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IN THE COMPETITION
APPEAL TRIBUNAL

Case No: 1403/7/7/21

Salisbury Square House
8 Salisbury Square
London EC4Y 8AP

Thursday 30th January 2025

Before:
Ben Tidswell
Dr William Bishop
Tim Frazer

(Sitting as a Tribunal in England and Wales)

BETWEEN:

Dr. Rachael Kent

Class Representative

v

Apple Inc. and Apple Distribution International Ltd

Defendants

A P P E A R A N C E S

Mark Hoskins KC, Tim Ward KC, Michael Armitage, Matthew Kennedy, Antonia Fitzpatrick
(Instructed by Hausfeld & Co. LLP) On behalf of Dr. Rachael Kent

Marie Demetriou KC, Brian Kennelly KC, Daniel Piccinin KC, Hugo Leith, Hollie Higgins
(Instructed by Gibson, Dunn & Crutcher UK LLP) On behalf of Apple Inc. and Apple
Distribution International Ltd

Thursday, 30 January 2025

(10.30 am)

(Open session)

THE CHAIRMAN: Yes, Mr Piccinin. Good morning.

MR PICCININ: Good morning. Apple calls Dr Barnes.

THE CHAIRMAN: Yes, thank you.

DR RONNIE BARNES (affirmed)

Examination-in-chief by MR PICCININ

MR PICCININ: Dr Barnes, I hope you have some copies of your reports in front of you, but I will call them up on the screen as well.

A. Yes.

Q. If we could start with your report which is {C3/5/1}. Can you confirm that is your report in these proceedings?

A. It is, yes.

Q. If you could turn to internal page 80, Opus page 82. Is that your signature? {C3/5/82}

A. It is, yes.

Q. Now if we could go to the joint statement that you have with Mr Dudney, so that is {C4/6/1}. Do you recognise that as the joint statement that you prepared with Mr Dudney?

A. Yes.

Q. If we could go to page {C4/6/6}. Is that your

1 signature?

2 A. Yes.

3 Q. So now if you can go to the other joint statement, the
4 one that you prepared with Mr Holt. That is {C4/5/1}.
5 Do you recognise this one as well?

6 A. Yes.

7 Q. If we can go to page {C4/5/4}. Is that your signature
8 too?

9 A. Yes.

10 Q. Taking the opinions that you express in your report, and
11 then also the opinions that are attributed to you in the
12 two joint statements that we have just looked at, taking
13 those all together, do those represent your true and
14 complete professional opinions on the matters that you
15 have been asked to address?

16 A. They do, yes.

17 Q. To the extent that they state any facts, are those facts
18 true?

19 A. Yes.

20 MR PICCININ: My learned friends will have some questions
21 for you.

22 Cross-examination by MR ARMITAGE

23 MR ARMITAGE: Good morning, Dr Barnes. My name is
24 Michael Armitage, I am going to be asking you some
25 questions on behalf of the Class Representative. I am

1 mainly going to be focusing on your evidence in relation
2 to the App Store's operating margins, then Mr Ward is
3 going to be asking you some questions about issues
4 arising from Mr Holt's evidence and also about some of
5 the balance sheet issues.

6 I would like to begin, though, by asking you some
7 questions about your experience and your instructions in
8 this case. It is fair to say you are an experienced
9 expert witness, are you not?

10 A. I have testified before, yes.

11 Q. I do not think you have previously given evidence in
12 this Tribunal, though?

13 A. That is correct.

14 Q. Could we turn up {C3/5/88} which is your letter of
15 instruction. That is dated 12 September 2024, yes?

16 A. Yes, it is.

17 Q. That is the day before the date of your report in these
18 proceedings?

19 A. That is correct, yes.

20 Q. To be completely clear, I am not suggesting there is
21 anything improper about this, but it is obviously the
22 case that you were first instructed before
23 12 September 2024, yes?

24 A. Yes.

25 Q. Can you tell us when you were first retained by Apple to

1 give assistance in relation to this case?

2 A. It was several months before but I cannot remember
3 exactly when.

4 Q. So Mr Dudney's first report was served on 14 May 2024.
5 Do you recall, would you have been instructed by that
6 time?

7 A. From memory, I think we had had discussions before then,
8 but when the engagement letter was signed I cannot
9 remember.

10 Q. Could we just turn up, please, {I/45/1}. This is
11 a recent order of this Tribunal in relation to some
12 disclosure issues. This is dated 15 March 2024. Can
13 you recall seeing this document before?

14 A. I think I have seen this, yes.

15 Q. Could we just look at paragraph 8. {I/45/3}. Can you
16 see that the Tribunal is talking about the approach of
17 the parties to resolving these issues. In the second
18 sentence, the Tribunal refers to it being unhelpful, as
19 a practical matter, that there is no accounting expert
20 instructed by the defendants to act as a counterpart to
21 the Class Representative's expert.

22 The Tribunal says:

23 "I would ordinarily expect the respective parties'
24 experts to be cooperating to ensure that the best
25 possible evidence was available to the Tribunal."

1 As I said, this was dated 15 March 2024. To the
2 best of your recollection, had you been retained by
3 Apple before that date?

4 A. I honestly cannot remember.

5 Q. May I also ask, have you worked for Apple previously on
6 any other matters aside from this case?

7 A. No.

8 Q. In relation to this case, or, rather, the issues broadly
9 arising out of this case, did you have any involvement
10 in the CMA Mobile Ecosystems report?

11 A. No.

12 Q. Or Apple's response?

13 A. No.

14 Q. Thank you. So turning to the substance, can I please
15 start by looking at the list of expert issues. It is
16 appended to your report as part of appendix B. That is
17 at {C3/5/100}. Can you see there under the heading
18 "Forensic Accounting Expert: "

19 "Issue 1: What are Apple's costs and
20 profits/revenues relating to the:

21 "A. App Store ...

22 "over the Relevant Period?"

23 So you can see there what is envisaged is that the
24 forensic accounting expert would opine on what the
25 costs, revenues and profits of the App Store are, yes?

1 A. Yes.

2 Q. Then if we can look at {C3/5/91}, which is back into
3 your letter of instructions, could you just read
4 paragraph 4.2 to yourself, please. (Pause)

5 A. Yes.

6 Q. So just by way of reminder, what actually happened is
7 that Mr Dudney's report was filed on 14 May 2024 and
8 that addressed the expert issue that we just saw. Apple
9 elected not to file any accountancy evidence at that
10 stage, but then at paragraph 4.3 you were instructed to
11 address the first Dudney report and then some other
12 reports, including the Holt report.

13 In relation to the first Dudney report, in relation
14 to your instructions generally, you were not instructed
15 to produce your own estimate of the App Store's
16 profitability pursuant to the issue we saw in the list
17 of issues, were you?

18 A. No.

19 Q. You were essentially instructed on this issue just to
20 respond to what Mr Dudney had done and comment on the
21 reliability of his approach, yes?

22 A. That is correct, yes.

23 Q. So we know that Mr Dudney has presented three metrics
24 for the App Store profitability, has he not? So there
25 is the ROR, return on revenue or operating margin, yes?

- 1 A. Yes.
- 2 Q. Then there is the return on assets measure?
- 3 A. Yes.
- 4 Q. Then there is the ROCE or return on capital employed
5 measure?
- 6 A. Yes.
- 7 Q. As well as being a measure of profitability in its own
8 right, the ROR or operating margin is an input to both
9 of the other measures, is it not?
- 10 A. I am not sure I would characterise it quite that way.
11 The numerator is the same in all three cases, yes.
- 12 Q. Thank you, yes. Now, if we go to paragraph 17 of your
13 report, please. Sorry, that is {C3/5/9}. Then we see
14 at subparagraph (a), you refer to the three metrics
15 presented by Mr Dudney. You say -- you recognise here
16 that each of the metrics is commonly used and can be
17 useful in analysing profitability, but you say that is
18 subject to the proviso that:
- 19 "... revenues, costs and profits can be reliably
20 estimated."
- 21 Yes?
- 22 A. That is what I wrote, yes.
- 23 Q. Then at (b), you say the ROA and ROCE metrics involve
24 consideration of various balance sheet issues. Mr Ward
25 is going to be asking you about those. But they do not

1 affect the reliability of the operating margin estimate,
2 do they?

