continue to compete necessarily applies very strongly in the case.

MR RIDYARD: So you think that if one reaches the view that you have given up -- you give up on competition, and Mr Matthew mentioned the notion of natural monopoly, so maybe there are structural factors that just mean competition is impossible, or it is just not going to happen in this sector, you might as well ... Is that a factor which importantly influences your view on where limb 1, where the limb 1 threshold should be set?

MR PARKER: Yes. So I think if you had a strong view that competition was about to happen, this was a new market, that rivals will be seeing those prices and seeking to come in and enter and compete for the available profits, I think that is one world. That might go to: you have not really estimated your cost-plus benchmark correctly at that point, because you are not taking into account all the kind of costs, both of sort of up-front investments to get into that market by the incumbent firm, and any kind of survivor bias issue that might be relevant to that firm as well. So lots of people tried to get in, only one succeeded. You need to not just think about the costs of the incumbent firm that it actually incurred, but the costs that other people -- the probability that it was successful and the cost of the failures.

So I do not sort of disagree that those facts are potentially relevant in other cases, but for me it would go into the construction of the cost-plus benchmark. I do not think any of those factors are relevant here.

MR RIDYARD: We had a similar question as regards the existence of a sectoral regulator. Mr Matthew, in a way you have partly covered that already. Was there anything additional you wanted to say about the existence of a sectoral regulator which further informs this choice about the limb 1 test?

MR MATTHEW: I think it is worth saying that when there is a sector regulator, they are there with ex ante powers to set prices a lot of the time. That is what they are designed to do. Moreover, they take a custodial view of their sectors, with a variety of additional considerations to those which you would expect under competition law. So Ofcom in particular in this case has not only been making its decisions about when to intervene on prices with a view to how best to shepherd in effective competition, which has been a key thing, but it is also when it has decided later on we do want to protect the Voice only customers who are -- they are viewed as becoming legacy customers that the market is not delivering very well for, they are there to do that, that is what they do, and they do it very much with, in mind, you know, they place a lot of weight on the fact that these are elderly customers who -- where it is worthwhile doing exactly those sorts of things.

So I can see the regulatory case for doing something is very clear. The difficulty is when you take it out of that kind of sector and then start saying, well, how would that work in the rest of the economy? Whenever there is a product where somebody has held on to it, do we suddenly say, well, now you are into price regulation territory it is opening it up.

I would also just comment on *Liothyronine* and those -- I think it is very obvious from reading those decisions why they are separate from a general "high prices should be illegal" finding. I mean, they (a) involved absolutely astronomical price increases, and (b) were not based on market conditions of any meaningful description but on manipulating the regulatory or procurement arrangements for these various pharmaceuticals. So I think, looking at those cases, you would not draw from them: that opens the door to prices above competitive benchmarks having a high likelihood of being illegal when it is just done in the normal course of business.

MR RIDYARD: Okay, Dr Jenkins and Mr Duckworth, is there anything you feel you want to add here? We are going to get on to the detail obviously of the limb 1 tests, so that might be a more appropriate time for you to comment, but I will just give you a chance.

MR DUCKWORTH: Nothing from me.

DR JENKINS: No, I can pick it up in one of the other questions.

MR RIDYARD: Thanks. So question 2 on the list was about uncertainty. Let us suppose, hypothetically, that we felt that because of the complexities of the SSNIP test and market definition in this case, because of the nonstandard nature of substitution that we are analysing between SFV and bundles, or some other reason, that we reached a view on market definition, a narrow market definition, but we were very conscious that it was a difficult decision to have made, it was not a simple case.

Mr Parker, do you think that would affect your way in which you should then assess the limb 1 question, if you went into it feeling that the market you were analysing, you concluded it was a narrow market, but you were less sure of that conclusion than you might be in some other case?

MR PARKER: So I think a lot of factors can potentially go into the significant and persistent element of the excessiveness test, and that probably is the right place for them, so the Tribunal can sort of make a judgment over all those factors together.

I am not sure that I would want to change the definition of the cost-plus benchmark and how you estimate that. I think that is a separate analysis. So I think to the extent that you wanted to take any uncertainties, as you describe, into account, I think it goes into that in the round judgment that the Tribunal will have to make as to what is significant.

MR RIDYARD: Okay, thank you.

Mr Matthew or Dr Jenkins?

MR MATTHEW: Yes, I mean, I think it is -- again, going back to the main theme, I do think it is something that is relevant, and a number of commentators have pointed out the sorts of instances where you might want to be bringing in price controls, or indirectly through competition law, are where -- I do not want to use the term "superdominance" as a threshold, but situations where you very clearly have a firm with very strong dominance that is not subject to significant competition, actual, potential, with no real prospects of that happening. For me, that goes into the general application of when do we worry about excessive prices becoming illegal. I do not have strong views about which part of the test it should go in, merely it should be there, and ...

MR RIDYARD: Thank you, yes.

Maybe I will ask this next question, and that is: on the facts of this case, we do have the -- to be specific about it, we do have both supply and demand side inter-relationships between the Voice service and the broadband service in particular, and the fact that the substitute products for SFV is -- or the main substitute appears to be bundles, which includes Voice as well, which obviously is a complication of the case we are grappling with.

Do you want to say anything more specific about why those factors should influence the way in which we would look at costs? Obviously we are going to come on to those to some degree, because it comes into the common costs question and other points, but is there anything at this point that you would like to say about that?

Maybe I will give that to Mr Matthew or Dr Jenkins in the first instance.

MR MATTHEW: So just as a general comment, we are talking about retail telecoms, and basically what retail telecoms do is they try and win customers and sell them as many services as they profitably can off the back of them. That is essentially what they are trying to do, and they try and retain customers. There are a whole variety of market interactions and complexities that go on in that process, Dr Jenkins has talked a lot about the migration from SFV to bundles, and those are, especially in the case of SPCs, those are a direct substitute.

But it is also, I think, and this is what I note in my report, is that there just are elements of how you go about setting prices that are influenced by what happens elsewhere in the market. So the Line Rental price up until VOCs in 2018 was set for the same for everybody, and the Line Rental price was part of competition in bundles. So there you already have a complication, which is that the price we are concerned about, Line Rental for SFV customers, is driven by what is going on in a part of the market that is quite competitive.

Secondly, there are a number of other issues, not just common costs, but there are essentially other factors about this market that means you are just going to get quite a lot of things going on with pricing and strategic positioning that matter for how you just think about whether one particular subset of prices is high or not.

So this is a market which has a lot of price dispersion, and I mean that generally, not particularly SFV versus others, but within bundles you get a lot of price dispersion. Part of it is linked to differences in the products, part of it is linked to differences by the providers. Part of it, quite an important part of it, is linked between the prices you get when you are buying a new contract or switching to a new provider versus the prices you pay if you are in contract or then out of contract later on.

Those things all fold together to mean that what telecoms competitors are doing is they are trying to win customers against quite a complex set of interactions, and even before you get on to common costs, which create their own well known problems, that just means trying to pick out the prices and margins of one particular product in isolation. It becomes difficult and quite artificial.

I do have another example in my report, it is from supermarkets, but you can imagine a supermarket that sells a variety of different products and it is pricing all the relativities of those products based around who it thinks will come in the door and what they might buy and whether they will be attracted by one or to the other. It might well be that there is one product that it makes sense to say, well, we will have relatively high margins on this product but relatively low on others, and overall the bundle of services is pitched such that it makes sense for customers overall. But if you happen to be one of the subset of customers who just buys the products that has the higher margins, you are not quite as well served, and that is -- nothing -- that is entirely consistent with what happens probably in quite a lot of ways in the competitive markets.

It does not mean that you cannot be setting excessive prices on a subset, it just means you have to approach it very carefully and with a full view as to the range of factors going on here.

MR RIDYARD: This is your bread and butter example, from what I remember?

MR MATTHEW: My bread and butter -- I am not sure that is the best example, but, yes, bread and butter.

I think broader, because just taking that example, I was thinking about that in the context of retail telecoms where obviously a lot has been going on, certainly outside of SFV. In bundles there has been a strategic battle going on about sports, based on trying to drive new sports rights to drive broadband sales and a whole variety of other things linked to upgrading of speeds and all the rest of it.

So I was thinking in the supermarkets example it is not just that you are kind of saying, well, I am just going to look at bread in isolation, I am also going to ignore the fact that my supermarket has now built a funfair outside, and has moved into home furnishings as well as other stuff in the next aisles over. Again, I am not suggesting that means bread prices could not be excessive by the supermarket, I am just saying when it comes to trying to factor that out from a complex mesh of influences, you have to do that very carefully, and in an excessive pricing context, in my view, cautiously.

MR RIDYARD: Mr Parker, do you have a point on that?

MR PARKER: I think there are definitely supply side issues to do with common costs and the appropriate allocation of common costs, and obviously there is going to be a discussion today about the size and allocation of those.

MR RIDYARD: Yes.

MR PARKER: On these sort of demand side linkages, I think what Mr Matthew has described is what I have talked about as the bundle pricing fallacy. I think the discussion we had last week --

MR RIDYARD: That discussion indeed last week, yes.

MR PARKER: -- suggests that, from my view, it is not true in theory and it was not true in practice, because of the way that people competed on the incremental broadband price.

So I do not really see the demand side, the demand side issues as being at all relevant, but I do think the common costs issue is clearly important.

Yes, I think that is all I would say on that.

MR RIDYARD: Thank you.

Okay, let us get -- many of those themes we will be coming back to time and again, I think, over the next two or three days.

Let us go into the specifics, then. I mean, I think it will be -- obviously this case is a lot about understanding the distinction between direct costs, indirect incremental costs and common costs, and how important those three categories are and how they fit together and how we analyse them in relation to the competition case.

Dr Jenkins, I think probably it would be useful if you could kick off on this, really. Can you give us an overview of what are the main categories of those three types of cost in BT's provision of SFV services?

DR JENKINS: Yes, I think over the weekend some tables were supplied. I do not know if the Tribunal have those in front of them?

MR RIDYARD: Yes, I have those.

DR JENKINS: Just to know whether I can refer to that as well.

So in terms of the direct costs of supplying SFV services, I think that is predominantly agreed between the two parties. We touched on it last week --

MR RIDYARD: Sorry, can I just stop you.

Does Mr Parker have them?

MR PARKER: I am not sure we have hard copies in front of us, which would be obviously useful to have prior to this discussion, because there is some material there that is ...

MR BEARD: If it is helpful, it is {OR-H/204/1}. I can certainly have them supplied if you would like?

THE CHAIRMAN: If there are any spare hard copies, I think that would be useful for ...

MR BEARD: There are lots.

THE CHAIRMAN: Right, let us have those distributed then.

MR BEARD: Does the Tribunal want hard copies?

MR RIDYARD: We have them.

MR BEARD: So did you want a hard copy as well, sir?

THE CHAIRMAN: I have one here. That is fine, thank you.

(Handed)

MR RIDYARD: We have it on the screen as well.

Okay, continue.

DR JENKINS: So for the direct costs of supplying SFV services, we touched on those last week. I think that is predominantly agreed. That is mostly comprising the wholesale costs of providing -- renting the network elements of that, plus a few other elements.

THE CHAIRMAN: Could I just interject there on a practical note. We have all noted that it is said that the direct costs are predominantly agreed. Is it possible at all to make them fully agreed, just so that we have a common starting point? Unless one side is going to say they will defer to the other side's articulation of direct costs. It just makes it much easier for us and an area of not real disagreement to avoid.

MR DUCKWORTH: I think we can go away and try and find ...

THE CHAIRMAN: That would be great, thank you.

DR JENKINS: Yes. It is not material, any difference in the numbers.

THE CHAIRMAN: Yes.

DR JENKINS: Then we come to the question of indirect and common costs. So I think the indirect costs of BT Consumer as a whole are agreed, and they are in the F28 disclosure. I think they are -- it is -- they are set out in Table 5, which gives you -- the top line is the SG&A costs, and the bottom line are the depreciation and amortisation costs, so that tells you the total indirect costs for BT Consumer which I also believe are agreed.

MR PARKER: It might just be worth clarifying the title, either that is -- the question there that is above the title, and replacing the word "common" with "indirect". I think that is right. Because the problem is we do not have the actual common costs, we have the actual indirect costs.

DR JENKINS: Yes. The table is not necessarily answering the question, it is relevant to answer the question. Hence, that is why that table is there. But Mr Parker is absolutely correct, we do not have a split of the indirect costs between indirect incremental and common costs, but the thing that we start from is what we do know are the indirect costs of BT Consumer overall. {OR-H/204/6}.

THE CHAIRMAN: Sorry, this is Table 5.3.

DR JENKINS: Yes Table 5.3 -- I think that is actually potentially a typo. I think it should just be Table 5.

MR RIDYARD: So the indirect costs in 2015/16 are the 782, plus the 201.

DR JENKINS: Yes.

MR PARKER: Yes, it is in the question 4(3) above, where the word "common" should be replaced with the word "indirect". Does that make sense?

THE CHAIRMAN: I see, just a moment.

MR RIDYARD: Yes. (Pause)

DR JENKINS: So in a sense, if the shape of the challenge for the Tribunal, and for us to assist the Tribunal, is the direct costs of the SFV services, and in fact the direct costs of Voice services generally and the direct costs of broadband services generally are agreed, and the overall indirect costs of BT Consumer as a whole are agreed. But what BT did not do certainly for the period, the claim period is do any formal allocation of their indirect costs to the products that were served -- that were supplied by BT Consumer and which these indirect costs supported.

So then the question is, how do we then move to a question of: can we identify indirect incremental costs and common costs? Now, for my part this is an important aspect of the approach to the cost benchmark that I think is relevant for the Tribunal to consider because it is with common costs that there is a need to choose a cost allocation mechanism, cost benchmark, that reflects the fact that in conditions of workable competition, firms can take a number of different approaches to how they recover their common costs. So ideally you want to be able to identify the common cost elements of those.

The difference between indirect incremental and common are, if we start from the question of: what is an indirect cost, it is a cost that is not able to be allocated to any one product, almost by definition, because if it, were it would be in the direct costs, and then we would all be agreed that that is where it is.

So perhaps if we now turn to Table 1, the first page of this schedule, with that background, {OR-H/204/2}, this then sets out what we have from the disclosure of the different categories of the SG&A component of indirect costs. These are taken from -- they are taken from the F28 disclosure, but also you will find them in Annex 7 of my first report, which is where I go through these cost categories to think about how one might consider indirect versus common costs.

This is not an exercise that Mr Duckworth and Mr Parker feel is necessary because of the approach they take.

Now, in order to identify common costs for a firm, the thought experiment that you would do is you say to yourself: imagine that the firm no longer offers each of the services that it currently offers and determine which of the indirect costs they would no longer need if they ceased to produce SFV services or bundles or standalone broadband, and you do -- the thought experiment you would do is to do each of those sequentially, take away those indirect incremental costs, and then what you have left are the common costs, right, so those are the costs that would be incurred even if you were -- if you were not supplying all of the other incremental services.

MR RIDYARD: Would it be fair to say the common costs are what creates the synergies between the products, and if there were no common costs between -- let us say I am making five products, there are no common costs, then I am indifferent about whether I make five products or one product. It would be just as efficient if I had five separate firms making them or one firm making all five.

DR JENKINS: Certainly, yes, they drive the economies of scope synergies through the fact that -- and we can take a couple of examples in a moment from the list of where they drive those benefits.

I think it is possible you also have demand side synergies, which mean that people like to purchase two products together even if their costs were separate. We have both of those factors going on here. But it is certainly true that what we are focusing -- a key driver here is the fact that there are strong benefits in the retailing function, so the fact that once you have the ability to retail these products, you can supply multiple products to the same customer.

MR RIDYARD: Whether they are strong or not remains to be seen.

DR JENKINS: Yes --

MR RIDYARD: That depends on the view taken on common costs.

DR JENKINS: Yes, that is the question we are looking at here.

So then, for example, if we take -- and so we see that BT changed through the period of the claim the way in which it reported its indirect costs, so the first table, Table 1, is focused on the period from -- is the way in which they provided the breakdown from 2012/13 to 2019/20 financial years. The average cost in the table is for the first part of the claim period, so from 2015/16 through to 2019/20.

You see that the way in which BT captured the information about their SG&A cost categories over this period is not necessarily how you would think about all aspects of the services that were being provided by the central retailing function. So, for example, in the first line which is total pay including commissions, so that is covering the pay of many of the staff in the overall central support functions for BT Consumer. So a lot of the staffing will in fact be -- I judge will be incremental. So even though those staff may have -- are central and are judged to be indirect, like they cannot be allocated directly to one particular product, it is very likely that as a product scales up or down, as the business scales up and down, the central pay costs will scale up and down.

However, there is likely to be a number of staff that will be required to fulfil the functions of BT Consumer, and so for that reason my "Classification" column, which I have done here as "Low", is then saying I am going to allocate the bulk of those costs into the indirect incremental category and only a subset of those will be judged to be common costs.

THE CHAIRMAN: Can I just be clear about it. To take the first line, as you have done, the first row, 308, that is the total staff and other costs for BT Consumer provision, because that is what all these reported costs are for.

DR JENKINS: Yes.

THE CHAIRMAN: Right, and when it says "Size of common costs", that is size of common costs, because that is what is left after you have attributed everything else as indirect costs.

DR JENKINS: As indirect incremental costs.

THE CHAIRMAN: So the classification of "Low" is the proportion of the total costs that common costs bears to it.

DR JENKINS: That is correct.

THE CHAIRMAN: It is low because it is 62 as against 308.

DR JENKINS: Yes. Then just to add a layer of complication, there are two potential lows. So in that classification of "Low", I have considered a baseline sort of middle scenario of what proportion should constitute common costs in my "Low" category, and then I also have a "Low" scenario within that, in order to be -- to give a range of conservative options for the Tribunal to consider in the -- given the fact there is not a common cost measurement that we have.

MR RIDYARD: When we say common costs, I mean, common between what? Because, I mean, you could have a cost that is common between -- I have five outputs, I could have costs that are common between A, B and C, and I could have costs that are common across all five, could I not? We are particularly interested in one particular set of common costs here, are we?

DR JENKINS: Yes, so here I am seeking to identify the costs that would be common across all the products that are supplied --

MR RIDYARD: Across all the products.

DR JENKINS: -- by BT Consumer.

MR RIDYARD: Actually, why do we not stop there and I will give Mr Duckworth a chance to comment on what we have heard so far.

MR DUCKWORTH: Yes. I think the first point to make is we are broadly agreed on the direct costs, but the definition of direct costs is not those costs that can be directly attributed to a single service, it is those costs which vary on a one-to-one basis in a short-term with provision of service. So the obvious example is also Line Rental, you provide an extra line, you need to pay for one, also a Line Rental for that line, so it is a direct variation. Indirect costs are the rest of the costs, effectively, but that does not mean that it cannot be attributed to a single service.

There are some cases -- so, for example, there are a significant number of people within BT Consumer who work solely on providing television services, and BT Consumer provided a sort of headcount and the reliance, which are sort of television-specific customers. You can attribute all of those television-specific staff, and you can attribute all of the costs of those staff to television services and obviously none to SFV services.

So indirect costs, you cannot attribute them directly to individual services. There should be some costs within indirect costs which you can attribute to individual services.

MR RIDYARD: Presumably that is what Dr Jenkins has done in the calculation we looked at here. Of the SG&A pay costs, 80%, has she not -- 80% of them, she has allocated them to individual products, presumably, because they are not in common costs?

MR DUCKWORTH: It is unclear that she has looked at the actual headcount data to do that --

MR RIDYARD: It is unclear how she has done it, but in principle there does not seem to be anything between you. I take your point about being precise about the definitions, but --

MR DUCKWORTH: There is a kind of difference between -- so my understanding of Dr Jenkins' approach, which she can correct me if I am wrong, is that she has tried to understand which costs are fixed and said: well, if I do not provide SFV services which costs can I avoid? But there are some costs which are fixed i.e, they are not variable. So an example is TV production. Those are fixed costs where you need to incur the cost to produce a television programme. It does not depend on the number of people who are actually sort of subscribers of the television service. So there are some costs which are fixed but are specific to an individual service.

I think looking at this table is looking at the way that BT Consumer has reported costs at a very high level base. I think it is helpful also to look at when we are thinking about costs attributed to SFV services the sort of activities required to deliver an SFV service.

I think it is helpful to get up {IR-E/6/69}.

So this is taken from BT's Regulatory Financial Statements and it kind of lists -- so on the previous page it has the direct costs and this kind of lists. So at the bottom of the page you have charges of wholesale markets and payments which is broadly the wholesale Line Rental.

On to the next page, what do you need to deliver Voice services? You need markets and sales to acquire these customers. You need finance and billing, so finance both for internal budgeting, for example, but also the billing costs. You need some computing, both the sort of customer care for billing, customer service is a large element and then sort of general management and then bad debts.

So it is helpful to think about what you actually need to provide to deliver these services.

Then trying to map that on to the costs that BT Consumer looks at a kind of overall basis. It is quite difficult to make that matching. Marketing and sales is kind of one of the areas where there is quite a lot of clarity, but we have large parts of BT's costs which Dr Jenkins considers a large proportion of it to be fixed and common, such as fixed re-charge and net internals, and it is very unclear what those large common costs are related to in the provision of SFV services.

Why is there a common cost of re-charging net internals of sort of £150 million per year to deliver SFV services? What are those common costs? Yes, there will be a kind of minimum level of costs as you kind of shrink the business and take various customer groups out but why would you be left with £150 million of costs if you get down to a sort of very low number of customers? Why when you are looking at the standalone costs to the SFV services do you need to incur this 150-odd million of costs? It is really not clear to me what those costs are.

MR RIDYARD: Right. Dr Jenkins, do you want to come back on that?

DR JENKINS: Yes, so here the question we are asking is: what are the common costs or what is the best estimate we can get of the common costs of BT Consumer? Certainly at the beginning of the period we still are in a point when there are quite a high number of SFV customers at the beginning of the period. They do decline over time and that question of what do we do over time and how do we then use this information to define what our costs benchmark is, absolutely, we will no doubt discuss that over the course of the next couple of days.

But the principle of how do we think about what is the way to think about price benchmarks -- cost benchmarks for pricing in workably competitive markets in the face of common costs, then I think there can be a wide range of pricing decisions that firms take about how they are going to recover those common costs.

Therefore, that question of considering an approach to cost allocation and deriving cost benchmarks that recognises the fact that you need to be able to capture the flexibility in how you can recover those costs, while also ensuring there is no overrecovery of them overall, and so hence, that is why the approach I have taken is what is known as the standalone cost combinatorial or SAC combi for short, it is a very different approach to the one Mr Duckworth is discussing which is that you do your best to decide how much you should allocate of these costs.

Part of the reason is indeed that BT did not allocate these costs out to those different products and what it did have was a central function that supported the provision of these different services and it did set its prices with an eye to how the market was evolving, the fact that demand for its services was changing, the use people were making of that connection was changing. The beginning of the period or prior to the beginning of the claim period it is predominantly being used to deliver Voice services. Over that period that connection is being increasingly used to deliver internet, broadband and then other content.

MR RIDYARD: Just to be clear, when you say BT did not allocate these costs out to those different products are you referring to the common costs or all the indirect costs?

DR JENKINS: It did not allocate any of the indirect costs. It certainly did not allocate out its common costs.

MR RIDYARD: It did not identify the common costs did it?

DR JENKINS: It did not identify common costs in there.

MR RIDYARD: So you are saying that the common costs are important, particularly important, to your analysis because, I know the two sides do not agree on this, but in your view a firm should have considerable flexibility about how they recover the common costs. Whereas for the indirect incremental costs then sooner or later they have to apply and they do apply to individual products and therefore the cost base should sort of quite mechanistically cover those incremental indirect costs but not the common costs. Is that a fair summary?

DR JENKINS: That is a fair summary because here we are talking about what would you expect to observe under workable competition, and for that, as you rightly articulate, you would expect to see that the incremental costs of the services, of any services, would form part of the pricing and so that is why it is useful to get an estimate of the indirect incremental costs and then there is flexibility to recover the common costs. There is no causal way to do that. That is kind of agreed. A business that faces those common costs will then look to see how best to recover them given the demand conditions they face in a workably competitive environment.

MR RIDYARD: So it is the common costs that give you the wriggle room when it comes to looking at -- justifying the prices of any individual product, as it were, although that is contested I know by the other side. So BT did not estimate the common costs, and that is something you have done and you have done it in two ways as you show in these tables.

DR JENKINS: That is right.

MR RIDYARD: But how can we know that what you have done is right or wrong? Do we have to go through every single judgment and make our own judgment on them in order to know whether these are reasonable or not?

DR JENKINS: We could do that, obviously. The other thing is that I have done a cross-check against that, which is in my second report which we can come to, which is -- it relates to this question of the re-charges and what those re-charges represent, and the fact that when Ofcom has been -- has looked at these questions, it had identified these re-charge -- this re-charge category as good estimate of the common costs as the cost transfers that would be invariant, even to the existence of BT Consumer. So they meet that test.

That cross-check of that re-charge category is quite similar to my assessment of common costs on my "Low" scenario. So, you know, there is perhaps some comfort there that the "Low" scenario gives you something that cross-checks well with the re-charge category.

MR RIDYARD: We should break in a moment. Shall we take it now? Let us take the break now.

(11.41 am)

(A short break)

(11.53 am)

MR RIDYARD: Right, I think what we had there, before that short transcriber break, was a nice overview of the notion of common costs and incremental costs. What we would like to do now is actually to put that to one side, and also to defer what were the next three questions, which were about workable competition and the benchmark. Obviously we will come back to those, but we think it makes more sense to come back to those questions after we have talked about the different cost allocation methodologies.

So what I would like to do now is go on to what is section 6 in our list about the notion of LRIC+ as a limb 1 cost standard in principle.

I think maybe to address this to Mr Duckworth and Mr Parker first of all. I mean, can you just tell us how the LRIC+ measure is constructed conceptually, and is it the same as fully allocated costs, and if not, why not -- or how not, rather.

MR DUCKWORTH: I will start.

LRIC+ is a sort of conceptual cost standard where the LRIC part tries to establish all of the elements of cost which are incremental in the long run. So obviously the direct costs are purely incremental. But then going on to the indirect costs, you attempt to work out which costs are causally related to the provision of an increment of service, in this case, SFV services.

MR RIDYARD: So our increment here is SFV services, which is not the same as obviously -- so Voice is not the same as SFV, of course, because Voice exists outside of SFV, and the increment we are talking about in all these cases is specifically the SFV increment over whatever else BT might be doing.

MR DUCKWORTH: Yes, it is a focal service in this context. So we try to work out all of the -- as I say, the direct costs vary directly with the provision of service, but the indirect costs which will vary them. That can be quite a complex relationship. So, for example, a customer -- the more customers you have, the more sort of calls you get to a customer care centre, and so the more customer care centre staff you need. But also there will be kind of other layers of kind of cost causality: the more customer care staff you have, the more human resources staff you need to manage those customer care staff, the more sort of IT support you need because they will probably have workstations, and the workstations will fail, and so the more workstations you have, the more IT staff you will have.

So there is a whole long chain of cost causality and you can construct a sort of LRIC cost model which attempts to establish all of those causal relationships. If you do that, and as Dr Jenkins has set out, you can work out effectively the incremental cost of delivering the service.

There are also, as I stated earlier, some potentially sort of fixed costs which are not incremental to the number of customers but are fixed specifically to provide that particular service. Not so obvious in the case of SFV, but there are kind of fixed incremental costs which are not shared with provision of Voice services.

But it is understood that LRIC on its own, if you priced all the services at LRIC, you would not fully recover all your costs. If you look at the incremental costs of each service, the remainder is the fixed and common costs, and you need to recover those in some way, and so you add in a mark-up on top of incremental costs to give LRIC+, and setting all prices at LRIC+ will allow you to fully recover all of your costs of production.

MR RIDYARD: So the plus is a way of recovering common costs, but you do that -- obviously you do a bit of common cost across each individual product which shares the common costs.

MR DUCKWORTH: Exactly.

MR RIDYARD: Is that the same as fully allocated cost?

MR DUCKWORTH: So LRIC is a sort of conceptual cost measure or benchmark. Fully allocated cost is a sort of methodology for coming up with costs of -- the methodology for service costing, which effectively takes the total costs of the business and allocates those total costs to the output of the firm.

You can do that effectively however you want, and it will still be a fully allocated cost methodology. However, you can try and make sure that the fully allocated cost methodology allocates cost by cost causality as far as possible, and so costs are effectively allocated on the basis of incrementality, and in that way you have fully allocated costs which can be a proxy for LRIC+. But that is not to say that all fully allocated cost methodologies are a good proxy for LRIC+.

MR RIDYARD: That is clear.

Dr Jenkins, any comments or points on that?

DR JENKINS: No, I think that seems fair. That last point, which is LRIC+, is a fully allocated cost methodology. There are other --

MR RIDYARD: It is one of many FAC methodologies, yes, okay.

So then if we go on to the question of how do we allocate the fixed and common costs. So from what you have said, Mr Duckworth, you allocate the fixed incremental -- or the fixed costs, as it were, if they are incremental, by looking at causality, and then the common costs, you have to come up with an answer, with a formula for allocating them to the services. What are the options there?

MR DUCKWORTH: There is a broad convention, which is to use what is called an equi-proportionate mark-up, where you take the common costs which need to be recovered and recover them through a kind of constant mark-up on all the incremental costs. So that is a kind of conventional way of going from LRIC to LRIC+.

As I say, it is convention, which means that by definition it is not necessarily based on the facts of the market, but underlying a sort of EPMU approach is a sort of conceptual or economic thought that in a market where the super-elasticities of different services are broadly similar, then EPMU will sort of proxy sort of Ramsey-type prices while you recover fixed and common costs kind of proportionately to super-elasticities.

MR RIDYARD: So that is to do with demand conditions, it is nothing to do with the supply side, is it?

MR DUCKWORTH: So by definition these are common costs, and there is no supply side causal relationship to attribute those common costs to one or other service, and so EPMU is a convention which takes a sort of null hypothesis about the demand side and allocates fixed and common costs according to that effective null hypothesis that there is no difference in the super-elasticities between the different services.

MR RIDYARD: Just to go back. So understanding how big common costs -- the size of common costs in this problem, the way it feeds into your way of looking at costs is for everything you can causally relate to a product or an increment, you do that, and then you are just left with the common costs, and then you have to find a rule for allocating the common costs, understanding that there is, by definition, no causality-based way of doing that.

Okay, let me hand over to Dr Jenkins there. Any further comments or observations there?

DR JENKINS: Yes, and then I will hand over to Mr Matthew. But I think we have got to remember that even on what we are doing here, we have got our direct costs, even our indirect costs, they are indirect. So Mr Duckworth has given some examples perhaps where you might be able to find some causal relationship, but even there it is not necessarily clear that the causal driver would be headcount versus, in a sense, the value of the products that the people are working on, right. Because you might have a set of staff in your human resources team.

Now, yes, you can say, okay, well, you need -- if you have got more people, you are just going to need more human resources people. But maybe it is that you put more effort and you ask people to work more on the products that are more valuable to you, and therefore you need more HR people for the more valuable products.

MR RIDYARD: But will that not show up when you ask the people to fill in a timesheet, and they will say, well, because we have been told that product A is more valuable, we have spent three-quarters of our time working on product A rather than B.

DR JENKINS: If you have asked people that question, yes, you would then find that out. But in the absence of the information and on what people actually spent their time on, there is not this unique attribution even of indirect incremental costs. Then we come to common costs and, yes, there is clearly no unique way of attributing common costs to the services which are supported by those common costs.

MR RIDYARD: But with the indirect incremental costs, in principle there is a unique way of attributing them to a product, it is just that you might not have collected the information to allow you to do it?

DR JENKINS: Yes, that is right. Hence if you are in a position of not knowing that fact, and you have to decide what is the right cost benchmark in an excessive pricing case, then you might need to look at a few options, rather than just be sure that a standard way or a common way or --

MR RIDYARD: Yes.

DR JENKINS: -- is the right way, when different firms may reasonably take different approaches to that approach to indirect, how they allocate or how they think about their indirect costs.

MR RIDYARD: Mr Matthew, did you have something on that?

MR MATTHEW: Yes. Actually it was just to come back on the point about EPMU, that ... So I just wanted to make a comment about Mr Duckworth's comments, which is to have suggested that EPMU is a convention they use because it is generally understood that it follows from certain demand conditions. I just wanted to say I am not sure that is right.

The defining feature of common costs is that it is not costs that drive prices, it is the other way round. It is what happens to your prices, your ability to make money out of your products, that feeds into the best way to set your prices in the most profitable way, and once you know that then you could always, of course, come up with some cost allocation that reflects it. But unfortunately that does not help you, because what we are trying to do here is come up with a cost allocation to help us understand the prices, but that is normally what happens in a lot of businesses.

Where common costs do matter is a special but very important case which is in ex ante regulation, and the reason they matter there is because common cost allocations are then used in setting price caps and tracking things over time, such that how these things are done does feed into prices and what happens to the firm's profits.

But that is a different situation from a commercially operating environment where it is the pricing decisions you look at first, and then the common cost allocations really should be following on.

MR RIDYARD: Okay. Mr Duckworth, or Mr Parker even, indeed, do you have any counter-observations on that?

MR DUCKWORTH: I just go to Dr Jenkins' point, which seems to be suggesting that costs follow value. I can see to some degree there may be some sort of reverse causality there, that if a business sees a group of customers who are generating high value, and they may spend extra time and resources on trying to acquire and retain high value customers, then I think that is one potential explanation. But in an excessive pricing case, that sort of reverse causality, where revenues drive costs attribution, is likely to lead to excessive prices appearing to be less profitable than they are, because we should be looking at the actual resources used to deliver that service, not trying to say: "ah, because this service had very high prices I will assume that lots of resources were used to deliver that service".

MR RIDYARD: So you are saying you would be -- there might be a general rationale for following Dr Jenkins' logic of -- maybe the effort does follow the value. But here you are saying you need to be careful about that, because of the possibility that it could cover up -- if there is truly an abusive excess price here, that it could help to cover that up by following the value route.

MR DUCKWORTH: Exactly, yes. Particularly if you have a captive group of customers, you are less likely to spend lots of resources trying to do that.

MR RIDYARD: I understand the point in principle, yes, that is right.