3 A. They do not, no.

4 Q. Now, in relation to the App Store's operating margin,
5 can we first go to Mr Dudney's first report, internal
6 page 4, {C2/7/11}. I do not know if we could zoom in?
7 I am just going to look at table 1, please.

8 So table 1 sets out the elements that make up
9 Mr Dudney's estimate of the App Store's operating margin
10 for each of the relevant years, does it not?

11 A. It does, yes.

12 Q. This came up with Mr Dudney yesterday, but just to
13 confirm, you essentially do not take issue with
14 the revenue figures, the cost of goods sold or COGS
15 figures, or the two OCOGS figures, and therefore the
16 gross profit figures in these tables, you do not
17 disagree with the estimates on those --

18 A. Not in any meaningful way, no.

19 Q. You only take issue with the OPEX figures, but in fact,
20 to be specific, I think you do not take issue with the
21 rows entitled "OPEX WWDR" and "OPEX App Store
22 Marketing", is that right?

23 A. No, that is correct.

24 Q. So it is essentially just the row called "Operating
25 expenses ... App Store", yes?

- 1 A. That is correct, yes.
- 2 Q. Sorry, I should say you obviously also dispute the
3 dollar figures for "Operating Profit" at the bottom, but
4 that is just an arithmetical consequence of the
5 disagreement between you about the OPEX App Store
6 figures, is it not?
- 7 A. Yes, that is correct.
- 8 Q. Now, going over the page to Mr Dudney's table 2,
9 {C2/7/12}, and as we are in open session I will not read
10 out any confidential figures, but just to take the
11 non-confidential figures for the operating margin, you
12 see that they go from 74% in FY16 and then 75% in each
13 of 17, 18 and 19, yes?
- 14 A. Those are the numbers that are represented, yes.
- 15 Q. Yes, those are Mr Dudney's estimates. What he does is
16 he takes the operating profit dollar figures from the
17 preceding table and then divides it by the revenue
18 figures from the same table to get that percentage, yes?
- 19 A. That is correct, yes.
- 20 Q. You and Mr Dudney agree, do you not, that that is the
21 right way to compute an operating margin percentage,
22 yes?
- 23 A. It is certainly the standard way, yes.
- 24 Q. In your reports, as I think we established earlier, you
25 have not produced your own alternative estimates of the

1 App Store's operating margins, have you, Dr Barnes?

2 A. No.

3 Q. You have presented some illustrations of what would
4 happen if you took a different approach, and we will
5 come to those. But you do not say: no, no, Mr Dudney is
6 wrong, in fact, the App Store's true operating margin is
7 10% lower or indeed 10% higher. You do not do that?

8 A. I do not, no.

9 Q. In fact we saw you were not instructed to do that.

10 The objection you take is a more fundamental one.
11 You say that it is not possible to produce a meaningful
12 estimate of the App Store's operating margins and that
13 any estimate you do produce will be arbitrary, yes?

14 A. That -- I mean, if you can point me to the paragraph in
15 the report, that sounds about right.

16 Q. Mr Dudney's own estimates, the ones we have just looked
17 at, you say, and these are your words from paragraph 16
18 (c) you say those are "meaningless and uninformative"?

19 A. Sorry, I am not seeing my report on screen.

20 Q. Paragraph 16(c) {C3/5/8}, and we are going to come to
21 some other parts of this paragraph in a moment. You
22 say:

23 "... the analyses that are summarised in Table 1 of
24 the First Dudney Report are meaningless and
25 uninformative for the purposes of [this case]."

1 A. Yes.

2 Q. In fact, in this paragraph you summarise the basis for
3 that opinion, and indeed the opinion that it is not
4 possible to do a meaningful estimate of App Store
5 operating margins.

6 Can we just scroll up to subparagraph (a). Just
7 picking it up on the third line, you say:

8 "... the integrated nature of the Apple 'ecosystem'
9 means that any attempt [any attempt] -- such as that
10 undertaken by Mr Dudney -- to answer this question and
11 to generate a fully burdened ... P&L for the App Store
12 must inevitably involve an arbitrary allocation of these
13 OPEX, leading to a result that it is inherently
14 artificial and without grounding."

15 That is your position, yes?

16 A. Yes.

17 Q. Now, just pausing there. In general terms, would you
18 accept that there is nothing unusual about having to
19 perform cost allocations in order to assess
20 profitability?

21 A. I think that is fair.

22 Q. Particularly so in a business which may have multiple
23 product lines?

24 A. Yes.

25 Q. Are you aware that this Tribunal gave a long judgment

1 very recently in which one of the big issues was how to
2 allocate BT's common costs to one of the services it
3 provided which was alleged to be excessively priced?

4 A. Yes, I am aware.

5 Q. But your opinion as stated here is based on what you
6 described as "the integrated nature of Apple's
7 'ecosystem'", yes?

8 A. Yes, my opinion here is restricted to the facts and
9 circumstances of this case. It is not any general
10 observation about the validity or otherwise of
11 allocating costs.

12 Q. Yes, and your opinion about, as you put it, "the facts
13 and circumstances of this case", and "the integrated
14 nature of [the] 'ecosystem'", that is obviously based on
15 the evidence given by Apple's witnesses of fact, yes?

16 A. It is based in part on that. It is based in large part
17 on my own analyses.

18 Q. You say your own analyses. You are not giving factual
19 evidence about the nature of Apple's ecosystem, are you?

20 A. I am not, no.

21 Q. You are not an expert in digital ecosystems, are you?

22 A. No.

23 Q. So you are basing your views as to the integrated nature
24 of Apple's ecosystem on the factual evidence, yes?

25 A. Yes.

1 Q. Then if we could look at your paragraph 16(b). Perhaps
2 just read that to yourself if you would, just to remind
3 yourself. (Pause)

4 Have you finished?

5 A. Yes.

6 Q. Thank you. So here you place reliance on the fact that
7 Apple believes that it:

8 "... cannot allocate all [indirect] costs ... or
9 produce fully burdened P&L statements for specific
10 products and services in any meaningfully accurate way."

11 You say that is consistent with your opinion, that
12 is what you say in the first line, "consistent with
13 [your] opinion", and by "opinion" you are referring to
14 what you say in subparagraph (a) about the integrated
15 nature of the system, yes?

16 A. Yes.

17 Q. But we have just established that what you say in
18 paragraph (a) is itself just derived from what Apple's
19 witnesses say, yes?

20 A. No, I think there is an important caveat here, which is
21 that it is not simply a case of taking the fact witness
22 evidence and relying on it without any sort of thought
23 or consideration. The question I asked myself, having
24 seen the fact witness evidence, was: is there anything
25 else in all of the documents I have seen, all of the

1 analyses that have been produced, in all of the
2 financial information that is available, is there
3 anything in that that would contradict that?

4 So I do not think it would be fair to characterise
5 it as literally just relying on the fact witness
6 testimony.

7 Q. Yes. Now, in relation to your paragraph 17(b)
8 concerning Apple's beliefs -- 16(b), sorry, yes,
9 16(b) -- you rely on various statements from Mr Parekh's
10 first witness statement, so Apple's CFO, yes?

11 A. Yes.

12 Q. Did you hear the oral evidence given by Mr Parekh in
13 this trial or read a transcript of that evidence?

14 A. Yes.

15 Q. In light of that oral evidence, does it remain your view
16 that it is not possible to produce a meaningful fully
17 burdened estimate of the App Store's operating profits?

18 A. It does, and I think it is important, in answering that
19 question, to be very precise about what we mean by
20 a fully burdened profit and loss account. I mean,
21 Mr Dudney and I have -- it was one of the issues we
22 addressed in the joint statement, we referred to that.
23 I think there is also, although the wording is slightly
24 different, it is very, very consistent with an
25 observation in the CMA ecosystems report where they talk

1 about the necessity of measuring all costs that are
2 necessarily incurred by the operations in order to
3 provide the relevant activities.

4 I may have got the wording slightly off, but I think
5 the key part of that is "all costs", that is the ... So
6 the words "fully burdened" have been used, they appear
7 in a number of the witness statements, and I think it is
8 really important, when addressing that question, to be
9 very precise about what we mean by that.