But the fact is that we do not have -- I assume we do not have perfect information about cost causality, so we have some uncertainty in front of us about how you allocate these indirect costs to the different activities. Is there -- obviously the best answer is to find out the full facts about causality, but let us say we do not have that. So is there a case for looking at different ways of different sort of conventions or accounting rules which might help us through this difficulty, or is that just not part of the process?

MR DUCKWORTH: I think that there is some value in looking at alternatives, and in previous cases the Tribunal has considered a kind of range of options. But I think it is important, when doing that, to consider whether on the facts of the case those different methodologies, in the absence of, as you say, activity based costing, whether those methodologies are likely to reflect cost causalities.

I do not think it is a case of coming up with as many different methodologies as you can and sort of equally weighting them or going for the middle one, I think it is a question of looking at potential alternative methodologies, thinking about whether conceptually that is likely to reflect -- each methodology is likely to reflect cost causality, and for the Tribunal then to reach a judgment on the appropriate methodology or methodologies to consider.

MR RIDYARD: That is fair enough. Thanks.

That is LRIC. When we get to LRIC+, or the plus bit of LRIC+, do you think there, there is more case for trying out the different conventions and -- because here you are a bit stuck for -- obviously there is no causality principle to fall back on.

MR DUCKWORTH: I think it is important to consider the demand side. So Mr Matthew talked about ex ante regulation, and in ex ante regulation, particularly given that the retail market has largely been deregulated, a lot of Ofcom's ex ante regulation is looking at the network. Obviously the network, because it is not disputed there are very large fixed and common costs within a network such as BT's. You need to incur a lot of costs before you serve any customers, you have to dig up all the roads, so very high fixed and common costs.

But there is obviously quite a lot of heterogeneity of demand, so the BT network serves, you know, the Goldman Sachs trading floor and your typical residential customer, and clearly the elasticities of demand for those different services are quite different. The incremental costs may not actually be that different, but the elasticities of demand could be quite different.

In that case, it is not surprising that Ofcom allows quite a degree of latitude in how Openreach in this case recovers fixed and common costs from different services, and I think that reflects both the very large fixed and common costs, but also the heterogeneous nature of demand.

Here we have a case where my fee is fixed and common costs are relatively low, and the demand for BT Consumer is, you know, by definition, all residential customers with a much more homogenous level of demand. As Dr Jenkins says, there is a lot of potential substitution between the different services. So you would not expect, in workable competition, a hugely disproportionate recovery of fixed and common costs from one group of customers compared to others, whereas you would expect Ofcom to allow Openreach to recover far more costs from Goldman Sachs for a connection to their trading floor than a residential customer.

MR RIDYARD: Dr Jenkins or Mr Matthew, any observations on that?

MR MATTHEW: Unless you ask me to, I will not comment on the wholesale side. I can do. There is a long history of deliberation --

MR RIDYARD: I think we have enough troubles on the retail side!

MR MATTHEW: -- common costs in that situation.

I will just say in passing one remark, though, which is that it is quite hard. So the point there is the ex ante regulator has to make decisions about how he is going to treat those things because it is price capping.

So he has to make a call on how many of the network costs he is going to put into these lines, which would be used for Goldman Sachs, as opposed to residential. Things like that are important decisions that Ofcom has to make over time.

I will also say they found it difficult to do as well. So there is a little bit of humility in how best to treat common costs, and there is a little technical point about something called the tariff basket, which is a way of setting a price control for a group of services, such as a variety of different types of broadband lines. It is like you are not sure -- you have a bunch of common costs between them and you are not sure how much should be on the high speed, how much should be on the low speed, that kind of thing.

Also, there are often ancillary services which go with these things, so there is like service, quality, bits and pieces, and your fault serving and stuff. The way you often deal with those is what is called a tariff basket, which basically sets a cap on the basket of products, not each product individually. It allows BT then to amend its balance of prices over time, and that is held to have good properties as an incentive mechanism. Actually to deliver at Ramsey prices is one of the sort of technical objectives.

Sorry, that turned out to be a bit of a digression.

But just to come back on the heterogeneity. I think that is a mischaracterisation of retail telecoms. I mean, you get -- simply observing what goes on in retail telecoms markets tells you there is a lot of heterogeneity going on in these markets, and you get that simply by observing -- I do not know what evidence the Tribunal has seen, but a scan or plot of what prices for Dual Play, Triple Play look like, they are very varied. It is a messy graph. That tells you there is a lot of going on in these markets that that is not sort of homogenous customers just buying what they want.

Just one final point, just to come back. I forget precisely where it came in. But we are talking a lot about costs allocation here. I would not forget the demand side, because I think there are situations, for example, where demand into linkages can result in quite large differences in the prices of two products when they are potentially related.

A classic example would be something like mobile services, handsets and calls. A classic example would be SFV, how much is a Line Rental, how much is the calls, where the price you set for one bit will be conditioned by what price you are going to set for the other bit, and in those conditions you can actually end up with situations where, if you work out the incremental cost for one part, it might even be sensible to price below incremental cost.

Going back to my supermarket example. Supermarket car parking is free. Not everybody uses the car park. The costs in the car park are recovered in the products the supermarket actually sells you. But nobody would say, you know, we can work out the incremental costs of the car park, they are going to positive, but you would say it is sensible to bundle that in with the other products you are selling.

It is just a further example of the complications that are at play here, and I would like to keep emphasising that point about heterogeneity of price dispersion.

MR RIDYARD: Just going back on the heterogeneity. If you have a group of customers who have no alternatives, and most customers have got alternatives, then that is a source of heterogeneity. So would it be -- and if you are then allowed to recover your common costs by identifying the inelastic bits of demand, and charging higher prices to the inelastic bits of demand, which is very crudely what Ramsey pricing is about, is it not, does not that raise problems here? Because if that group of customers does not have options because they do not benefit from effective competition, would you not end up by thereby justifying what could be considered to be monopoly pricing?

MR MATTHEW: So I do understand the point, but for me this does come back to what we are talking about in respect of workable competition, especially in retail telecoms.

So if we go back to -- I am sorry, there was a lot said about this last week, about the issues that arise in single firm dominance, and what do you do if -- you know, to what extent can you just look at, well, the price is high, the margins are high, so there must be dominance, there must be a narrow market somewhere. It is a point that I think Mr Parker was -- it is probably an unfair characterisation, but that theme was coming through.

The issue is: what is your comparator? So if you look at retail telecoms more generally, and many other markets, you will find similar looking amounts of price dispersion as you do between SFV and bundles, for example, or, if you take the SPC buyer from the separate sources compared to a bundle, within the bundles. So you see a lot of dispersion within the parts of the markets that are plainly workably competitive.

The reason you get that is a combination of differentiation across suppliers, differentiation in customer demands, differentiation in the amount that customers search. So some are very engaged and have changed their contract every two years, get a good deal every time, and over time they do very well. Others are not well engaged. I am one of them. So I have been with the same provider since 1996 and they have never had to acquire me, and the profits on me would be astronomical by now, and it was not BT.

So my point is that when you look at -- when you try and back out from just looking at high -- what appear to be high prices and high margins on one particular product, actually you could go around different parts of retail telecom and probably find the same thing without having to look very hard. It is just there they would have arisen when there are several providers and they do all have choices.

I think analogies can be made with a lot of other markets where you will similarly find quite broad outcomes in what is a competitive environment.

MR RIDYARD: Mr Parker or Mr Duckworth, do you want to come back on that particular point, about what I said about Ramsey pricing and why demand might be heterogenous.

MR PARKER: I think demand could be heterogenous. There is an issue, as you say, of -- in an excessive pricing case, one of the reasons why prices are -- we had a question about because customers are comparatively inert, that causes a bit of an issue, a sort of circularity issue.

I think we might get to this, but competitive markets have to allocate common costs all the time. So if you are a supermarket and you have a common cost, which is the store, the land, and so on, you have to find a way of allocating that. My view is that supermarkets are pretty competitive. What I think is intriguing and interesting is that supermarkets come to broadly the same allocations of common costs. Each supermarket comes to broadly the same allocation. So you have got the costs of the store that I need to recover.

Do you see one firm thinking: I am going to recover all of these common costs from alcohol, and another firm thinking: I am going to recover all of them from fruit and vegetables, and another one saying: I am going to do it all from ambient? No, you do not. You see -- actually, when you delve into it, you see that they have kind of different margin targets for different categories, and then within that they are trying to reach that overall margin target while looking at all the individual products that they have got. They have slightly different numbers of products. The margin target will be a combination of what do we think is going on in terms of the incremental costs that we may not be fully capturing, like if you require fridges to serve your products then they will probably be more costly than if you are just putting them straight on the shelf, what you might think about as a different margin type, different margin target, and so on. But you might also think, well, across all these products what are my inverse elasticities, what is my sort of Ramsey pricing approach, because competition is going to drive me to only being able to recover across the board.

Competition essentially drives you to the most efficient recovery of common costs across all these products. What we see is, if you go into a supermarket, you know roughly what things cost. It is not a massive surprise. If you went into a supermarket and bananas were £5 a bunch rather than £1 a bunch, then you would think: that is rather peculiar. But that is not what happens. You see, competition drives you. Yes, there is a bit of "Waitrose is more expensive than Aldi", but competition essentially drives you across those to a pretty clear view as to where you should be recovering those costs.

So it seems to me that this idea that there is a sort of "anything goes" approach to recovery of common costs under workable competition is not really right. The market does find an answer and it says, for the reasons that Mr Duckworth was saying, that there is a demand side element which needs to be taken into account, and the demand side element moves you away from the: on the supply side this is a common cost and we just do not know, we can put it anywhere, to: there becomes an answer.

That would be my -- no doubt we will come to it a bit later on.

MR RIDYARD: Yes. Just one follow up on that, and it is about flexibility. If you take that approach and you have quite a clear view about how under workable competition the common costs will get recovered, and then you apply that as a template on the margins in a particular case, does that -- when you then come to look at excessive pricing, does that come to impose quite a rigid rule on the firms that you are investigating as to how they can ...

You just said it should not be "anything goes", and I understand where you are coming from. But I mean, the flip side of that is do you then start imposing a very rigid rule on how firms should be recovering their common costs, and as soon as you find a departure from that rule then you jump on it and say it must be excessive?

MR PARKER: So that I would not agree on. I do not think that is an implication necessarily of the previous answer. That is because I think there is the significant and persistent, but obviously significant, part of that test for excessiveness. So I think it is completely sensible to come up with a cost benchmark, LRIC+, and identify what the margin is, as long as I do build up the direct costs, the indirect incremental, a sensible allocation of the common costs. As an aside, I will just say I do not think the common costs are anywhere near what Dr Jenkins has estimated, and we will no doubt come to that later on, but, if so, this kind of question of allocation becomes a little bit less interesting, because the variation is obviously not going to be so dramatic, but having said that, that gets you a benchmark.

I think it then goes into the question of significance, along with other factors, of how far above are you from that benchmark and how long have you been above that level? That, for me, is where the judgment of the Tribunal needs to come in, in combination with the various other factors that we will also no doubt come to, and I described a couple earlier on, but I think you should try and estimate the benchmark in a kind of sensible fashion, rather than building lots of variation into the benchmark.

MR RIDYARD: Okay.

Dr Jenkins.

DR JENKINS: I think that, as Mr Parker has just put it, that leaves a lot of uncertainty in the minds of any -- well, any Tribunal making that judgment, also in any business. As you said, if there is a sort of specific rigid determination that says, well, this is how common costs ought to be recovered, and then there can be judgment about what constitutes "significant" above that, that is quite removed from the actual realities of how businesses do actually make pricing decisions in a workably competitive environment.

In the situation that we are in, in this case, you cannot -- one should not extract oneself from those realities, which include the fact that the pricing of the SFV services was also the price that was being charged to customers who were taking Voice in bundles. There is -- one needs to consider to what extent was that passed and to exactly which of the customer groups. But there is this clear linkage in terms of the way the pricing worked into these other products, and we also have the arena of competition here is about seeking to retain and attract customers to the different rivals, not just BT, but the other rivals, by improving the attractiveness of that connectivity.

So over time there are changes to the cost base of these organisations, in the same way that supermarkets look at the range they are going to supply and the conditions and improve the quality of their stores, and then decide how are they going to recover that from the products that they take, and that does vary over time, from week to week. There is a wide range of price flexibility that is availability to most retailers.

So I think one needs to be really careful about giving the impression that there is one simple answer to these questions. Hence, we will come to exactly how one thinks about the standalone cost combinatorial approach, but the basic premise that says a firm that is pricing any one of its products between the long-run incremental cost and the standalone cost is not pricing excessively, on its face, subject to checking that in a multi-product environment it is not recovering its common costs multiple times across the different products that it offers.

So that means that the business is not charging excessively; it is recovering its costs, but it has the flexibility to respond to the demand conditions, which realistically the business is the best placed to make that judgment on, or you do not want to dampen the competitive dynamics to the extent of saying there is some clear rule that says this is the way it should be done for all multi-product firms across the economy, with some allowance around significance that, in itself, will probably need to draw on the same ideas that you would use to build in a benchmark that recognises the flexibility to recover common costs in a range of ways.

MR RIDYARD: Yes. That has partly sort of jumped on to the next topic, where we were going to talk specifically about the standalone cost rationale for that approach.

We did have a question, we do have a question about the 2009 exercise, but I think we should park that and deal with that when we are going to talk about that in detail, so we will park that one for now.

Before we go on to the standalone costs proper, can I just ask about, just back to this flexibility point, and thinking about -- let us put the common cost to one side for a second, but just thinking about the incremental costs.

In principle, Mr Duckworth, you are saying that one could do an exercise of getting to the bottom of causality, but BT has not done that in this case. It has not -- it does not do that on a regular basis, looking at the causality of all these costs.

Do firms, again, on flexibility, I mean, they are still -- most of these are still sort of fixed costs, so they are not varying in the short-term, but to what extent would you expect firms to be -- I know in the long-run they have to cover these costs, but in the short-term, to what extent do you think firms should be looking at all of the causality, even of the fixed costs, and making sure their prices reflect that causality all the time, or is the flexibility there in whether they recover those indirect costs on a product by product basis?

MR DUCKWORTH: I mean, I think it kind of depends on the nature of the product, but here we are talking about a subscription service. You are acquiring a customer for a number of years, and over that time period you have got the ability to vary costs much more than, say, a supermarket, which when a customer comes in they cannot vary their overheads reflecting the number of customers who come in on any one day.

Here, BT Consumer is serving customers with lifetimes of maybe five years and can vary costs to a significant degree within that time period, and so it makes sense to think about the overall resources that that customer will be requiring over that kind of medium to long-term.

MR RIDYARD: In that case, are you surprised that BT has not done more of that, I mean allocating these indirect costs?

MR DUCKWORTH: We have seen that they are looking at constructing such a cost model with a letter from Simmons, which came in I think the second half of last year as we were preparing our report, saying that BT is considering setting up precisely such an activity based costing system, across BT Group, not just BT Consumer, and Mr Cackett talked about unit economics which is, as it has been described, an ad hoc exercise, but it is an exercise where BT tries to understand better, effectively, the incremental costs of serving customers.

So I think, I mean, it is wrong to say that businesses do not do this. For a significant period of the claim period BT Consumer did not do this and priced without necessarily making reference to its kind of incremental costs or indirect incremental costs and focused on gross margin. But businesses over the long-term do need to think about their indirect costs as well, because those are costs which they do incur and which do vary over the medium term as they serve more or less customers.

MR RIDYARD: Yes.

Mr Parker?

MR PARKER: Just to add that even if you are not measuring indirect incremental costs yourself, but your rivals are and they are pricing on that basis, the market prices are reflecting that full suite of costs, which they should do, then you will have to respond in the market, and you will end up, even if you are using, say, a gross margin measure, but you will have a rule of thumb as to what gross margin you need to make for different products, which will end up being driven by the market prices you can achieve facing the competition that you do.

MR RIDYARD: So your gross margin target might have a sort of "shadow cost" of the indirect cost in there.

MR PARKER: Exactly, and that goes a bit back to the supermarket example. Even if you are not allocating at the fridges, you might think, well, fridges cost energy, there is a capital cost there. We need to make slightly higher margins on products in fridges, even if we do not specifically try to do that. That is kind of a business choice, but it does not mean that fundamentally the economics are driving you towards taking all the cost causality into account.

MR RIDYARD: All right. Let us move on to the SAC approach to limb 1. Dr Jenkins, you have already given us a kind of first answer to the rationale for that. Let me give you a chance to say a little bit more. What is the rationale for the SAC approach to limb 1?

DR JENKINS: The rationale for looking at the standalone cost measure is in determining an excessive pricing benchmark where you want to reflect the fact that there is uncertainty around how costs can be recovered across the economy, and therefore while you -- it is not that you might not look at other benchmarks, but an important benchmark would be one which allows for the fullest flexibility a firm could take in reasonably recovering its costs, and that range is generally agreed to be between long-run incremental cost and standalone cost.

Now, on its own, just that broad range has not been seen to be sufficient for determining cost-plus benchmark in excessive pricing cases because it can be very wide, and so the approach that I have suggested here is the one that then looks at how the pricing of the other products that are supplied off the common costs themselves contribute to recovering the common costs themselves.