10 Q. Could we, just on that point about the meaning of "fully
11 burdened". Just to be clear, then, your position is
12 that the question of whether one can do a fully burdened
13 estimate, and I will just show you what I think was
14 meant by that in a moment, your position is that that is
15 very important to the question of whether one can
16 reliably estimate the operating margin of the App Store,
17 yes?

18 A. Yes, I think without a precise definition of "fully
19 burdened", the question of what is the operating profit,
20 what is the operating margin of the App Store, it is
21 a somewhat vacuous question.

22 Q. Could we just look at {B2/4/3}. This is Mr Parekh's
23 first statement. Can you see at paragraph 12 he talks
24 about the fact that Apple maintains a single fully
25 burdened P&L for the entire company?

1 A. Yes, I can see that.

2 Q. Then he says:

3 "... ie it includes all direct and indirect costs
4 for the entire company ..."

5 Now, when we talk about fully burdened in relation
6 to an individual part of the company, what is meant by
7 that is that one has -- one takes the total costs,
8 including all the indirect costs, and that is your
9 starting point, and then one allocates a share of that
10 starting point to the relevant individual part of the
11 business. One does not exclude any category of overall
12 costs, yes?

13 A. So allocation may be a way of getting to the answer that
14 you are trying to get to, but I think the objective, you
15 know, the target that you have in mind is this notion of
16 the totality of the costs that are incurred. What is
17 the totality of the costs that the App Store incurred in
18 order for it to be able to provide the services that it
19 does?

20 Q. Now, just remaining for a moment with your point about
21 the integrated nature of Apple's ecosystem, I think the
22 substantive point that you are making, including by
23 reference to the witness evidence, is that Apple's
24 overall OPEX, including, you say, in particular its R&D
25 expenses, but there are also other categories of OPEX of

1 course, your position is that that cannot be said to be
2 attributable to the App Store as distinct from other
3 parts of the business, like devices, yes?

4 A. That is correct, yes.

5 Q. In other words, R&D expenses in particular are a common
6 or a joint cost?

7 A. Yes. Those two terms mean slightly different things,
8 but broadly speaking, yes.

9 Q. For these purposes you are content to agree with me that
10 they are common law or joint -- I appreciate there may
11 be some nuances?

12 A. At least for now, yes.

13 Q. The distinction being with a cost which is caused by the
14 App Store, yes?

15 A. Yes.

16 Q. In some way.

17 Now, you accept, I take it, that some of Apple's R&D
18 expenditure, without saying anything about the quantum,
19 will not be attributable to the App Store at all,
20 though, yes?

21 A. I would think that is a reasonable conclusion, yes.

22 Q. Beyond a couple of examples, like Apple's LiDAR system
23 and the ARKit, which you discuss at paragraphs 38 and 39
24 of your report, you have not analysed any specific items
25 of R&D expenditure and considered the extent to which

1 they can be properly attributed to the App Store, have
2 you?

3 A. No.

4 Q. Now, you seem to be suggesting that this issue about
5 common or joint operating costs, like R&D, is some sort
6 of bespoke Apple issue. But it is right, is it not,
7 that whenever you have a firm that supplies lots of
8 different products and services, it will have common or
9 joint costs that are not attributable to any one
10 specific part of the business, is that not right?

11 A. That is probably correct, yes.

12 Q. The very nature of such costs is that they are not
13 driven or caused by any single part of the business,
14 yes?

15 A. I think in that question there is a slight sort of
16 conflation of the notion of a cost driver, which is very
17 ... I think it is very important when thinking about how
18 to attribute the common costs. So the notion of a cost
19 driver, as your question suggests, is can we find
20 something that is -- you know, can we answer the
21 question: what is it that is causing Apple to incur
22 these R&D expenses? I think that is a slightly
23 different question from: which part of the business do
24 they relate to?

25 Q. I will suggest to you, and tell me if you disagree, that

1 if you want to understand the profitability of a single
2 business line within any multi-product firm, it is
3 a necessity that you are going to have to come up with
4 a reasonable way of allocating joint and common costs,
5 is it not?

6 A. So I think I would sort of phrase that slightly
7 differently. If you are going to be able to measure the
8 profitability of a single, and I cannot remember the
9 exact term you used, but let me sort of say business
10 segment.

11 Q. Business line, segment, yes.

12 A. It is a necessary condition, in order to be able to
13 tackle that question, that you are able to come up with
14 a robust and meaningful allocation of costs.

15 Q. Okay, yes. Indeed your view, I think you have made this
16 clear, your view remains that it is not possible to
17 meaningfully do that in relation to the App Store?

18 A. That is my position, yes.

19 Q. So it is not possible, therefore, to estimate the
20 operating cost of profitability of the App Store?

21 A. You can perform various calculations, but one of the --
22 to my mind, one of the key issues is there are various
23 ways in which those calculations can be performed that
24 will give you very different answers. So if you are in
25 a situation when it is difficult, and I think that is

1 the case here, to identify in any sort of meaningful way
2 what it is that is causing the costs, if you are going
3 down the allocation route, and again, I refer to the CMA
4 ecosystem report which talks about cost allocation and
5 makes the point that the mere fact that you have to
6 allocate costs in and of itself may not be a problem,
7 but there is a qualification which is if the results are
8 insensitive to the choice of allocation mechanism.

9 If you are in a situation, as you are here, where
10 the results are very sensitive to the choice of
11 allocation mechanism, that to me a priori is saying that
12 allocation is going to be a real -- at best a real
13 challenge here.

14 Q. We will come, I assure you, to what the CMA says about
15 that point, and indeed to the point about whether
16 Mr Dudney's estimates are sensitive to the choice of
17 allocation method.

18 Without putting too fine a point on it, Dr Barnes,
19 what you are really saying is that this Tribunal should
20 just abandon any attempt to estimate the App Store's
21 profits, that is right, is it not?

22 A. It is my position that that question cannot be
23 meaningfully and robustly answered, yes.

24 Q. That is not an App Store-specific problem, is it? This
25 is a case that is about the App Store, of course. But

1 on your view, this impossibility would apply equally to
2 any of Apple's other products or services, would it not?

3 A. Yes, that is --

4 Q. So the effect of that position is that the profitability
5 of Apple's individual products and services is immune
6 from scrutiny on this basis, do you see that?

7 A. I am not saying that at all. What I am saying is that
8 if you are going to sort of scrutinise the App Store or
9 another part of Apple, this is a tool that is not --
10 given these facts and circumstances is not going to work
11 for you.

12 I am not suggesting for a second that the App Store
13 should not be subject to scrutiny. It is just that in
14 these circumstances, putting it bluntly, the
15 impossibility of meaningfully and robustly determining
16 the App Store's profitability means that a profitability
17 analysis is, at very best, problematic.

18 Q. Yes. I was quite careful in the question I asked.

19 I said the effect of your position is that the
20 profitability of Apple's individual products and
21 services is effectively immune from scrutiny, yes, if it
22 cannot meaningfully be assessed?

23 A. It is my position that a profitability analysis in this
24 case is not probative to the question.

25 Q. You appreciate that Dr Kent's position, Mr Dudney's

1 position, is that it is perfectly possible and indeed
2 sensible to analyse the App Store's profitability using
3 reasonable judgments. That is what Mr Dudney has done.
4 Indeed, Apple has done that itself in a number of cases.
5 We are going to come to look at them. But you
6 appreciate that is Dr Kent's position?

7 A. I appreciate that is Dr Kent's position, yes.

8 Q. In terms of whether this is something which can
9 meaningfully be done, can we just go to your report at
10 {C3/5/26}. You refer here, and you set out a quotation
11 from a 2003 report by Oxera for the Office of Fair
12 Trading, which was referred to, as you say here, in the
13 CMA's Liothyronine decision, yes?

14 A. Yes.

15 Q. Let us just have a look at what Oxera say. So in the
16 first paragraph you see, third line:

17 "Broadly, cost allocation can be based on three
18 types of cost drivers (either separately or in
19 combination) ..."

20 They give a number of possible types.

21 Then you see the third example is:

22 "... value-based drivers (using demand factors such
23 as ...)."

24 One of the examples is "revenues", yes?

25 A. Yes.

1 Q. Then in the second paragraph, Oxera say:

2 "There may be no single method of allocation that is
3 obvious or correct ... to the extent that the
4 competition authority is interested in whether prices
5 are cost-reflective, the cost-allocation method used
6 should embody the 'cost-causality principle', which
7 means that costs are allocated to the source that caused
8 those costs to be incurred. However, cost-causality
9 cannot be applied to all common costs, nor, by
10 definition, to joint costs."

11 Then paragraph 50, Dr Barnes, you say:

12 "Implicit in this allocation is that for allocation
13 of a given set of costs to be meaningful, it must in
14 fact be possible to identify one or more potential cost
15 drivers, ie the sources that, at least to some extent,
16 'caused those costs to be incurred'."

17 That is what you take from these extracts, yes?

18 A. Yes.

19 Q. But with respect, that is not right, is it? Because if
20 you look at the last sentence of the quotation, Oxera
21 are saying:

22 "... cost-causality cannot be applied to all common
23 costs, nor, by definition, to joint costs."

24 A. So the way that I sort of interpret the Oxera language,
25 and obviously I do not know exactly what they meant when

1 they wrote it, is that cost causality is what you are
2 trying to get to. That is the objective here. That is
3 the question you are trying to answer. In some cases it
4 cannot be -- it is not possible to do that directly, and
5 that is why you go down the allocation route. Once you
6 go down the allocation route, then you are into the
7 realms of asking the question, well, can this be -- you
8 know, is the result that you get very, very sensitive to
9 the choice of approach that you take? Because if it is,
10 then I do not know how you determine, between the
11 various alternative approaches, which one is getting you
12 closer to the target of cost causality.

13 Q. Yes, but the point that Oxera are making is that the
14 target of cost causality cannot be applied to common
15 costs -- or "to all common costs, nor, by definition, to
16 joint costs", yes?

17 A. As I say, I think we are interpreting this particular
18 sort of sentence slightly differently. I think -- my
19 interpretation, and I may be wrong, is that what Oxera
20 are saying is that is your starting point. Can we
21 identify what it is that is causing these costs to be
22 incurred? In some cases -- if you can do that, and if
23 you can do that directly, then that is great. But if
24 you cannot, that is when you are in the realm of
25 allocation.

1 Q. Exactly, yes. Can I show you actually, because this is
2 a point that Oxera pick up in a bit more detail later in
3 their report. Have you read the full report or just
4 this paragraph?

5 A. Have I read every single word in it? No. I have
6 endeavoured to --

7 Q. It probably was not a fair question. Let me show you
8 the bit I am going to take you to and I will ask you
9 some questions specifically about that. Do not worry
10 about the rest of it, it is quite a long document.

11 So {C5/64/94}. This is a chapter about cost and
12 revenue allocation, so it is picking up on some of the
13 points that you quoted.

14 If we could just go to paragraph 6.15, which is on
15 page {C5/64/100}.

16 So the authors refer here -- they say:

17 "There are various cost-allocation methods that can
18 be used for distributing indirect costs ... In theory,
19 there is not a single correct method ... Depending on
20 the circumstances, some methods may be more appropriate
21 than others ..."

22 Then at 6.16 we see, in line with the quotation you
23 set out, that three types of cost drivers can be used.
24 Then the third bullet point over the page {C5/64/101}
25 that is "value-based", and that includes the

1 revenue-based approach, yes?

2 A. Yes.

3 Q. Then if we could look at 6.18, so over the page, sorry,
4 two pages over {C5/64/103}. There is a reference there
5 to 'value-based cost drivers', so including
6 revenue-based cost drivers, being -- the need for them
7 to be used with caution given what is referred to as
8 a "circularity problem", in other words, a problem that
9 it may lead to excessively high profits being
10 overlooked. I am going to come back to that point
11 later. It is a point you discuss in your report.

12 Then paragraph 6.19, this is a reiteration of the
13 point you quote from earlier in the report about cost
14 causality, but then at paragraph 6.20 we see the point
15 made again:

16 "However, cost causality cannot be applied to all
17 common costs, nor, by definition, to any joint costs."

18 But then the authors go on to say:

19 "... for joint costs and certain common costs,
20 allocation on the basis of cost causality is not
21 possible, and other types of cost driver, including
22 value-based ones, must be used."

23 That reference to value-based methods includes
24 allocation by reference to revenues, yes?

25 A. It does, yes.

1 Q. So really the authors of the document are making the
2 opposite of the point you make in your report. They are
3 not saying that in order to do a meaningful allocation,
4 you always need to be able to identify a cost driver
5 that caused the relevant costs to be incurred. What
6 they are saying is that for common and joint costs you
7 need an allocation methodology, and indeed a value-based
8 methodology may just be required, not just appropriate
9 but required?

10 A. So this is where I am going to refer to a previous
11 answer, when I said I am not going to quibble with you
12 on the distinction between common and joint costs at
13 this point. I think if you read this sort of carefully,
14 it says:

15 "... cost causality cannot be applied to all common
16 costs, nor, by definition, to any joint costs."

17 The joint costs, we do not need to get into a lot of
18 detail, but the archetypal example of that is when you
19 are refining oil and you have multiple different
20 products, and there is a production process, out of
21 which comes the different products.

22 I do not think that is the case here. I think, you
23 know, we are talking about common costs. But even
24 putting that to one side, when I read that, to me the
25 most important, or an important sentence is the one at

1 the beginning of 6.19 which says:

2 "To the extent that the competition authority is
3 interested in whether prices are cost-reflective, the
4 cost-allocation method should embody the cost-causality
5 principle."

6 So I am reading this very much as: that is what you
7 are trying to get to, that is the first best. Cost
8 allocation is what you have to rely on when the first
9 best is not possible.

10 Q. But the first best is not possible because the costs are
11 common; that is what the authors say.

12 A. It says -- it says that in relation to certain common
13 costs. I mean, 6.20 starts with:

14 "... cost causality cannot be applied to all common
15 costs ..."

16 Q. But your position, Dr Barnes, is that R&D costs, for
17 example, are common costs. One cannot identify the
18 extent to which they are caused by the App Store as
19 opposed to any other part of the business, yes?

20 A. That is correct.

21 Q. So Oxera are making clear that in relation to costs of
22 that kind, one needs an allocation methodology, and they
23 are certainly not discounting a revenue-based
24 methodology, in fact they are saying it may be required,
25 or a value-based methodology.

1 A. Sorry, can you point me to where they say it may be
2 required?

3 Q. 6.20, second sentence:

4 "... joint costs and certain common costs,
5 allocation on the basis of cost causality is not
6 possible ..."

7 That is your point in relation to R&D and other
8 OPEX.

9 "... other types of cost driver, including
10 value-based ones, must be used."

11 A. It says "other types of cost driver, including
12 value-based ones". I think your previous question -- so
13 they said that you have to use value-based, you have to
14 use revenue-based.

15 Q. We will move on, please, to the CMA report that you have
16 mentioned now a couple of times. I would like to look
17 at what the CMA made of the contention that the
18 App Store's operating profits cannot be meaningfully
19 assessed.

20 The CMA report is not among the list of documents
21 that was provided to you for the purposes of preparing
22 your report. Will you take that from me?

23 A. Yes.

24 Q. Indeed, it is not among the list of documents you relied
25 on in preparing your report?

- 1 A. That is correct.
- 2 Q. Could we turn up paragraph 59, though, of your report
3 which is {C3/5/31}. Can you see you are setting out
4 various quotations from Mr Holt's third report, and then
5 in the third of the quoted paragraphs you can see
6 Mr Holt is making reference to the CMA's profitability
7 analysis in relation to the App Store in the mobile
8 ecosystem's final report.
- 9 A. Yes.
- 10 Q. Can you see that? What Mr Holt says, middle of the
11 paragraph:
- 12 "In particular, in response to Apple's argument that
13 the profitability of the App Store cannot meaningfully
14 be assessed on a standalone basis ..."
- 15 So that is your position as well.
- 16 "... the CMA stated that, although they agree that
17 the presence of common costs complicates the assessment
18 and allocation methods can be arbitrary, it does not
19 necessarily undermine the conclusions ... especially if
20 they are found to be insensitive to the allocation
21 method."
- 22 Indeed, that is the point you made earlier by
23 reference to the report?
- 24 A. Yes.
- 25 Q. Below that you say:

1 "Mr Holt does not elaborate on the CMA's ..."