So you recognise the fact that there is a system of pricing that is being implemented by the business that is under scrutiny, and so you look at the product of interest, but then you look at when -- at combinations of the product of interest with the other products that are supplied over those same common costs. Then you assess whether or not those combinations, so that is if you look at SFV services with bundles and with standalone broadband, and you ask the question for that set of services, and if we then look at the costs, the direct costs of that, the indirect incremental costs, and then all the common costs for that which is going to be the same across all of these, and the appropriate margin, is there evidence that there is excessive pricing on that combination?

If you test sufficient relevant combinations and you find that in all these other combinations there is no evidence of the provider BT in this case ever recovering more than their relevant costs for that combination, you can then take comfort from the fact they are not over-recovering across the board and therefore it is reasonable to allow them the flexibility to choose where and how to recover those common costs across all those products.

MR RIDYARD: If you do a standalone assessment of a small product within a big portfolio of products, the standalone cost is always going to be -- it is always going to give a lot of freedom, is it not, on that particular product?

DR JENKINS: Yes. If we turn to {E/17/222}.

MR RIDYARD: I should say, I do not want to get into the minutiae here because we will --

DR JENKINS: Agreed, but I just think perhaps it is helpful just to see what that standalone cost stack looks like for SFV services at the beginning of the claim period.

MR RIDYARD: Sure.

DR JENKINS: So it is in 2015/16. I think it does show that the common cost allocation is reasonably high for SFV services here at £11 92.

MR RIDYARD: The £11.92 that is obviously your take on common costs.

DR JENKINS: My take on common costs and spread over the number of SFV services lines in 2015/16 which is 2.7 million lines/2.8 million lines.

Now, I think what is certainly the case is as we go through the claim period that group becomes much smaller and then there is a question about the smaller that group then you can get some very high standalone cost measures which is why you definitely need to be checking the combinations and thinking about how to interpret a cost-plus benchmark in those situations.

MR RIDYARD: Okay. Mr Duckworth, just at a general level, the pros and cons of standalone costs with or without the combination cross-check.

MR DUCKWORTH: Just starting with standalone costs. This kind of comes from a contestability theory where you are saying if you price above standalone costs, and this was probably particularly when BT was effectively a kind of natural monopoly, and you would price above standalone costs for any one service then it would be profitable for an entrant to come in and compete just for that service alone. That is a very narrow view of costs and if you looked at standalone costs of all the different services and added it up you would get a sort of a huge flexibility in pricing.

We are in a case where we do not have BT Consumer as a sort of an existing monopolist being able to price up to SAC as a kind of ceiling before it gets entry in a single product. What we have is BT is a multi-service firm competing with other multi-service firms and the other multi-service firms can spread their fixed and common costs across a range of services and so they can enter and expand at a level far below standalone costs of SFV services because they can recover their fixed and common costs from Dual Play services, Triple Play services etc. etc.. So I do not think SAC is a very helpful benchmark here because it does not reflect the actual nature of competition in this market.

DR JENKINS: So I would say that the actual pricing of SFV services is below the standalone cost benchmark and that is, as Mr Duckworth says, that BT is competing with a range of multi-product rivals who are also facing similar cost structures, such that in fact, no -- the analysis I have done and yes, there are lots of things to discuss about the judgments and all the rest of it, but on the basis of that analysis I do not find any situation where BT's SFV services pricing is above the cost benchmark.

So that fact can be seen to show that there is competition and the pricing flexibility that this gives is not being fully taken up by the firms because they are constrained from doing so by the competitive environment in which they operate.

That is another way of looking at it. If BT did have the power to price as it liked to these customers why would it not price even higher than that, given the costs it faces. But we are trying to find a benchmark for the excessive pricing. What is the maximum amount you could expect to see and still consider that it would be consistent with some forms of workable competition, and even that BT is not pricing at that level.

MR RIDYARD: Okay, right. I think take it further from that I think it makes more sense to go to, as we will do later in the questions we have here, looking at your combinatorial tests and how they feature into the analysis.

DR JENKINS: Yes.

MR RIDYARD: Let us move on now to going back to the common cost allocation, a point which Mr Parker has already referred to, at least obliquely a few times, the Bliss paper on how common costs gets recovered under workable competition.

Mr Parker, I mean, as I understand it, you are now arguing that there is a kind of unique common cost allocation which is consistent with workable competition and it comes out of this Bliss paper. So can you introduce that and explain why you think that is the case.

MR PARKER: Yes. So I think as at a conceptual level what you have got is if you face competition everywhere then you will end up with zero economic profit so you have got that overall constraint that you face on your pricing. If you have a common cost across multiple services, then competition will drive you to essentially just recovering that common cost across all those services because if you were recovering more on that common cost, having recovered all your other costs, then that would be positive economic profits, that would not work.

So then the question is, how does that process of competition, where does it end up in terms of how those common costs are allocated across all the different products? The answer is from Bliss that they are essentially in a sort of Ramsey pricing type way but taking into account, so this is the concept of super-elasticities that Mr Duckworth was talking about. So it is not just the individual own price elasticities of each individual product but it is also taking into account across price elasticities of one product vis à vis other products.

So you might say, and I know milk is a particular product in a supermarket. If we are out of line on milk then people will not come at all and so maybe it would be more competitive on milk in terms of charging a lower mark-up and getting a lower allocation of those costs. That is because we think that will have some knock-on effects to other products. That is in this concept of super-elasticity, so in that super-elasticity you would not want to apply very much common cost to that product.

But essentially it is like an extended version of Ramsey pricing. It seems to me that is basically how -- competitive firms have to deal with this problem all the time and this is, if you like, an explanation of how they end up with the prices that they do. When we talk about the competitive price for something that always --

there will always be at some -- think of a retail example. There will always be some element to which there is a common cost which is needing to be recovered. But that does not mean we think, well we have absolutely no idea how these firms recover the cost to their store.

If you are a coffee shop and you are selling coffee and cake, you do not see coffee shops saying, right, I am going to recover it all on cake. Another shop saying, I am going to recover it all on coffee. Give or take there is a competitive price for coffee, some sort of quality differentials between a high street coffee shop and a kind of single estate kind of really premium coffee shop and so on. But by and large you know what the competitive price for coffee is. If you went into a shop and it was £10 for coffee and it was £1 for cake you would think their coffee prices are a bit off, and if you went into a shop and you saw their coffee was £1 and their cake was £10 you would think their cake prices are a bit off. So you would go to the first one for coffee and the second one for cake, or the other way round, I have forgotten my example, and as a result competition would then kind of end you back up at where they have got up which is there is a competitive price for coffee and a competitive price for cake.

This is the sort of conceptual reason for why in competition you do end up with prices that are competitive on the basis of this sensible application of the demand side.

MR RIDYARD: In terms of looking at the limb 1 question and just figuring out what is the price which is above the competitive level, it gives you a nice template that gets away from the sort of the impossibility of allocating common costs to a nice template of how to do it.

MR PARKER: Exactly. I think if we look back at the sort of regulatory world people have been worried about how to allocate very, very large common costs in a world where you do not have workable competition and so you are having to make some judgments or allow the regulated firm within this band of flexibility. But here in principle, and in many competitive markets, you do have workable competition so the market is doing it for you. Then, we will come back to this, but in a world where common costs are I think much, much lower than Dr Jenkins has identified, this all becomes a moot discussion.

MR RIDYARD: If they are that low then none of this matters. Dr Jenkins, does that all seem sensible to you?

DR JENKINS: No. So maybe just starting from the bit that in a sense could be sensible which is to say in a sense that is what arguably BT is doing, it is determining how to recover its common costs. It is not recovering all its common costs from Standalone Fixed Voice or the Voice service as it supplies it in with bundles as well. It is --

MR RIDYARD: It is certainly earning bigger gross margins on SFV customers than it is on bundle customers.

DR JENKINS: It is. It certainly is not having the same margin but it is -- I think the statement that Mr Parker has made is that you would allocate according to super-elasticities. There is another step which is to say that the super-elasticities would be the same. It is not at all clear that has been established here. But it is almost -- it is not clear to me that the actual LRIC+ benchmark that has been put forward has anything to do with this type of structure that is being described here in any case. So you can park that. I am sure we are going to come back to it.

It is also not clear to me that if you actually read the Bliss paper it says that for the situation we find ourselves in here you would find a sort of Ramsey solution in this case. Even if it were the case it is with the proviso around super-elasticities which is a concept that it would be useful to have a clear definition of, but it is not clear that the super-elasticity of SFV and super-elasticity of bundles would be the same. That might exactly give you the rationale for having a higher margin on your SFV product precisely because of the inter-relationship and the strong cross-price elasticity between the two. That is what makes it rational even on a Bliss model to do that. Not that I think the Bliss model is a sufficient basis for this.

So I think there are a lot of requirements before you would conclude, ah, well, obviously the answer is the same margin across these two.

I think something interesting to look at is that in the most recent period, so the last couple of years, there have been standalone broadband products. I think this came up early. It was one of your early questions last week, and if you actually look at the pricing of Standalone Fixed Voice now and standalone broadband products now they are very similar at between £26-£28 and of both of them offer the alternative product for £5 extra. So if you take a standalone broadband you can add Voice for £5 if you take Standalone Fixed Voice you can take broadband for £5.

So it has moved with the technology shift so that, as I said, more and more people are not that interested in fixed Voice service. It does not have the same buy-through condition that it used to have and you actually see that the standalone products have the first recovery and then the incremental subsequent products have much lower incremental prices.

That structure is not exploitative. It could be an absolutely rational way to recover the common costs of the business over a customer base.

MR RIDYARD: Mr Parker, can you comment?

MR DUCKWORTH: Can I just talk about the standalone broadband and standalone Voice?

MR RIDYARD: Yes sure.

MR DUCKWORTH: I think we need to be careful that it is not necessarily about recovery of common costs but may reflect the direct costs so there is a direct cost effectively for having the line into the house which if you provide standalone Voice you need the line into the house, if you provide standalone broadband you need the line into the house, so there is a recovery of that cost from the standalone services. Then the incremental adding Voice to a broadband line or adding broadband to a Voice line has much lower direct costs because you have already paid for the line into the house.

MR RIDYARD: But I thought when you were giving the evidence in the hot tub before I thought you were saying that -- I thought we had established that for BT it has to pay two prices to Openreach.

MR DUCKWORTH: Yes.

MR RIDYARD: For the other competitors?

MR DUCKWORTH: Previously there, it was a buy-through obligation that you needed to purchase the Voice line first and then add the broadband incremental on to it and if you just wanted a standalone broadband you still needed to purchase a Voice line but my understanding is that kind of buy-through requirement has gone.

So the cost structure between standalone broadband and lone Voice and Dual Play I think reflects in part the direct costs structure. It is not necessarily simply a question of where you recover the fixed and common cost from.

MR RIDYARD: Does that also imply there is a big common cost between Voice and broadband?

MR DUCKWORTH: At an Openreach level and the direct costs reflect that at Openreach level, yes, which is the cost of the physical infrastructure into the house. That is a common cost to providing either broadband or Voice or a combination of the two over the service. But from the perspective of BT Consumer, in the past BT Consumer had to pay separate -- had to pay a Voice charge of the wholesale Line Rental on every single customer of a fixed line service and then pay an additional broadband. My understanding is now BT Consumer can pay a single standalone broadband charge and then add Voice on top of that, so there has been a change in the kind of cost structure faced by BT Consumer and we need to be careful we do not confuse that with common costs recovery.

MR RIDYARD: We have a few more questions on this but we will deal with those after the lunch break. Thank you.

THE CHAIRMAN: 2 o'clock then.

(1.01 pm)

(Luncheon Adjournment)

(2.00 pm)

MR RIDYARD: Right, so I would like to pick up where we left off, because I think there are a few questions still about the Bliss article and its relevance to the apportionment of common costs.

Just to come back specifically on the last point, Mr Duckworth, you were reacting to what Dr Jenkins had said about currently observed pricing, where she said that standalone either broadband or Voice is typically charged at £20 with a £5 increment for the other element.

Can you just tell us, what point were you making about this? Were you saying that was only something that applies the way Openreach works now and would not have applied previously, or were you making a different point?

MR DUCKWORTH: I think it is reflecting kind of both a demand side change, where there is obviously a lot of demand for broadband only, but also a change in the way that Openreach delivers and sells the services. So now it is moving to a kind of Voice Over IP service, which effectively uses a broadband connection to deliver Voice, whereas previously it was effectively, from BT's perspective and BT Consumer's perspective, you used separate equipment to deliver the broadband service and the Voice service.

So my observation was the fact that we have seen a change in the kind of apprising and emergence of standalone broadband from BT Consumer which in part reflects changes to the technology underlying that. So a change in the structure of direct costs which BT Consumer pays to Openreach is not necessarily just a change in the way BT Consumer recovers its own fixed and common costs.

MR RIDYARD: So are you saying that is not very relevant for the claim period?

MR DUCKWORTH: It is only relevant in recent years, but it is not necessarily relevant for SFV services, which I think generally are still delivered over wholesale

Line Rental, but there is a shift going on from delivering Voice services over the copper line using wholesale Line Rental to the majority of Voice lines being delivered over the Voice Over IP technology, which effectively uses a broadband network and then runs a Voice application on top of that network. So there is a change in technology which has happened in the last two years, I think, roughly.

MR RIDYARD: Just in terms of the whole common cost discussion, is that saying going forward there is a bigger common cost between Voice and broadband than there was in the past?

MR DUCKWORTH: At a BT/Openreach level, I think there is increased common cost between Voice and broadband.

MR RIDYARD: But at a retail level?

MR DUCKWORTH: At a retail level I do not think it affects the sort of the level of common cost there is, yes. Common cost is serving customers, for example, having a call centre, and the way the underlying broadband and Voice services are delivered will not impact on the common costs of the --

MR RIDYARD: But the cost --

MR DUCKWORTH: -- services.

MR RIDYARD: But the cost of the line -- sorry, the Openreach charge for a line is whatever, £10 a month or something, so that is £120 a year, that is a reasonably big number in the scheme of things.

MR DUCKWORTH: Yes.

MR RIDYARD: If that is a cost to the retail operator, whether it is BT or TalkTalk or whoever, I mean, if you are saying that that is -- just by buying that line once you can do both Voice and broadband through that line, then that would be quite a big common cost, would it not, between Voice and broadband?

MR DUCKWORTH: So there is a distinction between a common cost to serving that customer and a common cost for -- a fixed and common cost for BT Consumer to provide either Voice services or broadband services. So, yes, I accept there is a large common cost incurred to serve that customer, whether you are serving that customer with a Voice service alone or a broadband service or a combination of the two. That is kind of a fixed and common cost of serving that customer.

But when we are looking at BT's -- BT Consumer's fixed and common costs, we are ignoring those direct costs which effectively given, and looking at, on top of those direct costs, the indirect costs of serving those customers, the degree to which those are fixed and common. So I think there is a distinction between the direct costs and then the indirect costs.

THE CHAIRMAN: I follow that. But in the context of what we have got to look at, and the claim period which ends in October 2022, I think, somewhere thereabouts, do these recent developments that you have talked about, and moving over to a VOIP protocol-based system for Voice calls, is that of any relevance to the period we are looking at in terms of the attribution of incremental costs?

MR DUCKWORTH: I do not think it has a material effect on our analysis.

THE CHAIRMAN: Yes, thank you.

MR MATTHEW: Could I just add one or two comments on that?

MR RIDYARD: Yes, please.

MR MATTHEW: So leaving aside the precise periods, it does however -- the switchover to VOIP does have some parallels with some of the other themes we have been talking about. So what will basically happen is, especially for Voice only customers, they are going to need to be moved onto the new system, and my understanding is that will involve changeover of the equipment, you will have to have a wi-fi router, plug your phone into that, which if you do not have a broadband connection means somebody has to put it there, and it is sort of one of the general cases of wide VAT economics, that whenever you have to do those

kind of things it is quite painful.
THE CHAIRMAN: But the Voice only customers here, their claim ends in 2017.
MR MATTHEW: I agree.
THE CHAIRMAN: So what is the relevance of what happens to Voice only customers now?
MR MATTHEW: The comment I was going to make is, well, you are absolutely right, we are now into: Ofcom will deal with that through their ex ante regulation and voluntary agreements with BT. It is, however, a change that affects Voice only customers, and one of the themes that has been put is that Voice only customers and SFVs in general have no innovation, nothing ever happens in these markets, and my point is while it has come late, actually when you have a situation where you get some legacy customers, you often do get end of life complications coming in, and that does tend to mean that you have to take those into account and say, well, is this really a totally calm product market where everything will continue as it always has done? Actually we are reaching the point where that is not true.
THE CHAIRMAN: Yes, thank you.
MR RIDYARD: Dr Jenkins.
DR JENKINS: I was just going to add I do think it is

interesting to see this, and I think it is from some time in 2020 that BT started offering the naked broadband product. It is also relevant because we still have split purchase customers in the claim who are paying the SFV prices, and it is not that -- there is a lot of investigation that has gone into those two products, but what is interesting is now there is a meaningful standalone broadband product, which I agree with Mr Duckworth that there was not at an earlier period. You had to basically have the Line Rental and then you got broadband as an addition to that. Now that there is a realistic option, you see the pricing structure being sort of the same sort of price for the Voice line and the broadband line, if you take them standalone, so that sort of relationship that you need to have with your customer to provide one service. Then whichever product you add on, the Voice or the broadband, you then pay the same incremental price for it, so the bundle is the same whichever way you come to it.

So that is saying something about the way BT is thinking not just about the underlying potential benefits of the changes in technology, but also in terms of the cost to serve a customer in terms of how much -- the additional amount they are charging.

MR RIDYARD: Yes, but that is what is behind my questions on it. What is it saying about the costs?

DR JENKINS: So that they are similar across those, across those two.

MR RIDYARD: Can you be more precise about that?

DR JENKINS: I am not sure that I can at this point in time without having done a bit more looking into what the actual wholesale prices are.

THE CHAIRMAN: Just to finish that point off, because it was a point Mr Parker made, yes, there are costs which are common to Voice and broadband, with a small C, in the sense that for essentially the period we are looking at, each of them had to have Line Rental. We know that. That is a direct cost. So we have done -- and direct costs are agreed. So what we are really interested in, and what we are going to be moving on to, is the incremental costs, and that is why I could not quite see where this was going, this particular point about the new technology.

DR JENKINS: I think it is saying that if there are -- I mean, the premise is that the costs that are being recovered from SFV customers are excessive, right. Then you say, okay, we look at another set of customers who, while they are buying a different product, you have got a similar structure, which is the product that they buy is a single product and the pricing is similar to those two customers. So I mean, I guess maybe it is another benchmark and one needs to look into it a bit more, but it is sort of saying there is -- to the extent that the technology can provide similar services, and the pricing is the same, and the increment when you end up at a bundle is the same, then saying, ah, but it is clearly excessive when you are just buying Voice, but it is not clearly excessive when you are just buying broadband.

THE CHAIRMAN: I see. Thank you very much.

MR RIDYARD: Yes, Mr Parker, yes, please.

MR PARKER: I am not sure you can draw much from the fact that, if that is correct, that Voice and broadband have recently -- standalone broadband have recently had the same prices, given that they may have different costs and different margins attached. I just do not think you can draw very much from that, and linked to the fact that bundle prices are offered at a discount, I think that has been well trialed in our previous discussions about the competition in bundles and the ability to price discriminate against people on standalone services. I am not sure how far this takes us.

MR RIDYARD: Just I think possibly the last or second to last point I had on Bliss, Mr Matthew, and I know in your evidence you make a point about the sort of fixed fee variable elements of pricing in relation to the Bliss argument. Do you recall that point? Is it in some way relevant to how we interpret, Mr Parker's view anyway, of how common costs should be recovered?

MR MATTHEW: I cannot remember what my precise point was, but in general terms I think my main observation on Bliss was it is a theoretical paper that seeks to evaluate outcomes in oligopoly, with, in some versions, as Mr Parker says, free entry, but examines, thinking of a shop, how does a shop decide how to distribute the gross margins that it sets when it is having to compete with other shops to get people in through the door?

My general point is I have no issues with the article itself. It is one of a stream of articles that goes into those sorts of questions. But my experience is that transitioning from an article, a stylised article like that, to being able to say, well, now, through theoretical reasoning, we can predict what the outcome in an actual market would be, even if we could fill in all the parameters, is an ambitious exercise, and I think it is probably in that context I was talking about fixed charges versus variable charges being one of the many complexities.

So precisely how different firms decide to make those judgments, I mean, it could even vary. There is a longstanding theme that says choosing different pricing structures is itself part of competition. It is not something that everybody necessarily does the same. You say: 'I am going to choose my price structure to fit in a way that actually matches some part of the market', whereas somebody else might choose differently.

The sort of example you get of that is mobile phones in the past are quite good. So you had periods where, for example, I think it was Three would offer lots of very cheap data packages, whereas others were charging for that in a very different way, and what they were doing was competing on the pricing structure.

So that sort of thing is real and the Bliss article really does not sort of get into that kind of thing. I think the realistic thing is if you want to pick up something like that and say: there exists the outcome of workable competition, or competition even very -- full competition, it might be that that exists, and of course in practice, in real life, it does. We see it. The difficulty comes with trying to use theoretical reasoning of that type to get there.

My main point, coming back to a lot of the comments about common costs allocation, remains that common costs allocations are either something you do just at the end in a commercial environment, as opposed to a regulatory one. What you do not do, if you are a supermarket, is sit down and say: how am I going to work out my common cost allocation and how will that inform my prices? It is the other way round, and the Bliss article is just a version of that. It is saying: you cannot use this theoretical reasoning to reach a view as to how prices would be formed, and if I can work that out, I can get you back to what common costs allocation would have got you there. But you still have to go through that first step, and that is the hard and complicated part.

MR RIDYARD: Thank you.

I think the last question I had on Bliss was just, and it may be that none of you is in a position to answer this, but I mean, it is quite a while since that article was published and common costs questions obviously crop up a lot in regulatory cases and other cases. Is it something which has been picked up by other decision makers and regulators? So have they already answered these problems that we are talking about now?

Mr Parker, would you like to go first?

MR PARKER: Not that I am aware of, and I think that is because this is a description of how firms set prices in competitive markets, and therefore it is not -- I think it is not meant to be, and I am certainly not using it as a: what we should do is work out what the super-elasticity is to work out what the answer is. What I am using it for is to say it is really important to think about the demand side, and that I think is an issue with sort of purely supply-side approaches like SAC combi, because one of the implications we will come on to of the SAC combi is if BT were to make lower profits on product B, SAC combi would say, well, you can put your price up to recover that from product A. But let us suppose you are becoming less efficient on product B, or you are offering a lower quality service, or, if you are the coffee shop, your cake supplier has not turned up. That does not mean you can put your price up on coffee because your cake supplier has not turned up, but SAC combi would say, well, you can do that, because it is all about the cake side.

Similarly, let us suppose you get an answer which is you could put your prices up, SAC combi says you can put your prices up a lot. But what happens if customers are very price-elastic, or, as I think Dr Jenkins has expressed a view in her market definition exercise, now, I do not believe it, there was clearly some level of elasticity, but the SAC combi just says, well, it does not matter how far you put the price up, we will not take into account any of that demand response.

So I think, for me, the purpose of the Bliss paper is to say what happens in competitive markets. I think it is quite a general paper, but I do not think it has been picked up by regulators because they tend to be looking at a world where there is not that sort of competitive benchmark out there, and so understandably they are looking for different ways of trying to tackle the problem when they do not have that sort of demand side guidance or competitive market guidance.

MR RIDYARD: Anything else to say on that?

Dr Jenkins.

DR JENKINS: Yes, I am also not aware of any situation where it has been applied. But I also do note that in the article itself at page 382, Professor Bliss writes that he recognises that the result is "hard to interpret intuitively and difficult to apply empirically", which may influence why it has not been adopted by others. We did not go into a lot of detail on the super-elasticities point, but as I said before, I think the premise of Mr Parker that the super-elasticities would be the same has not been discussed or shown and given the super-elasticities' weight across price elasticity by the relative quantities, and here you have bundles being much bigger than SFV and the cost price elasticity negative, then the -- this is quite technical, but I will keep going -- then the impact of the super-elasticity is likely -- for SFV is likely to be much lower than its elasticity, because it is a negative and you get a big weight from bundles. The reverse is not the case, because for bundles the proportion that SFV represents, the bundles for the inverse of it, is much less.

So even on its face I do not think you get -- even if you could implement it, even if you believed it and could take account of Bliss's arguments, I do not think we even have the conditions to say you can draw from it what Mr Parker draws from it.

MR RIDYARD: Okay.

MR PARKER: Just to be clear, I do not say that the super-elasticities are all the same.

MR RIDYARD: All the same for what? For the different products?

MR PARKER: All the different services offered by BT.

MR RIDYARD: All right. Let us move on from that. The next topic is looking at the 2009 BT cost exercise on which, Mr Duckworth, your approach relies. So obviously it makes sense for us to drill down and really understand what we know about this 2009 exercise and to what extent ...

There are two issues here. One is: at the time, was it a good answer to the question that we are interested in; in other words, how to identify costs causality and BT's costs? The second question is: to what extent can we assume that the 2009 exercise still holds true for the claim period?

Let us deal with the first question first. What do we know about what happened in 2009, what BT did, and what assurance does it give us that it was answering the questions which are of interest to us in this case?

MR DUCKWORTH: Just to put the regulated financial statements in context, they are a remedy under -- after finding that BT has SMP in a given market. In this case, BT up to 2009 was found to have a - (inaudible) - significant market power in the market for retail Voice services, both access and calls, and at that point Ofcom was required to put in place a regulatory cost accounting obligation. That regulatory cost accounting obligation required BT to produce effectively separated accounts, so accounts down to EBITDA level, for Voice services, and that required it to identify the revenues, and then identify an attribution of costs to calls, or certain types of calls, and to access, effectively, of the line.

The costs were then some direct costs which -- in the same way that BT Consumer recognises those direct costs as effectively a re-charge from BT Openreach in the regulatory financial statements. It is the same approach, it is a kind of re-charge from Openreach. Then an allocation of indirect costs, both SG&A and depreciation/amortization, to those retail services.

That allocation was based on a very complex system which starts off with very granular cost information across the whole of BT Group, which is then allocated through a multi-stage process which tries to reflect causality in allocating very granular cost information using operational information to allocate those costs eventually to individual services, so --

MR RIDYARD: When you say "individual services", do you mean Voice and broadband, or do you mean something more drilled down?

MR DUCKWORTH: The way it is structured is, because the obligations only apply to regulated services, it effectively allocates costs to those regulated services, and then there is a big residual which covers all of BT Group's nonregulated products. But it is, in essence, a fully allocated cost methodology which tries to allocate all costs to individual services or individual bits of output of BT. But as I say, where those outputs are not regulated it sort of just groups them all together in a residual element.

THE CHAIRMAN: Sorry, just to be clear, so far as the allocated bit is concerned, is this BT Voice or SFV?

MR DUCKWORTH: It is BT Voice.

THE CHAIRMAN: It includes the Voice element in the broadband service as well?

MR DUCKWORTH: So up until 2009, BT was found to have SMP for retail Voice, and one of the conditions applied, one of the SMP conditions, prevented it discounting the Voice price, for example, if it was bundled with a broadband service. So effectively in 2009 all BT Retail Voice services were Standalone Fixed Voice services but they were unbundled for the broadband side. BT was not able to bundle together fixed Voice and broadband and offer a discount for that bundle.

THE CHAIRMAN: Sorry, does that mean that in effect what BT was being required to do by Ofcom was provide this revenue costs allocation in relation to SFV?

MR DUCKWORTH: Yes, effectively.

THE CHAIRMAN: Only? In other words, what we would now call the Voice only customers and the SPCs?

MR DUCKWORTH: Yes.

THE CHAIRMAN: Right, thank you.

MR RIDYARD: Okay, at that point all Voice companies were SFVs for the reasons you just described, but in the claim period that is not the case. So does that mean that what was incremental to so-called SFVs in 2009, which is Voice, is that necessarily the same as what is incremental to SFVs during the claim period, given that SFVs in the claim period is not all -- is only a relatively small proportion of Voice customers.

MR DUCKWORTH: If you think about where the sort of incremental costs are derived, for example, customer service, customer service costs for retail Voice customers in 2009, the incremental customer service costs are going to be similar to serving ... similar.

MR RIDYARD: If it is a per customer charge then I ... A per customer cost, sorry.

MR DUCKWORTH: A per customer cost, exactly. So you are carrying out the same activities to serve the retail Voice customer in 2009 as you would need to serve the retail or the SFV customer in the claim period. So broadly the activities are the same, and hence the incremental costs are similar.

MR RIDYARD: That would be true if the cost was linear with the number of customers, would it?

MR DUCKWORTH: Yes. So we can come -- there is obviously a question about the economies of scale later on. So I say similar, not necessarily the same.

MR RIDYARD: No, no, okay.

MR DUCKWORTH: I will carry on.

In terms of the allocation rules, there is a very thick description called the Detailed Attribution Methodology, which BT is required to publish, which explains the allocation rules used to get from, as I say, quite detailed cost categories to services, and it is a multi-stage process, so I am not going to go into the details of individual attribution methodologies.

The main point is BT is bound by a set of regulatory accounting principles which require it, as far as possible, to ensure costs are allocated to services on a causal basis, and where costs of the company are attributed on a causal basis, i.e. are kind of fixed and common, that those are on a "fairly presents" basis. I consider that means that this fully allocated cost methodology is effectively a good proxy for LRIC+.

Certainly Ofcom, in other contexts where it is looking at regulating Openreach prices, does consider the outputs of the regulatory financial statements to be a good proxy for LRIC+, and then sets prices generally on the basis of costs as recorded in the regulatory financial statements.

MR RIDYARD: In that process, would we know -- let us say BT was told to do this job, and it has done it as well as it can do, but it might have come up with some aspects that were quite relatively simple. You know, it knows that -- it might know that the cost of call centres increases with the number of customers of any given service or something, but then there might be other costs where it is genuinely difficult, a puzzle, to know how to get to the right answer. They would still have to produce an answer for Ofcom because it was required to, but is it clear from this handbook which are the areas in which BT knew the answer and just put it down, and areas where BT said, well, we do not really know the answer but this is our best guess. Is that distinction made in the handbook?

MR DUCKWORTH: I do not think that distinction is explicitly made. So for each cost there will be a cost driver and some of those cost drivers will be based on operational data. So, for example, when allocating the costs of human resources you might use the number of staff in different divisions of BT to allocate that cost, and that is clearly a causally related cost driver to allocate human resources costs to various divisions, and then from the divisions you kind of have another stage to allocating the products.

In other areas you may use, or BT may well have used, cost allocation methodologies which do not appear to have a clear causal relationship. For example, to use revenues to allocate costs or to use -- we talked about equi-proportionate mark-ups. You know, clearly this was an expensive exercise for BT to carry out because there is a level of materiality where you want to find causal cost drivers for the big ticket items, but there will always be some costs where the effort in trying to determine cost causality for that particular cost is so large that it makes sense to use kind of a proxy cost driver which allocates the cost in a way which seems fair, or fairly presents the kind of cost allocation.

MR RIDYARD: Okay. Let me stop you there.

Anything so far in that answer, Dr Jenkins, which you would disagree with or want to raise?

DR JENKINS: I would just say that the approach of the RFS was starting from the indirect costs, and not necessarily always very clearly delineating between incremental and common costs, I do not believe. I do not believe that was a really clear view.

So while there was some aspect about cost causality, as Mr Duckworth has clearly said, at times that was difficult to do, even in the event there might be theoretically some attributable cost causal reason.

I also think that even for the incremental areas there would be a judgment to be made about, yes, whether you do it on the basis of customer numbers or you do it on the basis of headcount or these elements. So it definitely was done in a "fairly presents" way. It was audited and all the rest of it. But it does not mean that was the only way someone might have done that exercise.

MR RIDYARD: Specifically on common costs, I mean, is this correct, that those were not separately identified or thought about, or it was all just part of the exercise?

MR DUCKWORTH: This is a fully allocated cost methodology, so common costs are not sort of separately identified. However, as I said initially, it does go down to quite granular cost items, and I think that helps in identifying costs which are specific to given services. If you go down to thousands of different cost items then you have got a much more refined way of saying, well, this cost, I can see is related to this, so it is of this group of services, and allocate it on that basis.

But I mean, I agree with Dr Jenkins. This is an exercise which is complex, requires some degree of judgment. BT cannot spend infinite resources spending all its time working out cost causality, but it is the most robust cost attribution that I think is available to the Tribunal.

THE CHAIRMAN: Could I just ask one supplemental, two supplementals there, please.

You will have given the reference in your report, but this underlying published calculation done by BT, we can look at that document?

MR DUCKWORTH: Yes, so one of the -- as Dr Jenkins says, the regulatory financial statements are audited, but they are also relatively transparent, subject to the confidentiality of BT. But the general public, if they are so interested, but certainly competitors, can go in and analyse the detailed attribution methodology and make representations to Ofcom, saying --

THE CHAIRMAN: All I wanted to know is: you have made a reference to it in your report --

MR DUCKWORTH: Yes.

THE CHAIRMAN: -- and it must be within the documents we have here already? That is all I wanted to know.

The second question I had was: we know that BT were required to do this by Ofcom, but the principles that they were required to apply, were they general accounting principles as opposed to some principles which were imposed by Ofcom?

MR DUCKWORTH: They were regulatory accounting principles rather than general accounting principles, so they were imposed as part of the regulatory obligations. The regulatory financial statements are far more detailed than your typical statutory financial statements. They go down to kind of individual products where those are regulated, so it is, you know ...

Some of the inputs are based on the statutory financial statements, but the process and the outputs are far in advance of what is required by statute for a non-regulated company.

THE CHAIRMAN: Thank you very much.

MR RIDYARD: Dr Jenkins, maybe I could ask you, just going back to this common cost question again: to the extent that you have looked at this 2009 exercise, is it possible to go into that and sort of get some clues about what BT thought its common costs were, as opposed to the incremental costs, through that exercise?

DR JENKINS: I do not believe so. I have had a look and I do not think you can unpick to determine which are the common -- or fixed and common and which are truly incremental.

MR RIDYARD: Okay, I suppose I was wondering whether, in that exercise, BT might have gone to Ofcom saying: we can do these costs because they are incremental, but these ones are just in the "too difficult" box, and that would somehow give you a clue -- a kind of cross-check of your estimates of the common costs?