2 On the points made by the CMA. But you do not go on
3 to say anything about what the CMA actually said about
4 these matters in its report, do you?

5 A. No.

6 Q. I assume you had read the CMA report before serving your
7 report, given that it had been cited by Mr Holt, yes?

8 A. I read, again, not all of it, I read some points of it.

9 Q. Appendix C, the profitability --

10 A. Yes.

11 Q. Let us go to that, please. It is {AB6/28/1}. I am just
12 going to take you through a few of the points, please.

13 Can you see at paragraph 3, second bullet point, the
14 appendix is setting out, among other things:

15 "A more detailed assessment of the financial
16 performance of their [so that is Apple's and Google's]
17 respective App Stores."

18 Yes?

19 A. Yes.

20 Q. Then if we could go over to page {AB6/28/7},
21 paragraph 21, you can see they refer to:

22 "... the next section, in which we assess the
23 profits earned by the App Store, which is a core focus
24 of this study."

25 Insofar as that is a reference to operating profits,

1 in your view that was always just a doomed exercise,
2 yes?

3 A. I do not believe it can be meaningfully and robustly
4 determined, yes.

5 Q. It was meaningless, arbitrary, impossible for the
6 regulator to consider these matters, in your view?

7 A. Yes.

8 Q. Paragraph 24 on page 8 {AB6/28/8}. You can see there is
9 an estimate, or at least within a range, I assume
10 because of confidentiality:

11 "... that the App Store's gross profit margins
12 averaged 75-100% over the period 2018 to 2021."

13 We established earlier, you do not take issue with
14 Mr Dudney's estimates of gross margin, do you?

15 A. No.

16 Q. But then at paragraph 25, can you see the CMA says it
17 has also considered operating margins on the basis that
18 these give:

19 "... a more complete picture of a product or
20 service's profitability ... because they account for
21 operating expenses that were necessarily incurred in
22 order to supply [that] product or service."

23 Yes?

24 A. Yes.

25 Q. Then if you just read paragraph 26 to yourself, you will

1 see that Apple was making some familiar arguments, some
2 similar arguments to those it has made in these
3 proceedings, about its own internal documents. Do you
4 see that?

5 A. Yes.

6 Q. Reference in the final sentence to the point about fully
7 burdened profitability?

8 A. Yes, I see that.

9 Q. If we look at paragraph 27, the CMA says it has seen
10 some:

11 "... examples of reports of the profitability of
12 individual segments."

13 We will come to what you say about some of those
14 later. But unlike you, Dr Barnes, the CMA clearly
15 considers those internal reports to be relevant to the
16 question of the App Store's operating profitability,
17 yes?

18 A. Yes.

19 Q. Then it mentions some findings in the Epic Games case.
20 I am going to come back to that in a moment. Then --
21 yes, I am going to come back to that in a moment.

22 Then in the final sentence:

23 "In our view, this measure of profitability can ...
24 provide useful insights into the App Store's
25 profitability ..."

1 That is a reference to a finding that profits were
2 over 75% in the Epic case, yes?

3 A. Sorry, can you repeat the question, please?

4 Q. I am actually, at this point, just showing you what the
5 CMA has said, and I will ask you some questions in
6 a moment, I assure you.

7 So what has happened is that the US court has found
8 operating profits of over 75%, or it has approved
9 estimates of that nature by Epic's expert witness. Then
10 CMA says:

11 "In our view, this measure of profitability can
12 therefore provide useful insights into the App Store's
13 ..."

14 So contrary to your view, the CMA does think
15 operating profits for the App Store can provide useful
16 insights, yes?

17 A. Yes.

18 Q. Then paragraph 29, {AB6/28/9}, I am sorry, 28. So this
19 is Apple putting forward the position that:

20 "... the profitability of the App Store cannot
21 meaningfully be assessed on a standalone basis."

22 Then the first bullet point says:

23 "The presence of substantial common costs means that
24 it is not possible to allocate costs in a reliable and
25 economically meaningful manner to a particular product

1 or service within a given ecosystem."

2 That is essentially identical to the views you
3 express in your report which we saw at paragraph 16
4 earlier, yes?

5 A. Yes.

6 Q. Then at paragraph 29, this is the paragraph I think we
7 discussed to an extent earlier, the one that Mr Holt
8 refers to, the CMA says that:

9 "... the presence of common costs complicates the
10 assessment and allocation methods can be arbitrary.
11 [But], this does not necessarily undermine the
12 conclusions we can draw from the results, especially if
13 they are found to be insensitive to the allocation
14 method."

15 Then paragraph 30, you see that the CMA makes the
16 point that:

17 "... whilst we agree that interdependencies exist in
18 Apple's integrated model, they also exist across
19 ecosystems (and supply chains) which are not vertically
20 integrated. It is normal for businesses and investors
21 to assess the profitability of firms which operate in
22 different markets."

23 You accept those propositions in the paragraph as
24 a matter of generality, yes?

25 A. As a matter of generality, yes.

1 Q. Just to go directly now to the conclusion, paragraph 39,
2 {AB6/28/11}. You see that the CMA finds that:

3 "... the App Store was highly profitable on any
4 reasonable measure of gross or operating margins."

5 So drawing the threads together, the CMA's view was
6 that the App Store's operating margin can be
7 meaningfully estimated, notwithstanding the arguments
8 Apple has raised about the integrated nature of the
9 business and the arbitrariness of allocating common
10 costs, yes?

11 A. That is their conclusion, yes.

12 Q. Indeed, they felt able to conclude that the App Store is
13 extremely profitable on any reasonable measure of
14 operating margins?

15 A. Again, that is their conclusion.

16 Q. Again, your position is that the CMA's conclusions, the
17 expert regulator's conclusions about this matter, are
18 just arbitrary and meaningless, yes?

19 A. So I find the conclusion somewhat at odds with the
20 general sort of proposition that they set out earlier.
21 So in one of the earlier paragraphs that you referred me
22 to, they were talking about ... and I think the words
23 "not necessarily" are important. They are essentially,
24 putting it loosely, they are saying cost allocation can
25 be okay. So it is not necessarily a problem. But then

1 the insensitivity to the allocation method they raise.

2 So I think any investigation of sort of
3 profitability has got to properly look at that
4 question: is the result insensitive or not to the choice
5 of allocation mechanism?

6 [Redacted]

7 THE CHAIRMAN: I am just going to pause you, I am sorry to
8 interrupt you, doctor, but you have to be very careful
9 about confidential information, and some of the
10 documents you are straying into probably are
11 confidential. I do not want you to have the inability
12 to answer the question --

13 MR ARMITAGE: I am certainly going to be asking you about
14 that document.

15 A. So let me, to complete -- let me move away from that
16 document and maybe give you another example.

17 An accepted alternative way of allocating common
18 costs is on the basis of gross margins, and in some ways
19 this goes to the point that Mr Dudney made about the
20 benefits received. So Mr Dudney's argument I believe is
21 that allocating on the basis of revenues is a sensible
22 thing to do because revenues are a measure of the
23 benefits received.

24 Therefore, from an economic point of view, I think
25 it is equally plausible or equally -- an equally valid

1 argument to say, no, the benefits received are actually
2 gross margin. You know, a company does better from
3 generating -- it is better to have something that sells
4 for 100 and has a cost of sales of 10 than to sell
5 something for 150 that has a cost of sales of 100. Now,
6 if you were to allocate OPEX on the basis of gross
7 margin you would get very, very different answers.

8 So going back to the point about me not having done
9 my own analysis. I could have put that forward as an
10 alternative. My position is that that is just as
11 arbitrary as what Mr Dudney is doing, and when you have
12 two standard and equally valuable approaches that give
13 you different -- very different answers, that is when
14 you start to ask the question, well, is it possible to
15 answer, you know, to think about profitability in
16 a meaningful way?