DR JENKINS: No, I think there are a number of categories where it sort of says, you know, not quite sure about this category, will allocate it on the basis of other cost allocations, it is like an EPMU piece, and I think that is a mix, that sort of overall basket is a mix of things that are unclear, maybe fixed and common, but they are just in the indirect box. They have not been sorted first of all to say, okay, here are the ones that are incremental, here are the ones that are common, and now let us think of an approach separately for those.

MR RIDYARD: Okay.

If we step back and look at the way in which the exercise turned out, am I right in thinking that it turned out to be something very similar, as if they had done it by EPMU, all the indirect costs on an EPMU basis?

Mr Duckworth.

MR DUCKWORTH: So just to unpick that. Dr Jenkins has produced sort of alternative fully allocated cost estimates based on an equi-proportionate mark-up on direct costs, and if you do that during the claim period and compare that to my approach, which takes the 2009 costs and projects them forward with CPI, those two results are relatively similar.

I do not think that means that if you had applied an EPMU approach in 2009 you would have necessarily got the same result.

MR RIDYARD: I see. You think it is a coincidence anyway, in any case?

MR DUCKWORTH: Yes, I think it is coincidental.

MR RIDYARD: Do you disagree with that, Dr Jenkins? Do you have any ... or maybe you just do not know.

DR JENKINS: I do not disagree that it is coincidental on Mr Duckworth's statement. I think it is still potentially meaningful, because one of the challenges that we have is that because it is based on 2009 it does not use the actual indirect costs of BT going forward, so it is not unhelpful to see, well, what does that benchmark look like when you think about using the actual indirect costs, what sort of high level fully allocated cost approach is it akin to? I think the actual similarity of the levels is a meaning -- you can conclude something meaningful about -- maybe there were lots -- you could have done a very intricate alternate way, but if in the end it ends up looking like EPMU, then that is still a meaningful factor to take into account.

MR RIDYARD: Why? I am not sure I understand why.

DR JENKINS: What has not been done since 2009 is doing an actual granular approach. So what Mr Duckworth's approach does is say, okay, assume that was fixed in stone, and then assume that each cost category that existed in 2009 increased by CPI, and then you did the same allocation and that gives you your number, lots of things change, so the underlying costs categories probably shift, they mix shifts, so the fact that each of them is being extrapolated by CPI probably does not hold, so that is the sense in which there is a lot moving as you follow through Mr Duckworth's approach.

So if ultimately, then, when you look at actual and direct costs and the actual allocation, and it is similar to the EPMU one, I mean, maybe you are right, maybe it is just pure coincidence and you cannot infer anything from that, but it is saying it would be equivalent to someone having used EPMU on the actual costs as they evolved since 2009. Maybe you cannot say anything more than that.

MR RIDYARD: Okay.

Now, what about the use of the 2009 RFS specifically as opposed to prior years, I think it was, when they also did the RFS. Why have you chosen 2009, and obviously there is a discussion about how it would have looked differently if they had taken other years.

MR DUCKWORTH: So Mr Cackett in his testimony said BT Consumer is constantly looking for efficiency gains, and we see in the period before 2008/09 and also the period after 2008/09 that BT implemented a cost transformation programme which reduced costs over time, sort of all else being equal. I will talk about the caveat later.

Presumably that was BT sort of moving with effectively the efficiency frontier. Generally we expect companies to become more efficient over time, productivity goes through a sort of innovation on how you deliver services. If unit costs are expected to be falling over time, then the best thing to do is take the most recent estimate of those unit costs as the starting point, because that encapsulates all of the efficiency gains that have happened up to that point.

So if I used earlier estimates, then there would be a degree of inefficiency, at least compared to 2008/09, even if it was not inefficient in a static sense in, say, 2007/8. So I used the latest year because that encapsulates all the efficiency gains up to that point.

MR RIDYARD: So if in previous years the costs had been considerably higher, you would just say that just shows that costs are coming down, and, if anything, you might even want to project that to the gap between 2009 and the claim period?

MR DUCKWORTH: Yes, exactly. So I have taken a conservative approach, which is I assumed there are no material efficiency gains from 2009 onwards. Again, Mr Cackett's testimony, and looking at the kind of medium term plan of BT Consumer from I think it was 2020 onwards, was assuming a roughly 5% reduction in total indirect costs per annum. In my first report I was showing that the customer transformation programmes in 2008/09, 2009/10, 2010/11, I think it was, were also showing similar reductions in costs of about 5% per year. So if we take earlier periods, we effectively take a sort of inefficient level of costs compared to the current day where efficiency gains have increased over time.

MR RIDYARD: Okay.

Dr Jenkins.

DR JENKINS: I think if we go to {E/18/131}, I think that this just plots the level of indirect costs attributed to residential fixed Voice services within the RFS from 2004/5 to 2008/09, and also plots it against the number of fixed Voice lines. So it is not -- there is not clearly a linear relationship. There is plenty going on and changing in those years in terms of obviously the costs that are being incurred as well as the fact that BT is facing a lot of competition over that period with respect to fixed Voice lines, it is losing lots of those lines, and we know a lot of those customers are moving to take bundles with the rival providers.

I just think it is quite hard to attribute -- to just pick on the 2008/09 number and say, well, that is the right number and there -- there is nothing there that suggests it would be a linear, a particularly linear relationship, I think, for the costs.

MR RIDYARD: Yes.

DR JENKINS: I mean, you can see that in a sense between 2004/5 they are now spending the same amount of money as they were when they had a lot more customers. Now, you could say, oh, they are just inefficient and they are doing all these things; it could be driven by the competition they are facing, the fact that actually there are -- a lot of these costs are relatively fixed, so even when they lose a big chunk of those customers they are still having to invest in new and better customer service systems or upgrade those systems, all of those elements, their marketing, you know, the brand marketing may increase over that time because of the competition they are facing. So there are many things that can be going on.

Now, obviously we do not have any further data so then that obviously makes life difficult, but what we know is that for BT Consumer it is not the case that the total of indirect costs is particularly falling over that period either, and while it can -- while at times it can be thrown at BT that they were inefficient, in fact I think Ofcom, when they looked at it, I think it is actually agreed between myself and Mr Parker and Mr Duckworth that there is not any evidence that BT was inefficient in its retailing activity during this period.

MR RIDYARD: Okay. So, yes, there is certainly -- this chart does not show a steady decline in indirect costs, certainly not -- if you did it on a per line basis, it would be even different again, yes.

So your take on this chart is that the 2008/09 number arguably looks like a bit of an outlier, or, certainly, it is not representative of the previous years.

DR JENKINS: Yes. I am not sure exactly what you would take from that, but I do not think you can say it is obvious that what you should take is 2008/09. You could take an average, or you could take one of the earlier years.

MR RIDYARD: What about Mr Duckworth's point about BT projecting 5% improvements in efficiency in the years from 2008/09 onwards?

DR JENKINS: I think I would need to refresh my memory on exactly what those documents said about -- because that can be in a sense per unit improvements, but the actual amount that is being spent is more. Not just necessarily because there are more customers, but also because the actual quality and the level of service is increasing. So during the next period, one of the things that BT did was, I think they called it rightshoring, which was bring a lot of their customer care back into UK-based call centres, which was seen as a way of managing better their customer service outcomes.

Now, I would have to have a look to understand was that at plus 5% on that, or within the context of making a shift you then want 5%. As I say, I think my findings are that overall during this period, like the period between 2012/13 and 2015/16, the BT Consumer SG&A did increase over this period. I think that is {E/18/133}. So the bottom line of the first paragraph, first fragmentary paragraph. 5.76 is the paragraph number.

So I think the cost transformation plans were referring to the whole of BT Retail, which includes more than just the consumer business, and that for the consumer business itself, the actual data provided by BT shows that the indirect costs, the SG&A element of that in particular, were increasing over this period.

As I said, I do not think that is put down to inefficiency on BT's part, but the fact that they -- these are the costs they needed to incur to compete for the business of customers.

MR RIDYARD: Okay. The number of Voice customers certainly fell, did it not, in this period? Because on your chart we were looking at earlier, we were looking at 14.5 million Voice lines.

DR JENKINS: Yes, I think we know that BT's overall Voice lines declined throughout the period. Voice, however sold throughout the period, is declining, and what BT is doing through that time is seeking to invest, to retain those customer relationships. Once they are allowed to bundle, that is a very important factor in their competitive offering to their Voice customers, it is encouraging them to take multiple services with them, which they are successful at encouraging that, but yet they still are losing customers throughout this period both from -- that is both on -- Standalone Fixed Voice customers are leaving them, and also -- sorry, their Standalone Fixed Voice customers leave them and go to other Standalone Fixed Voice suppliers, and also to bundles supplied by other rivals. Then many of those Voice line customers stay with them, remain in their Voice business, but are also taking multiple services from them.

So you just have to keep in mind, whenever you look at a number: is that Voice, however sold, or are we looking at SFV only?

MR RIDYARD: Yes. But it is still quite striking, shall we say, that the SG&A total costs were going gradually, steadily up when the number of customers was going down.

DR JENKINS: Yes, they --

MR RIDYARD: Or are those are the facts --

DR JENKINS: I think that is the facts in a market. I am sure BT would have been very happy if it did not have to look after its customers and market and design products for its customers, and implement and improve their service offerings. However, it is operating in a competitive market and its costs are increasing over this period.

MR RIDYARD: Okay.

DR JENKINS: These are nominal.

MR RIDYARD: Yes, okay. Let us move on to the question of --

MR DUCKWORTH: Sorry. Yes, I mean, SG&A costs did increase considerably, 600 million to 782 million. At the same time BT went from a business offering broadband and Voice to a business offering broadband and vVoice and television services. It is not surprising if you introduce a new product line, I think Mr Matthew talks about a funfair in the car park of a supermarket. You know, value incurs extra costs. Launching a TV business requires significant extra costs. The fact that BT Consumer's SG&A goes up in a period where it is adding a new service line is not at all surprising. It does not tell you anything about --

MR RIDYARD: It goes to cost causality and --

MR DUCKWORTH: Yes, the cost of serving the existing legacy base, just because you build a funfair in your car park, does not mean the costs of the supermarket goes up.

DR JENKINS: I do not disagree with that. Indeed, that is why a lot of those SG&A costs are denoted as common in the approach I take.

But I think the question we are looking at here is whether you can extrapolate from 2008/09 on the basis of a CPI and will that accurately capture what is likely to be the relevant costs.

MR RIDYARD: That was my next question, actually. Dr Jenkins put it so well.

Mr Duckworth.

MR DUCKWORTH: Can I just go back to the kind of the chart of the RFS and the earlier years. Clearly one of the big changes in the market in 2005 was BT gave a set of commitments creating Openreach, and we have had a lot of discussion about the competition from local loop unbundling providers, and that was effectively all driven by the Openreach separation.

It is not surprising in a world where BT faces increasing competition and structural changes that during that period the costs of serving Voice customers may have increased. As Dr Jenkins says, facing competition you need to invest in providing a better quality of service than perhaps when you do not face that competition. So some upward increases in costs during the period where true competition based on local loop unbundling is being introduced is not surprising, but from 2006/7 onwards you see quite a significant reduction in costs in the period.

Then moving to your question. Is taking 2009 and projecting it forwards by CPI an appropriate approach? If I had access to detailed costing information from BT and sufficient operational information on the drivers of those costs, then I would much prefer to use actual costs as incurred and allocate them on a sensible basis.

Looking at the cost categories that Dr Jenkins put in her Table 1 this morning, in my opinion it is just not possible to do that actual cost allocation in a way which suitably reflects cost causality. So I have to fall back on very much, for me, a second best, which is to take a set of costs and an attribution methodology which I believe is robust, not perfect but robust, based on BT's own attribution of costs with a fairly detailed methodology, with oversight from Ofcom, with that being audited, and also oversight from industry, the detailed attribution methodology is published and people can go and check whether that attribution methodology is reasonable.

Then projecting it forwards, I have taken what I believe is a conservative approach. I have said I have seen there are ongoing cost efficiencies in indirect costs, as set out by Mr Cackett in the documentary evidence in terms of the cost transformation programme, but I have said I am not going to take that into account, I am going to just look at unit costs increasing with inflation, and I think that is conservative, because I think over time productivity gains would tend to lead to unit costs reducing in real terms.

MR RIDYARD: Were there any telecom-specific cost indicia that you could have used or you thought about using?

MR DUCKWORTH: One of the problems with using telecom-specific -- so there are the elements of the CPI which are based on telecoms services, but they are effectively based on the price of telecoms services, and I do not think that is a helpful thing to look at, sort of input price inflation.

There are PPIs, producer price indices, for telecoms equipment, but again we are looking at BT Consumer, which does not really deploy the level of equipment itself, so I do not think there is a solid input price index that I could use, rather than CPIs. So I have used CPIs as a measure of general inflation, rather than trying to find a measure of specific inflation which is relevant for the indirect costs that BT incurs.

MR RIDYARD: Dr Jenkins, on that specific point, do you think Mr Duckworth could have done better?

DR JENKINS: I think the economy of scale point is probably -- I mean, it is probably the most important one to think about, which is that to the extent there are fixed and common elements in there, that because the way this is being used is solely to refer to SFV customers and not the whole Voice increment, you need to think about how that group has reduced, whether you would still have some fixed element to that which would have the result of increasing the average retail costs to serve those customers, and I think that type of increase was something that Ofcom also included when it was thinking about a fully allocated cost approach to this.

That is not captured by using a CPI, a simple CPI. As I say, the use of a simple CPI is completely unconnected to the actual indirect costs that were incurred, but that in a sense is -- that is the choice one would make by choosing to use the 2009 --

MR RIDYARD: You say you have not got a better index.

DR JENKINS: I have not got a better index.

MR RIDYARD: Leaving aside the volume question, the scale of economy question.

DR JENKINS: Yes. I would not recommend a different index but the CPI is not likely to capture well what actually happened to indirect costs.

MR RIDYARD: Let us talk about the fall in volumes over this period and why does it matter and how should you try and deal with that.

DR JENKINS: My understanding of Mr Duckworth's approach, so you will correct me if I am wrong, is that effectively you take the 2008/09 per customer, amount to serve per customer, per Voice customer from that number and then you then look at how many SFV customers -- you then increase that by CPI. So you are effectively assuming that it is perfectly scalable, the SFV business from how it was in 2009 when 14 million Standalone Fixed Voice customers were being served to wherever you end up in that process.

Now, that might be a reasonable assumption if you are thinking about Voice overall, however sold, but if you are looking at just SFV customers, then you need to address the fact that to serve those customers there may be some fixed costs in terms of marketing, setting up systems, all of those aspects.

So that would not be easy to derive from the RFS itself but one could use some judgment to make an adjustment for the types of economies of scale that you might see.

MR RIDYARD: Okay, Mr Duckworth, on that.

MR DUCKWORTH: So I think we have to be careful when thinking about economies of scale and fixed costs. So there are different levels of fixed costs. There is a fixed cost at a level of BT Consumer potentially, a fixed and common cost across all services of BT Consumer and over this period whilst the number of Voice lines for BT Consumer as a whole was falling there was an increase in the number of broadband lines, there was the introduction of this new line of business in terms of television and later on a significant number of standalone TV customers. There was eventually the merger with EE which was also brought into BT Consumer.

So looking at BT Consumer fixed and common costs it is not clear whether there was actually a reduction in demand overall because, yes, there was a reduction in Voice lines but there was an increase in broadband lines, in TV customers and eventually bringing on sort of EE's mobile customers and a vast number of EE's mobile customers.

To go down to the next level, are there fixed costs which are related to Voice only? Potentially there is some fixed cost related to Voice only and as the overall number of Voice lines come down to a degree that there is fixed cost which is Voice only, yes, that will kind of result in a kind of diseconomy of scale. Whether that is -- in my opinion that is probably more than offset by the efficiency gains over time.

Then you get down to the, are there any costs which are fixed and specific to SFV services? I have seen kind of no explanation of what those SFV specific costs would be. BT's case has made great store by the fact that there is a common Voice set of prices, a common Voice product delivered to both Standalone Fixed Voice customers and to the kind of bundle customers. On that basis, I find it difficult to see what the fixed costs which relate to SFV customers only would be.

MR RIDYARD: So you are saying -- what you are drawing attention to is a common cost then between the SFVs and the other Voice customers.

MR DUCKWORTH: Yes. I can see that there would be some costs in managing the Voice service which would be common to SFV customers and to other Voice customers in bundles as well.

MR RIDYARD: So if you were drilling down into cost causality you would say there was not much cost caused by SFV customers given that there were other Voice customers?

MR DUCKWORTH: Yes.

MR RIDYARD: Or there is an element of cost, anyway. I put it too extreme there, but there is an element of cost that is incurred by BT when it has a Voice business and there is nothing incremental to this particular group of Voice customers that we happen to be labelling SFV customers.

MR DUCKWORTH: It is probably a question of materiality. I cannot think of anything that would be a material fixed cost just for delivering SFV services which would not be incurred also to deliver Voice services to Dual Play customers.

MR RIDYARD: So that would be a common cost then, would it not?

MR DUCKWORTH: Yes, it would be common to SFV and --

MR RIDYARD: Other Voice. But in all of this we are talking about the costs of supplying SFV customers.