17 Q. You have not ever suggested the use of gross margins as
18 a driver in this case. You have not suggested in your
19 reports anything along those lines. I think your
20 position is that would not be a reasonable method
21 because, of course, your position is it is just
22 impossible, yes?

23 A. Let me try and be clear here. It is clearly possible to
24 do the calculation.

25 Q. Impossible to do it meaningfully, that is your opinion?

1 A. Again, not wanting to be pedantic, but I think it is
2 important to think about what we mean by "meaningful".
3 It has to -- meaningful -- this is a strange way of
4 answering. Meaningful has meaning only in a particular
5 context, and so the question -- obviously there is
6 a very specific question in front of the Tribunal here,
7 and so the question is: can you generate an estimate of
8 profitability that is meaningful in that context?

9 To me, it is reasonably self-evident that if you
10 have got something which is essentially arbitrary, and
11 the results differ depending on how you -- on the
12 particular approach that you take, then that is where
13 the lack of meaning starts to kick in.

14 Q. Yes. So when I say "meaningful", I mean meaningful as
15 an estimate of how profitable the App Store is for the
16 purposes of this case. Just to be clear about what
17 I mean by meaningful. Sorry, it is not really
18 a question.

19 If we could move on to Epic v Apple. We saw that
20 the CMA referred to the findings on the App Store's
21 operating margins that were made by the US court in that
22 case. You do not mention those findings in your report,
23 do you?

24 A. No.

25 Q. Could we go to Barnes 1, appendix B., sorry, appendix B

1 of your report, because there is something a bit curious
2 here. It is {C3/5/115}. This is part of the list of
3 documents with which you were provided.

4 Can you see the heading at the bottom "Documents
5 related to the US proceedings"?

6 A. Yes.

7 Q. Then you see the two bullet points there and some
8 pleadings, and there is a declaration of Mr Roman.

9 Then go over the page, please, you can see there are
10 various other materials. There is a deposition of
11 Mark Rollins and various transcripts? {C3/5/116}

12 A. Yes.

13 Q. I am sorry, just to be clear, sorry, the fourth bullet
14 point says:

15 "Order after Trial on the Merits ..."

16 That I think is the judgment, is it not, as we would
17 call it in this jurisdiction, yes? Does that sound
18 right?

19 A. I believe that is the case, yes.

20 Q. A reasoned decision of the US court. Does that sound
21 right?

22 A. I believe so, yes.

23 Q. You were provided with that. You do not mention that as
24 part of the list of documents you have relied on in your
25 appendix C, but you had, I think, therefore, read the

1 judgment when you drafted your first report, yes? You
2 would have read what was provided to you?

3 A. Not necessarily. This was -- from memory, appendix B is
4 all the documents that were sent over to me. Appendix
5 ... I think it is appendix C are the ones that I -- let
6 me just confirm this ...

7 Q. Can you recall whether you read the section of the
8 judgment dealing with the App Store's profitability
9 before you produced your first report?

10 A. I cannot recall.

11 Q. It is mentioned by Mr Holt, I will just show you that.
12 It is Holt 3, page 72, paragraph 190, which is
13 {C2/10/76}. Mr Ward reminded me it is also mentioned by
14 the CMA, and you said you had read the CMA report before
15 you produced your first report?

16 A. Yes.

17 Q. So you can see that Mr Holt summarises the court's
18 findings in relation to the App Store's operating
19 margins, so you were certainly aware of this part of the
20 judgment by the time you wrote your report?

21 A. Yes.

22 Q. Can we just go quickly to {AB5/7/42} and I will just
23 show you the relevant part of the judgment. Under the
24 heading "App Store Operating Margins", there is
25 a reference to the plaintiff's expert, Ned Barnes; he is

1 no relation, I take it?

2 A. No, I do not believe so.

3 Q. To your knowledge. You see that he produced an analysis
4 of the App Store's operating margin to be over 75% for
5 both fiscal years 2018 and 2019.

6 Then if we go over to the next page, {AB5/7/43}. So
7 in the first paragraph there is a reference to Mr Barnes
8 having reviewed:

9 "... internal documents reflecting ... P&L
10 statements specific to the App Store and presented to
11 [the] Apple executives."

12 The court says:

13 "These documents support Mr Barnes' independent
14 conclusions."

15 Then there is a fairly long paragraph, the second
16 one. Perhaps just read that to yourself, please.

17 A. Sorry, can you tell me which paragraph again?

18 Q. The second paragraph on the page, beginning "Apple
19 counters ..."

20 (Pause)

21 A. Yes, I see that.

22 Q. You see the third sentence refers to:

23 "Apple's protestations to the contrary,
24 notwithstanding the evidence, shows that Apple has
25 calculated a fully burdened operating margin for the

1 App Store as part of their normal business operations."

2 So the court is rejecting there, is it not, the
3 contention that Apple does not calculate fully burdened
4 operating margins for the App Store, which is a point
5 that Apple has made in the witness statements on which
6 we saw that you relied, yes?

7 A. Yes.

8 Q. Then in the last sentence of the second paragraph the
9 court says that:

10 "... Mr Barnes' analysis [so that is Ned Barnes] is
11 a reasonable assessment of the App Store's operating
12 margin."

13 In other words, the estimate of over 75% for 2018
14 and 2019, the court is saying that is a reasonable
15 assessment, yes?

16 A. That is the court's ruling, yes.

17 Q. Just lastly, over the page at {AB5/7/44}, you see in the
18 first sentence, second line:

19 "... under any normative measure, the record
20 supports a finding that Apple's operating margins tied
21 to the App Store are extraordinarily high."

22 To state the obvious, the findings the US court made
23 are completely at odds with your view that Apple's
24 profitability cannot be meaningfully assessed, yes?

25 A. That is correct.

1 Q. Now, obviously you do not agree with the US court on
2 this, and that is obviously your prerogative, but you do
3 not mention the US court's findings anywhere in your
4 report, do you?

5 A. I do not believe I refer to it, no. Let me just sort of
6 elaborate on the answer. One of the reasons why I do
7 not refer to it is that the ruling in and of itself is
8 not something I would rely on. Obviously knowing of the
9 ruling raises a question when I am doing my -- when I am
10 putting the report together, is, you know, is there
11 anything -- is there anything that underpins the ruling
12 that makes me -- that would make me reconsider the way
13 that I am approaching this?

14 My understanding is, and I may be wrong here, but my
15 understanding is that Ned Barnes adopted exactly the
16 same revenue allocation approach as did Mr Dudney.
17 I believe that is the case. So in which case the
18 arguments about the arbitrary nature and all of the
19 issues that we have gone through before, they apply
20 equally here.

21 I do not have visibility of the full -- of all the
22 documents the US court saw, but to my knowledge I have
23 not seen any documents that the court, the US court saw
24 that I have not seen. So although I do not rely on this
25 explicitly, certainly had there been something that

1 I had looked at and thought, okay, that is a new data
2 point, that is something that I should be taking into
3 account, then I certainly would have done.

4 Q. Going back to the previous page {AB5/7/43}, and
5 I accept, as I said, it is your prerogative to disagree
6 with the findings. That second paragraph, the court has
7 made a factual finding, has it not, that "Apple
8 calculate[s] a fully burdened operating margin for the
9 App Store as part of their normal business operations".
10 That is directly contrary to the evidence on which you
11 rely, we saw that you cited it at paragraph 16(b) of
12 your report, from Mr Parekh, did you not think that was
13 a matter that ought to be at least mentioned in your
14 report as a relevant data point, or however you might
15 like to refer to it?

16 A. No, again going back to a much earlier answer, you know,
17 the opinion about Apple's inability to generate a fully
18 burdened P&L for the App Store, having precisely defined
19 what fully burdened means, that is my opinion. It is
20 consistent with the witness testimony.

21 Q. Thank you. But just in terms of the substantive
22 findings ...

23 THE CHAIRMAN: Just before you move on, Mr Armitage.

24 Dr Barnes, can I ask you, did you review any of the
25 evidence in relation to this question of profitability

1 in the Epic case? Some of the transcripts that you have
2 referred to in your list of documents, we cannot tell
3 whether they involve the evidence of Dr Barnes, and
4 I cannot remember who the other expert was; did you
5 review the evidence?