MR DUCKWORTH: Yes.

MR RIDYARD: Then you are highlighting an element of common cost here between SFV and other Voice.

MR DUCKWORTH: Yes, exactly. If that was a material cost, then it would give rise to economies of scale or diseconomies of scale as volumes were reducing.

MR RIDYARD: It is an economy of scope, is it not, in between SFVs and other Voice?

MR DUCKWORTH: Yes, I mean, depending on how you define it, whether you define it as, "I have got to recover that cost across all Voice lines", so it is potentially an economy of scale but if you are saying, "yes, it is surveying two groups of customers, one of which was buying Voice only and one buying Dual Play" then it is an economy of scale.

MR RIDYARD: Yes. Dr Jenkins, is there anything you want to add there or identify?

DR JENKINS: Yes, I think the complexities that we find ourselves in are about the situation, abstracting in some sense from the realities of the situation which is the fact that what BT was doing was providing a range of communication options and Voice services and other services to the same group of customers.

So this idea that well, these are SFV customers, well they are actually Voice customers. They look like Voice customers. The pricing is the same. They are encouraging across the board. What BT is seeking to do is offer appropriate and attractive services to its customer base, so on the Voice service element it is innovating and improving customer service and adding new add-ons in terms of Voice services. It is also adding other products, the TV, the sport, which is their strategy. It is clearly linked to encouraging people to take their broadband and those content services all from BT.

Now, that latter group are also an important part of the Voice customers. So I think this conversation just underlines the fact that there are a lot of costs that are about attracting and being attracted to their customer base. It is quite hard to separate out SFV from the other customers in the different ways you think about this, and particularly the idea of an increment which is SFV versus an increment which is Voice can be quite difficult to delineate, especially because of the way BT organised itself which was to think of all Voice customers as one group.

MR RIDYARD: I can see that argument. What I have not quite figured out is where --

DR JENKINS: I think it will come up in the SAC combi because where I have wide combinations this is part of the lines error. That is one of the places it will come up. It may also be relevant in other places but we will see.

MR RIDYARD: Okay, let us think about that. We should perhaps take a break there. Yes.

THE CHAIRMAN: Thank you.

(3.13 pm)

(A short break)

(3.27 pm)

MR RIDYARD: I just want to come back on changing -- on volume, and what impact volume has on these cost estimates. Because looking at 2008/09 on Dr Jenkins' chart, we were looking at somewhere between 14 million and 15 million Voice lines in that year. Then in the claim period, Voice lines are kind of around the 9 million or 10 million number, from what I remember, and then of course the SFV numbers are -- it is also a moving target, as we know, but it is much smaller than that.

DR JENKINS: Yes, SFV is around 2.8 million/3 million at the beginning of the period. It falls -- obviously by the end of the period SPCs are 0.3 million, but you do have VOCs there, but they are not part of the claim, they are benefiting from the commitments.

MR RIDYARD: Yes, understood. So that gives us a sort of overview of volume numbers. So how does that -- let us take that in stages then. If we were just looking at Voice customers as a whole, the difference between the

14 million and, let us say, the 10 million, how would we expect that to affect costs?

Mr Duckworth?

MR DUCKWORTH: I think here we are kind of focusing on unit costs, because I project forwards based on unit costs. The critical question is the degree to which there are fixed and common costs which are specific to Voice services. I accept there will be some fixed and common costs. I do not think they are significant enough to outweigh the impact of efficiency gains over time.

MR RIDYARD: But what is the basis for that belief?

MR DUCKWORTH: If there were large fixed and common costs for retail Voice services, that would form a barrier to entry. If you had to incur, as Dr Jenkins has, a quarter of a million -- sorry, a quarter of a billion pounds in fixed costs in order to deliver any services, then you would not see lots of relatively small players entering the market for Voice services, and we see the Post Office was a relatively small player entering the market. I think that leads you to conclude that there were not huge fixed and common costs from delivering Voice services.

MR RIDYARD: Yes, but the other entrants have not entered into Voice only, have they, they have entered into the bundles market. The Post Office does seem to have focused --

MR DUCKWORTH: Other providers provided -- Sky provided Voice only services, SSE provided Voice only services.

MR RIDYARD: But on the back of a broader business, though.

MR DUCKWORTH: That is true, but if we are talking about sort of fixed and common costs for SFV services, they were able to deploy -- sorry, fixed costs for SFV services. They were able to deploy SFV services on the back of a Dual Play business, which suggests there are not significant fixed costs for SFV services alone, even in terms of --

MR RIDYARD: Sorry, I have not got on to SFV yet. I am still just on the difference between the 14 million and the 10 million, so this is Voice in general, before we get on to the SFV question, because I think that is a separate question which may or may not have a different answer.

But you said it depends on how important fixed and common costs are. But is it not just a fixed cost question?

MR DUCKWORTH: Fixed cost, yes. Fixed and common if we are looking at SFV and Dual Play as a separate increment, but fixed if --

MR RIDYARD: Yes.

MR DUCKWORTH: -- across the two.

MR RIDYARD: Dr Jenkins, can you help us out on this puzzle?

DR JENKINS: You mean can I tell you what the adjustment should be?

MR RIDYARD: Well, if you can do that, that is great, but if you can talk around it in a way which helps us, that would also work.

DR JENKINS: I can do that.

I think we are in quite a hypothetical situation here, because the premise we are taking is that the costs as at 2008/09 are for time in memorial the right set of costs to serve Voice customers. Then we ask the question: okay, now this is the right set of costs for 14 million customers, how would it change if it became 10 million?

Now, I do think there are some fixed elements of the cost base that would have been identified, such that they are unlikely to be fully scalable in terms of the billing systems, the customer service approach that you take, the central office costs, all of those things, so there will be some elements such that you do not get full scalability.

Then the other part of it is the fact that BT is in a competitive environment. So your first premise, which is they can just do nothing to their current offering and just keep going exactly the same, and that will be sufficient to service these SFV customers because nothing happens to them, that also -- I do not think that is correct either.

Now, that one you would potentially have to look at. Okay, what did they invest in? How much did SG&A costs increase? Can we attribute some of that to the Voice base or the SFV base? Depending on which increment you are thinking about.

MR RIDYARD: If we look down to the SFV group in particular, which is much, much smaller than these numbers, what are the relevant considerations there? Why should the answer for SFV be different to the answer for Voice in general?

DR JENKINS: (Pause). So possibly the answer between SFV and Voice is not different, but what you have to then recognise is that the Voice customers that are actually also purchasing bundled services, and BT's strategic planning and the cost base that it is incurring, not the direct costs but the indirect costs which are about being able to offer multiple services to customers, is as relevant to the SFV customer base as it is to the rest of the Voice base.

Now, actually that is my position, that you should think about it like that, because actually there is not a lot to differentiate between those SFV customers and those Voice customers when they purchase these products in a bundle, because many of them who started -- well, going back to the 14 million, you know, those people have not disappeared, they have become bundle customers, right. So you can see this whole area is one where what people are using their line for is changing over time, so whereas at the beginning, at these early periods that we are looking at here, it is predominantly Voice, but by the end of the period the line is being used for a wide range of services.

If you do that, then you see the SFV element as just the Voice element, and there are a lot of common costs, and there is a lot of flexibility as to how you might recover those. That includes the fact that the price for Voice might reflect the change in use, the reduction in Voice, the desire to ensure that people have the incentive to upsell, so that means that the first price is higher and the increment is lower. Those all become very relevant to thinking about price, and they match into the cost story by reflecting that there is a range of common costs across all Voice customers and the rest of BT's business because of its strategic approach.

MR RIDYARD: Specifically the -- let me just go back to my question about the impact on volume, because we have got -- let us say we have got some good data in 2008 which tell us that the cost per customer of Voice is £100, and then we want to say, quite a few years later, we have only got 10 million customers, not 14 million, so is there a reason on that decline in volume alone why the number of £100 is not going to be realistic? The economies of scale argument would say, no, you cannot just assume that you can achieve costs of £100 if you have lost whatever that is, almost a third of your volumes.

DR JENKINS: Yes, I mean, you could, in the spirit of being more helpful than perhaps my last answer was, if you look at Table 4 that was handed up this morning, which gives you -- now obviously these numbers are disputed, but there are some proportions of common costs, total costs, that are somewhere between 7% and, say, 13/14%. You could do some back of the envelope assessments which say, okay, now imagine that 10-20% of those costs are fixed in some way or common in some way, then what would the implication be for a -- how much would be the average cost rise were you to assume that 10% of the £100, as your starting position, is actually fixed and common and for a third reduction, and that would -- I could work that out if you gave me a couple of minutes. I could do it right now. Not in my head.

MR RIDYARD: We can think about that.

DR JENKINS: So you could use some rules of thumb around that. As I said, that is also predicated on the fact that the £100 does not change, and there is no reason to think that the base cost has not increased in response to competitive pressures, which I think, as Mr Duckworth said, you can see even in the chart I showed you that competitor pressures do lead to increases in indirect cost.

MR PARKER: Mr Ridyard?

MR RIDYARD: Yes, please.

MR PARKER: I think we might be able to shed some light on this by looking at Table 2 of Mr Duckworth's report, on which I relied, which is on page 40 of the report. {IR-E/7/40}. So SSE is a provider, I will not read the numbers out, but it is a provider of Voice and broadband services. That is its total cost. It is clearly able to operate in the market at a very substantially reduced scale compared to BT, whose total costs are £4 billion. It seem to me -- and there is a chart from the previous table about the Post Office which has total costs of about £140 million.

So if there are people who are able to operate, and this is in the broader retail telecoms perspective, at a considerably reduced scale compared to BT, that suggests to me that the difference between 14 million lines and

10 million lines is not going to be very significant, given that there are people able to operate in the market at very much reduced levels of operation. So if there are large economies of scale, I do not see how these people would be able to survive.

MR RIDYARD: Yes. Is there any implication in the fact that -- I mean, the Post Office has gone into this presumably as a sideline to its other activities. There is a sort of scope economy thing there. Whereas SSE, and presumably that is the energy company, is it?

MR PARKER: Yes.

MR RIDYARD: So it would also have ... I do not know, but do we know whether it was a standalone telecoms operation or was it something that was able to benefit from the ...

MR PARKER: I am sure everyone has some economies of scope with the other parts of the business. BT is facing competition from multi-product firms, but this suggests that you do not need a large -- if your worry, or if your issue is about what is the level of fixed and common costs within a retail telco service or within the Voice part of that retail telco service, this is not suggesting -- it is suggesting that you can operate at quite small scales and still remain competitive.

MR RIDYARD: Yes, okay.

MR DUCKWORTH: If you take it one level up, broader economies of scope across a business, well, BT Consumer has economies of scope across television and now DE, so that is not a reason to expect that kind of unit cost for Voice services only would increase over time because it lacks -- BT is losing -- BT losing economies of scope over time. In fact BT is, as Dr Jenkins says, increasing the number of products it offers to customers, and so you would see almost an increase in economies of scope over time.

MR RIDYARD: Economies of scope. Okay, that is useful.

Before -- we are going to move on then to Dr Jenkins' approach on standalone costs and its variants. Before we do that, is there anything that we have -- that has been important that should be said about Mr Duckworth's reliance on the 2009 figures approach?

Dr Jenkins, Mr Matthew, have you got any ...

MR MATTHEW: Very briefly, because I have not looked into this in detail, but the sheer scale of the change, simply registered as the idea that you can necessarily track forward over quite long time periods with large changes and everything else that is going on, to me immediately comes with a very large health warning. There was a comment about my funfair at the front of the supermarket not affecting costs, which misreads the example. The point about putting a funfair in front of your supermarket, if anybody has actually done that -- they did it at great cost, I think, judging by driving past on the North Circular -- is to attract more people. So that is part of the parcel you are making, you are just doing it in a different way, and those costs should be included in the way you are approaching it.

Specifically on the points you have been discussing about costs across retail telecom services generally, just to emphasise I do agree with the implication that Sky, TalkTalk, Vodafone and others who are building retail telecoms or (inaudible) businesses plainly do have the same economies of scale across their business that BT has.

But in the case, just going to the example on the Post Office and other very small suppliers, that is usually because (a) they are operating at a very small scale, so you cannot necessarily assume it tracks up to compare to BT. But also to note that I agree with you, as I said in my report, that especially something like the Post Office is basically targeting a group where its other business has a large synergy, so it is just a different type of common cost, if you like, floating around there somewhere, and if you were to try and work out the standalone costs of the Post Office building that business without the advantage of being able to stick it in their Post Office counters, that would suddenly look like a different number to the one you have here.

MR RIDYARD: Yes, I can see that.

Mr Duckworth, any last comments on the 2009 exercise and its reliability and usefulness?

MR DUCKWORTH: I just think overall, in terms of projecting forwards, we have talked about some reasons why projecting forwards based on the CPI will be conservative, if you assume that there is some efficiency gains over time; some reasons why it may underestimate price increases, the kind of economies of scale point. I think Dr Jenkins talks about sort of quality improvements. Some of those quality improvements flow through into direct costs. So there were costs associated with fixing faults more quickly, and that was a quality improvement which was reflected in the direct costs which I do include in my benchmark.

The onshoring costs are a sort of increase in quality, which I accept, which is reflected in an increase in indirect costs, and I have not captured that.

But overall, I think my opinion remains that taking the 2009 figure and projecting forwards on CPI, taking account of all those factors, some of which suggest that CPI is conservative, but others kind of offsetting that impact, that efficiency impact, I think it is still a robust benchmark.

MR RIDYARD: Okay. Right. So let us move on to then comparing it with BT's experts.

Dr Jenkins, the first -- I know we have touched on this already when we asked you to give an overview of common costs, but compared to what we have just heard about the exercise that BT did in 2009, can you say something more about the judgments you have made when you have -- in the various tables that you have already referred to today, where you have had a go at trying to identify which are common costs and which are not. Can we have a bit more of the detail on how those judgments have been made and how we can evaluate the reasonableness of them.

DR JENKINS: Yes. So maybe it is helpful to pull up {OR-H/204/1} again. Next page, {OR-H/204/2}.

So perhaps if we start again with this first table which summarises the material that was in my first report at Annex 7. As I said, the first step for me in terms of implementing a standalone cost combinatorial approach was to get an estimate of common costs for

BT Consumer, common costs that relate to the SFV services.

So the approach I took, and how it compares with, as I understand, the RFS approach, would be the RFS approach would take the £308 million for total SG&A pay, including commissions, and would probably have a lot more detail about that than is now available to us for whatever the number was in 2009, and would then fully allocate that actually to a range of different services, and that might be done on a headcount basis or customer number basis or value basis, I think all those -- or an EPMU basis. All of those four types of allocators were used. As Mr Duckworth said, it could have been first allocate to product, and then within product use another allocator. So that would be a mix of incremental and common elements of that cost.

The approach I took is different in that I say, all right, I am going to get a general estimate of the split of these indirect costs into the component that can be considered incremental and, hence, can then be allocated in some way across the different products of interest, and then the residual, which I judge to be common.

Having identified the amount that was incremental, I then allocated that on an EPMU basis across the different products, and that is how I determined indirect incremental costs.

Now, the reason I did it that way was if you do that on an equi-proportionate mark-up, EPMU, that means you allocate the incremental costs according to the ratio of direct costs, and that means the bundles category is going to attract the bulk of those incremental costs because they have the bulk of the direct costs. So for my purposes I considered that would be conservative, because I start by saying: of the incremental costs, the bulk of them get allocated to bundles.

Now, it could be there are other -- if there were an RFS approach and if it had done it like this, you would potentially be able to do something different, but that is not available to us. So that is how I dealt with the indirect incremental costs.

What this table then shows you is only the common cost element that is left. I have not reported the -- and we can go to one of the other tables to see how the split goes. But as you see, for my baseline, for that first category 20% has been allocated to common costs. In the "Low" category it is only 5% of the costs that has been allocated to common costs in my "Low" category, so only £15 million of that £308 million have I allocated to common, and that is because pay headcount can generally be allocated through some causal driver as an incremental element. That is why I have picked "Low" for that type of category.

MR RIDYARD: In a sense, you could allocate it to one service rather than another. So you can presumably find out if those people are working in the TV business or in the broadband business or the Voice business?

DR JENKINS: So ultimately, I -- because of the question of interest here, I have split the services as SFV services, and bundles, which includes all of the broadband, the TV, the sport, because saying all of those, even though they can -- and also the Voice element that is sold in a bundle, that is the buy-through for the bundle. So it is assuming here that all the direct costs of that are attributed to the bundles category. Then any incremental costs around headcount are attributed on the basis of that direct cost ratio to the bundles category.

So I do not have any information on how many people work in each of these, but by using --

MR RIDYARD: A better way of putting my question would have been to say: at some level you have reached a view that the number of people you employ in this category depends on the number of customers?

DR JENKINS: Depends on ... I think what I am saying is headcount is generally incremental to services, actually to services, whether it is -- I have not done it on a customer basis, I have done it on an EPMU basis. But the first judgment is to say categories that relate to people are generally not common, because you can flex the number of people. So this category is given a "Low" rating, because there will be some central people, but further down where you have got the subcontract costs, which are people costs, onshore/offshore, I have put those as "No common costs", because you just assume they are related to specific needs so they will be treated as incremental costs.

MR RIDYARD: Let us look at a category where you have gone for a much higher view on common costs.