6 A. I ... This may sound like I am passing the buck, and
7 that is certainly not meant to be the fact. I have
8 a support team and the support team that I work with,
9 I explicitly asked them the question: is there anything
10 in the documents, because obviously there is a very
11 large volume of documents, is there anything in those
12 documents, are there any sort of financial statements,
13 any presentations, that have not already been produced
14 in this case that I should be aware of when thinking
15 about this question?

16 So although I have not explicitly reviewed the
17 transcripts, for example, that was the question that
18 I asked and got, yes.

19 THE CHAIRMAN: So the answer is you did not.

20 A. Yes.

21 THE CHAIRMAN: For that reason.

22 A. Yes.

23 THE CHAIRMAN: But it does sound, from your answers to
24 Mr Armitage, that you were aware before you wrote your
25 report that this issue had arisen in the US proceedings.

1 A. Yes.

2 THE CHAIRMAN: I am not entirely clear about whether you are
3 saying you had read this section of the judgment before
4 you wrote your report or not.

5 A. I honestly cannot remember. I mean, if I can just go to
6 annex ... There is a reason for doing this. So
7 appendix C to my report is a "documents relied upon"
8 list. So the way I always interpret that is if it is
9 something that I rely on in support of an opinion that
10 I am giving, then I will include it in that list. That
11 does not mean to say that there are not other documents
12 that I review and consider but do not actually need to
13 rely on for my opinions, which is why they would not
14 appear in appendix C.

15 THE CHAIRMAN: I think your instructions, if it is helpful
16 we can look at that on page 94 of your first report.
17 I think your instructions indicate that the materials in
18 annex B, you are directed to refer to those materials.
19 So one assumes that if you followed your instructions,
20 you would have read those materials or at least someone
21 on your team would have. {C3/5/94}

22 A. I agree, and that is why I was trying to draw that
23 distinction. So appendix B is the -- or the documents
24 in appendix B are to meet that requirement. So the
25 documents I was presented with, we need to refer to

1 them, and so that is what the list in appendix B is
2 doing. But appendix C is meant to be only those
3 documents that I actually rely on to support an opinion.

4 THE CHAIRMAN: Yes, I understand that. But I think the
5 distinction about reliance -- well, the point about
6 reliance is not really the point I am addressing. The
7 question is whether you were aware of and had read it,
8 and it seems to me that is not about reliance at all,
9 and indeed it is really more about -- presumably that is
10 what Gibson, Dunn meant when they said refer to the
11 materials. Presumably you expected somebody in your
12 team to read them.

13 I think the question: is do you know whether you --
14 well, firstly, it is apparent that you were aware of the
15 issue, is that right?

16 A. Yes.

17 THE CHAIRMAN: But you had not necessarily read the
18 judgment, is that the position?

19 A. That is correct, yes.

20 MR ARMITAGE: I think we saw that in the CMA report the Epic
21 judgment, including the point about the fully burdened
22 estimate, was set out in terms. That is in footnote 25
23 of the CMA report, appendix C. Then it is also referred
24 to in Mr Holt's report, which of course you had read.
25 So you were certainly aware of the specific findings

1 even if you had not read the ...

2 A. I was aware of the findings, yes, yes.

3 Q. Now, coming to Mr Dudney's estimates and indeed Apple's
4 internal estimates, Mr Dudney has obviously been
5 cross-examined about the methodology he has adopted for
6 allocating OPEX to the App Store yesterday. I am going
7 to come on later to some of the points you make in your
8 report about his approach. But I would like first to
9 ask you some questions about Apple's own internal
10 estimates of its profitability. I have a few questions
11 I can do in open, and then I will need to move into
12 closed, and that may be an appropriate time to have the
13 break, but I will do the open questions before that, if
14 that suits?

15 THE CHAIRMAN: Yes, thank you.

16 MR ARMITAGE: Thank you.

17 Could we just look at a general point that you make
18 in the joint experts' statement with Mr Dudney. That is
19 {C4/6/7}. It is proposition 2. The proposition is:

20 "External and internal financial reports are
21 prepared for different users and may serve different
22 purposes."

23 A. Yes, I see that.

24 Q. Then just your third paragraph, you say:

25 "... I believe it is important at the outset to make

1 the following point."

2 Then you say:

3 "Taken at face value, the issue for the forensic
4 accounting experts ... could be read as suggesting that
5 the term 'Apple's costs ... relating to the App Store
6 ...' refers to a unique and well-defined construct and
7 that there is in some sense a single correct answer to
8 the question."

9 You say:

10 "[That] is ... far from the case - the question ...
11 is whether it is possible to measure Apple's costs ...
12 in a way that is informative as to the issue of ...
13 excessive pricing ..."

14 Then you say this:

15 "The fact that Apple has, in the past, produced some
16 measure of costs (and profits) for the App Store for an
17 entirely different purpose has no dispositive relevance
18 to this question."

19 No dispositive relevance.

20 Now, we have already seen what the US court and the
21 CMA thought about the Apple internal documents. Neither
22 of those bodies thought they were of no relevance. Do
23 you accept that?

24 A. Yes.

25 Q. I asked you earlier about Mr Parekh's oral evidence, and

1 I think you confirmed that notwithstanding that
2 evidence, which you had either heard or read, Apple's
3 internal estimates of App Store's profitability are
4 essentially meaningless and not relevant to the
5 Tribunal's analysis of excessive pricing. Is that still
6 your view?

7 A. Again, I want to be clear on the word "meaningless".
8 Not to say that they are meaningless in an absolute
9 sense. In other contexts, the information that is
10 presented may not be useful to the people reviewing that
11 information. The thing is, I have seen nothing in the
12 various documents that looks -- in my opinion, looks
13 like a fully burdened P&L for the App Store. I have
14 seen nothing that suggests that it attempts to measure
15 all of the costs that are necessarily incurred by the
16 App Store.

17 Q. Okay. We are going to look at the documents, as I say.

18 Just before we do break and then go into closed,
19 paragraph 72 of your report. This is on the point you
20 make about different costs for different purposes. So
21 it is {C3/5/36}. There is a quotation -- sorry, can we
22 just show the whole page. There is a quotation at the
23 top of the page from Mr Dudney's report. You see in the
24 second paragraph from Mr Dudney he says he considers,
25 based on his experience, that it is:

1 "... reasonable to place reliance on the information
2 that Apple itself prepared contemporaneously because
3 these documents were prepared in the normal course of
4 business for decision makers within Apple."

5 Then at paragraph 72, there is a reference to the
6 line of business reports. We are going to come to those
7 later.

8 Then you say in your second sentence:

9 "... I note that while Mr Dudney refers to 'decision
10 making concerning [the App Store]', he is silent both as
11 to the nature of this decision making, and as to how the
12 information that he utilises in his analysis was used by
13 Apple's management in making these decisions."

14 You say:

15 "This is another example of the notion of 'different
16 costs for different purposes' ..."

17 You say Mr Dudney is silent about the purpose. But
18 your view, presumably, is that it is of critical
19 importance to understand the purpose for which internal
20 profitability estimates were prepared before one can
21 place reliance on them, yes?