DR JENKINS: Yes, so that is the "Fixed Recharge" and "Net Internals" categories, so those are the ones that have a big weight, and those are the ones which are the recharges from BT Group for the general services that are provided to BT Consumer in terms of accommodation, for buildings, HR, legal, energy and head office costs, those types of recharges, and those are recharged to BT Consumer by the central system.

THE CHAIRMAN: Can I just ask a clarification, just when you are on that. I am being a bit slow, but to take your £160 million figure, that is the total recharges to BT Consumer.

DR JENKINS: Yes.

THE CHAIRMAN: The £140 million, is that meant to be a proportion of those recharges that you attribute to SFV?

DR JENKINS: No, that can be considered to be common across all the services. So I am saying, of those, there will be £56 million that is allocable. There will be some causality there between what central office does for the BT Consumer. I actually have no information on that unfortunately, so I am not able to do that, to do the actual thing, but I have not assumed that 100% of the recharges are common, I have made that adjustment.

THE CHAIRMAN: But then -- and we will come on to it no doubt -- but then what you have got is £56 million that you take to be incremental costs --

DR JENKINS: Yes.

THE CHAIRMAN: -- across the whole of Consumer.

DR JENKINS: Yes.

THE CHAIRMAN: Then you have to do something with them later on to get it down to SFV.

DR JENKINS: Yes. So for those ones, that £56 million, that is where I allocate it according to the proportion of direct costs.

THE CHAIRMAN: Because we do not see that in this particular table. Because you mentioned that the effect of the way in which you allocated the incremental costs, because it would be EPMU, would mean that most of them would fall on the bundles because of the direct costs because the number of customers is higher.

DR JENKINS: Yes, that is correct.

MR RIDYARD: But also because the cost -- yes, because the costs as a proportion of revenue are much higher too, are they not?

DR JENKINS: Yes, but I did it on the direct cost ratio.

So then the other category that gets a reasonably high allocation is the marketing and sales category. It is low to medium. So that captures that for marketing, I would say in the next iteration of their internal reporting BT split out marketing, and I attribute that to a "Low" category, because a lot of marketing can be attributed to the specific programme that it is related to. But there is central marketing, central brand elements.

The other source that I use to help inform this was the way Ofcom thought about some of these categories in the VULA margin approach. Ofcom was doing a fully allocated cost approach there, but just to understand where they thought categories were fixed and common, I just wanted to ensure that my assessment aligned at a reasonable level with the approach Ofcom had taken.

So marketing and sales, when it is integrated there, the marketing element would be "Low", but the sales category does include, can include, more general sales function, billing functions, that are common across all the services that are supplied.

MR RIDYARD: The big question that arises from this is why should we trust this and the judgments you have made over the admittedly older 2009 judgments that BT has made when doing an exercise on cost allocation that was much more detailed?

We are sort of, as we have mentioned already, we are sort of faced with two imperfect options here. We might like the fact that this is based on current data, but we might like the fact that the 2009 exercise was audited and gone into in a great deal of granular detail. So why should we prefer your approach to BT's approach in 2009?

DR JENKINS: I think the approach that I have taken here has the merit of transparency, so if there are things you disagree with we can change those. If it was the view that the judgment should be different or it should all Be "Low" --

MR RIDYARD: But we do not know why exactly you have gone for £57 million on the marketing sales as opposed to £50 million or £62 million. So obviously we can change the numbers, but we do not know -- do we know enough about why you have chosen the numbers you have chosen when you have not been able to look into the detailed questions that would be relevant behind it?

DR JENKINS: So as I said, there are a couple of cross-checks that I have done. So the first cross-check is the baseline and the "Low" scenario, because the concern here is really that there is too much that is common, I guess. That is the concern that is being levied. So there is a "Low" scenario here, and there is the cross-check against just taking what are known as the TSO costs, and when Ofcom was investigating charges for the VULA case, Ofcom identified that group, which is a recharge category, and they identified that as clearly fixed and common and invariant to whether or not BT Consumer existed.

So we do have a sort of independent check on sort of the extent of BT's costs that can be seen to be common in its BT Consumer business that relate just to the fixed element of the TSO costs. So that is another check which would say, okay, yes, I have used judgment, but at the end of the day the extent of those common costs does match with an approach that was taken by Ofcom in a different context to identify those.

MR RIDYARD: Okay. Can I stop you there and then over to, I guess, Mr Duckworth or Mr Parker, if you want to contribute?

MR DUCKWORTH: I will start. I mean, I think you have identified an issue here, which is that it is very much dependent on Dr Jenkins' subjective judgment, a sort of lack of documentary or quantitative evidence to support that judgment. I note that one of the cross-checks is the Ofcom VULA decision. As Dr Jenkins said, that was a fully allocated cost methodology, and so actually determining whether costs are fixed and common or incremental did not affect the results of the costing that Ofcom undertook for that purpose.

Dr Jenkins also says that TSO costs are invariant and sort of clearly fixed and common. I think if we turn up {OR-F/505/8}. So this is a slide produced by BT itself, looking at a view of costs for SFV services, so Solus Voice customers, for engagement with Ofcom. If you look at the line which says "TSO Direct, Indirect & Fixed costs", it says:

"Significant downweight - Proportion of number of products [circa] 3-4%."

Suggesting that BT itself thought that these TSO costs were not all sort of relevant to service Voice or SFV customers, and downweighted the proportion of costs allocated to SFV customers to reflect the fact that they were not fixed and common across SFV services.

There is an underlying spreadsheet which I have seen which actually allocates only 20% of this TSO cost to SFV services.

Similarly, on "Total marketing and sales costs", it says "Significant downweight", again suggesting that BT itself did not think all of the marketing and sales costs were fixed and common to Solus Voice or SFV customers.

So here we have an example of BT internally saying TSO costs are not completely invariant. Whilst Ofcom may have reached a view -- I think Ofcom suffers from sort of the same information asymmetry that myself and Dr Jenkins suffered from, that we do not know exactly what is in this TSO direct group, but potentially Dr Jenkins talks about accommodation, energy, HR, all of those costs seem to me to be costs which are to some degree variable. Accommodation, you can close down buildings over time. BT has moved out of 81 Newgate Street, the old BT centre, into a new office building. Energy costs are clearly something that vary.

MR RIDYARD: The building costs can vary, clearly, but can they be expected to vary in relation to what?

MR DUCKWORTH: I think the headcount, for example. If you have fewer staff you need less office space, and BT at the moment is announcing that it is going to shed 55,000 people. These costs are variable over the long-run, and that is the --

MR RIDYARD: I understand it is possible for companies to reduce headcount, but do you not have to be saying that you reduce headcount because the number of SFV customers is changing, as opposed to --

MR DUCKWORTH: There is kind of indirect causality there, but the number of customers change, the number of customer support staff change, then you have fewer people working in call centres, you need less office space.

MR RIDYARD: No, once you are there. But there has to be the trigger to this, does there not? There has to be a belief that changing the volume of the customers that we are looking at on this increment --

MR DUCKWORTH: Exactly.

MR RIDYARD: Just on this table you have taken us to, when it says:

"... Proportion of number of products [about] 3-4%."

What is that referring to?

MR DUCKWORTH: It is not entirely clear, because this is ...

MR RIDYARD: It is not at all clear to me.

MR DUCKWORTH: But my interpretation of that would be that Solus Voice is a small proportion of the products delivered by BT Consumer overall, and particularly on sort of things like product development, if a small proportion of the product is delivered then you need a smaller proportion of, say, delivery costs associated with that.

But, yes, it is all quite unclear. What I am saying is that here is a piece of information from BT internally which is saying something which seems different from Dr Jenkins' assumption or Ofcom's assumption.

MR RIDYARD: Is this particular document helpful in contradicting or confirming your approach?

DR JENKINS: I think what this document is doing is allocating all the indirect costs, which BT does do from time to time. It does not actually tell you whether or not they are common or not, and it is one particular allocation. I think -- I mean, in a second maybe we will call up what Ofcom said about the TSO fixed element, but the fact that there are allocations of these costs, and if that is on number of products, that is like number of -- it is not customer or revenue but number of products allocator. It is an alternative fully allocated cost allocator which does not necessarily take you terribly far forward if the Tribunal is trying to decide, well, what would be the cost benchmark?

The advantage of having a view on incremental and common cost is it helps to drive the range of potential pricing that in a workably competitive market you might expect to observe. So stepping away from what did BT do at any given point of time in any given spreadsheet when they are looking at particular products, the question is in a sense a more general one, which is: what is the benchmark, what is the approach to the benchmark that one should take in an excessive pricing case more generally?

So obviously it is not helpful that we do not necessarily have all the information that it would be ideal to have, but for me that is not a reason not to start with thinking through what is the right approach to this question, and do the best we can with the information that is available.

MR MATTHEW: Could I add just one point on that theme, which is obviously the original question was about comparative to imperfect comparative approaches. When we are going back to 2009, just to reiterate, that was obviously not separating out what the common costs were or giving an idea of how large they were, and while it is true there would have been an allocation done implicitly as part of the RFS, that is itself an allocation of common cost.

So if you were to put that through an excessive pricing prism, you would still need to confront, well, what does that mean now that we are into excessive pricing where common costs do need to be taken into account in an ex post environment as opposed to an ex ante one, where, as I said earlier, the regulators obviously are quite used to saying, okay, we will do this allocation, that allocation, accept this, and we will build price caps on the top of it.

MR RIDYARD: Okay.

MR PARKER: Perhaps I could also offer a thought. Could we go back to Table 2 of Mr Duckworth's second report, which I took you to earlier, which is page {IR-E/7/40}.

So Dr Jenkins' contention is that BT's fixed and common costs across all retail telco services in 2015/16 were £390 million. In other words, you could not get out of bed unless you had spent the £390 million, because that is what you need to start serving retail telecoms customers at all, and all these costs are common, in her view, across all the services she set out earlier, and that is what is in her report.

But we can see that SSE, and I will not say the exact number, but is able to operate at approximately one-tenth of the scale for its total costs. So of those total costs, if they had the same direct versus indirect proportion as BT, about three-quarters of those total costs are going to be direct, and about one-quarter is going to be indirect. So if we -- without being able to say any particular numbers, but we are in low double figures, shall we say.

Then there is a question of, well, what proportion of those costs are genuinely common across, in that case, the services that SFV offers as between fixed price and broadband? Even if we take Dr Jenkins' proportions as given, which I do not necessarily think we should, that would get you down to £4 million to £5 million of generally fixed and common costs.

So I think it cannot be right -- Dr Jenkins' judgments as to what is fixed and common for a retail telecoms provider just cannot be right. They are not just wrong but they are miles away.

MR RIDYARD: I can see the point you are making about the distance between them, but does it have to be the same for every player in the market?

MR PARKER: Otherwise they are not fixed, are they? If you say they are smaller and therefore do not have to incur so many costs, that just tells you those costs are not fixed.

MR RIDYARD: Could that be down to the choice of how they have chosen to enter the market? Are there some options which give you higher fixed costs and common costs, but which nevertheless pay off if you operate on a certain scale, whereas other people pay as they go?

MR PARKER: If you can pay as you go then they are variable, so they are not fixed. If you genuinely thought they were fixed and common across all the services, however you did it, you would have to incur these costs before you start. So if it is right that you have to incur £390 million of costs before you offer any of these services, then SSE should not be operating -- you can see the same thing for Post Office, you can see the same thing for Plusnet.

MR RIDYARD: Okay, it is a nice interesting point.

Dr Jenkins?

DR JENKINS: Yes, I would say it should read "BT Consumer Fixed and Common costs", rather than "BT SFV Services Fixed and Common costs". So that is what the exercise has identified, is the common costs of BT Consumer. Then there is a question about, well, what -- how has SSE determined this? Their note says it is direct costs, indirect costs and recharged costs. So we know SSE has its own very active household business serving energy products at least, as well as potentially other products. So in their recharging, has that accurately assessed what the actual common costs are for a household utility business that is relevant? Then you have got the scale of SSE's venture into fixed Voice and broadband is of a different scale to that of BT and others.

So if what we are interested in here is how did BT actually think about running this business, and how did it think about its pricing in order to be able to judge whether or not that is excessive or not, I do think it is relevant to look at what BT's own indirect costs were and how those can be thought of between being incremental and fixed and common at the scale that BT is.

MR RIDYARD: The point Mr Parker is making is that if that is -- if those truly are fixed and common costs, then they would have to be -- then anyone operating in the market would have to be incurring similar fixed and common costs. Do you disagree with that proposition?

DR JENKINS: Yes, that to offer the range of services that BT was offering, then they would need to have that sort of scale of fixed and common costs. The question is if we look at SSE's total costs for its overall business, like you are very dependent on the way it may have allocated its own costs to that business line --

MR RIDYARD: So you do not believe this is a like for like comparison.

DR JENKINS: I think it is very hard to know what is like-for-like. While that is arguably you could say that is a nice point, what that means is you should never see small entrants or that sort of thing, there could be a minimum efficient scale point as well going on here, and that does not mean that there are not these fixed and common costs for BT and that smaller rivals struggle to compete just on a cost basis, but they have some other angle that they are seeking to offer and they are seeking to grow and as they grow you would find that they actually have a fairly significant fixed and common costs base akin to BT.

MR DUCKWORTH: Can I just try and encapsulate this a bit because thinking about what we are using these estimates of fixed and common costs for which is as an input to the SAC combinatorial approach. Dr Jenkins kind of defines SAC on {IR-E/17/179}. At the top it says:

"Standalone costs are the costs of providing an individual service on its own, i.e. on a standalone basis. SAC therefore represents the costs that a single product firm would need to incur to provide the service in question."

So we are trying to come up with a cost of a single product firm sort of abstracting from BT Consumer as a multi-product firm and looking at the fixed and common costs that BT -- that not even the fixed and common costs, the cost that BT incurs as a multi-service company. We are saying, what is the cost of a company just providing a single service? In this case SFV. Does such a company need to incur, according to Dr Jenkins' Table 1, £282 million worth of cost per year and also the indirect incremental and direct costs on top of that to offer that single product SFV?

Is that kind of a reasonable input to calculating the standalone costs, and I think it is just not. Dr Jenkins talks about well, it is offering multiple services and hence it has a fixed cost base. But is then taking that multiple service fixed cost base and pushing that into estimates of standalone cost, by definition an operator which is not providing all of those services, and you just end up with a result which just is not credible.

THE CHAIRMAN: Sorry, just one moment, if I may. Mr Duckworth, can you just remind me, and it was not split out between the incremental and the true fixed costs, but what was BT's figure for 2009 on SFV that was in its RFS? You can look it up and come back to me.

MR DUCKWORTH: I will come back to you on that one.

THE CHAIRMAN: I think Mr Matthew as well wants to say something.

MR MATTHEW: Yes, I was just going to comment that those figures understood as the fixed and common costs of a scale competitor in retail telecoms services which is what I understand it is, do not look out of line with anything. That is BT, Sky, TalkTalk. They have all built large platforms and in various different ways they compete for customers off the back of those.

MR RIDYARD: But the question is you said scale competitors. So if you go back to the SSE comparison or indeed the Post Office comparison, is the point if we look properly at SSE's business we would find it too had these monstrous, these large costs to set up its platform or that there is a different way of doing it which is not necessarily the same way as the large-scale plan?

MR MATTHEW: I think there are two important points here which I alluded to earlier. First, obviously they have their own synergies so they have their own common costs somewhere else which means that their costs are almost certainly not reflective of their standalone costs of serving their customers because they are using the Post Office system to sell them.

MR RIDYARD: Let me stop you there. If you are saying they are common costs then you are saying these numbers are not their fixed and common costs for providing SFV.

MR MATTHEW: Correct. Those costs will be the Post Office or SSE's incremental cost plus some mark-up, presumably if they are making money and if you were to work out their standalone costs of selling without the benefit of the Post Office, you would end up with some very -- just different numbers because that is why they are in the business.

The second one is a slightly more general observation that does come up from time to time which is of course in retail telecoms you can always just pick up a wholesale service and some of them you have to make investments to use but some of them not too many and it is possible to sell to a small number of customers. I can give you a telecoms service and you get some slight -- and you do from time to time get some very small suppliers floating around. That is not uncommon for retail telecoms, as it happens in other markets as well.

The core market, the bit that actually is selling the price through conditions of what I would think of as oligopoly competition, basically drives everything and then you get some people who come in under the umbrella and make some sales from time to time, but I do not think it would be right to use those types of competitors, which I think is where Mr Duckworth's analogy was going, to then say, well, that gives me a good idea of what a scale competitor's business model would be looking at and it is the common and fixed cost it would be using.

That to me says yes, the fact that I can obviously make a few sales without incurring £390 million to do so is obvious. That is almost certainly true, but to build something that is capable of having real weight in the market is a different proposition, and it does come back to what we are doing here which is looking at BT's costs, so kind of start with the BT Business model and try and make sense of that.

MR RIDYARD: Okay, thank you.

THE CHAIRMAN: Good, we will halt there, so we will go at 10.30 tomorrow. Mr Matthew, you are the only new addition to the panel. You have probably been told, do not discuss your case or the evidence overnight or indeed until you have finished.

Thank you very much. 10.30 tomorrow.

(4.27 pm)

(The hearing adjourned until Tuesday, 20 February at 10.30 am)