22 A. It is important to know the basis on which they were
23 prepared.

24 Q. But also the purpose for which they were prepared; that
25 is the point you are making here, is it not?

- 1 A. Not necessarily.
- 2 Q. So now you are placing reliance, I think, in
3 contradistinction to what the purpose is, on the
4 question of whether the estimates are fully burdened,
5 yes? That is a point you have made two or three times
6 now, I think, yes?
- 7 A. Yes.
- 8 Q. Just in terms of what you say about Mr Dudney being
9 silent about the nature of the relevant decision making.
10 Could I just show you appendix B of your report,
11 {C3/5/108}. This is the list of materials that you were
12 provided with. Could we go on to -- sorry, that is just
13 to show you the title. Then if we go on to page
14 {C3/5/110}. You see that is the beginning of a long
15 list of financial data. Then on page 111, {C3/5/111},
16 you see there is a long list of App Store presentations.
17 Mr Piccinin took Mr Dudney to one of these yesterday.
18 I think you will know, having read the transcript of
19 Mr Parekh's evidence, that these are annual
20 presentations by the App Store team that are made to
21 senior executives and they contain P&Ls for the
22 App Store specifically, yes?
- 23 A. Yes.
- 24 Q. Mr Parekh confirmed in fact during his evidence that
25 they are not trend analyses. Did you see that or will

- 1 you take it from me?
- 2 A. I believe he answered that, yes.
- 3 Q. Now, nothing in your report suggests that you asked
4 Apple anything about the purpose for which these
5 estimates were prepared. We know that you asked about
6 the provenance of the line of business reports, and we
7 are going to come to that later, but you did not ask
8 about the purpose for which the App Store P&Ls in the
9 management presentations were prepared, did you?
- 10 A. No.
- 11 Q. So you criticised Mr Dudney for not having information
12 about these matters but Apple is your client, Dr Barnes?
- 13 A. So my criticism of Mr Dudney was -- in that sense was
14 a limited one which is that he raised the issue of these
15 being used for decision making but did not explain what
16 that decision -- what the decisions were.
- 17 Q. But there is absolutely no evidence, and you have not
18 asked Apple as you have just confirmed, to suggest that
19 the purpose of these sort of documents makes them
20 inappropriate or irrelevant for use in a profitability
21 analysis, is there?
- 22 A. I think it is easier to answer that question when we
23 actually look at the documents, a specific example of
24 the documents.
- 25 Q. Okay. Thank you. Then just one more question in open.

1 Paragraph 34 of your report. One more set of
2 questions I should say. Paragraph 34. {C3/5/17}.
3 Would you mind just reading that to yourself. It is
4 quite a long paragraph. (Pause)

5 A. Yes.

6 Q. So the point you are making here or one of the points is
7 that where an entity conducts an allocation exercise in
8 respect of indirect costs the appropriate methodology
9 may differ depending on the exercise, and that is what
10 I think you mean by this phrase "different costs for
11 different purposes"?

12 A. Yes.

13 Q. You give some examples of different purposes, and the
14 first one you refer to is an exercise of comparing the
15 profitability of different divisions within a business,
16 and you say if that is the purpose, then an allocation
17 based on revenues, direct costs, operating margin or
18 headcount may be informative. We absolutely agree with
19 that and we are going to look at examples of Apple doing
20 that sort of thing.

21 But then you give some other examples. You refer to
22 a decision about whether to decide -- a decision about
23 whether to close a particular division, where you might
24 want to look at the costs that would be saved by doing
25 so, yes?

1 A. Yes.

2 Q. Then you refer to an exercise in assessing profits that
3 a particular operating division would generate if it was
4 operated on a standalone basis, yes?

5 A. Yes.

6 Q. But those are just hypothetical examples, Dr Barnes.
7 You are not suggesting that Apple has ever actually
8 assessed the App Store's profitability in either of
9 those ways, yes?

10 A. These were purely illustrative examples to make the
11 point that the notion of the profitability of the
12 App Store is not a single, well-defined construct. To
13 think about analysing it, you have to understand the
14 context.

15 If I could just make one sort of minor
16 clarification. So the sentence beginning:

17 "If the purpose of the exercise is to compare the
18 profitability of the different divisions ..."

19 This is not a big point, but saying an allocation
20 based on operating margin is somewhat circular, because
21 obviously that is after -- you know, gross margin, yes,
22 operating margin, no.

23 Q. Just to be clear, though, the two approaches that you
24 mentioned, well, in fact, focusing on the reference to
25 looking at the standalone costs, I think the point you

1 are making there is that if you were doing that, you
2 would be allocating a much higher proportion of the
3 total cost because -- and that is because the standalone
4 business would need to incur all of the truly common
5 costs across the whole business, is that about right?

6 A. More or less. It is an economies of scale type argument
7 that ...

8 Q. But to be clear, you are not saying that is the approach
9 the Tribunal should take to estimating the App Store's
10 profitability in this excessive pricing case, are you?
11 You are saying, in fact, that exercise just cannot be
12 done?

13 A. What I am saying is that the relevant measure, and this
14 is just repeating an earlier answer, but the relevant
15 measure of profitability, conceptually, is one that
16 takes into account all of the costs that were incurred
17 to enable the App Store to provide the services that it
18 does. That is where I am coming from.

19 Q. Thank you. I will just put one last point to you before
20 we break. When you talk about an exercise to compare
21 the profitability of different divisions, you would
22 accept that evidence of such an exercise is relevant,
23 would be relevant to the question of how profitable the
24 individual divisions are, yes?

25 A. I think there is a distinction between a comparative

1 calculation. So you mentioned trend analyses earlier,
2 which is I think a year-on-year comparison, and this is
3 a single year across different business segments. An
4 approach that may be informative in that context may not
5 be informative, may not be relevant, to the absolute
6 question of what is the profitability of the App Store
7 taking account of all of its costs?

8 MR ARMITAGE: All right, we will look at that by reference
9 to some of the documents after we break, and that will
10 be in closed session, please.

11 THE CHAIRMAN: Yes. So we will come back at midday, then
12 and it will be a closed session when we do that.

13 Dr Barnes, you are not to discuss your evidence with
14 anybody during the break, thank you.

15 (11.51 am)

16 (A short break)

17 (12.01 pm)

18 (Private session)

19 (1.19 pm)

20 (Luncheon Adjournment)

21 (2.00 pm)

22 (Open session)

23 Cross-examination by MR WARD

24 THE CHAIRMAN: Mr Ward.

25 MR WARD: Thank you, sir.

1 Good afternoon, Dr Barnes. I am Tim Ward and I am
2 going to start by asking you about your criticisms of
3 Mr Holt's ROCE analysis.

4 Can we turn, please, to your report at {C3/5/54}
5 where you summarise your objections, and it is towards
6 the bottom of the page, and you talk about two
7 interrelated problems and I am just going to remind you
8 what you say.

9 In (a):

10 "First, when assessing profitability in competition
11 policy analysis ... what matters is economic
12 profitability ..."

13 I should say that is common ground. Just for the
14 transcript, that is in the joint expert statement with
15 Mr Holt, {C/4/55}, proposition 2.

16 "In other words [you say], the appropriate
17 comparison ... is between a measure of the App Store's
18 economic profitability over the relevant period and its
19 WACC. That is not what Mr Holt does. Rather, he
20 compares a measure of the App Store's purported
21 accounting profitability (its ROCE) with its WACC.

22 Then just in fairness, you immediately accept at
23 (b):

24 "... while it is in principle possible ... for the
25 average ROCE over the relevant period to be a reasonable

1 proxy for the App Store's economic profitability ...
2 these conditions are not met ..."

3 Then if one sort of scans down about five lines, you
4 say:

5 "Specifically, one of the key conditions for the
6 average ROCE over the relevant period to be a reasonable
7 proxy for economic profitability is that 'the correct
8 asset valuation is used'."

9 Then if we scroll forward, you then on the next page
10 turn to the Oxera report which Mr Armitage took you to
11 this morning, which I think is from 2001. We can see,
12 just looking at the bold, that the Oxera report talks
13 about NPV, net present value, and IRR as measures of
14 economic profitability, that is right, is it not?

15 A. Yes.

16 Q. Can we turn to that Oxera report now, please. It is at
17 {D1/1486}. Could we turn to page 129. {D1/1486/129}.

18 We will see under the heading "The IRR versus other
19 profitability measures", 8.4:

20 "Competition authorities in the UK have frequently
21 undertaken profitability assessments -- but relatively
22 few investigations have used the IRR (or the NPV). As
23 illustrated in table 8.1, other profitability
24 measures -- in particular, ROCE and ROS [return on
25 sales] -- have been used more often."

1 We can see that if we turn to the next page
2 {D1/1486/130} there is a table, this is obviously a few
3 years out of date of course, but you can see ROCE is
4 used a lot. The authors are able to identify one case
5 where IRR was used, and even return on sales, gross
6 margins, net margins have been used.

7 At 8.5, if we scroll a little bit further:

8 "As discussed in this paper, it is valid to use
9 other profitability measures -- in particular ROS, gross
10 margins and market valuations -- as proxy measures ...
11 in addition to the IRR itself."

12 So it would be fair to say, would it not, that the
13 ROCE is in fact a standard measure of profitability for
14 competition authorities, would you agree? Not the only
15 one but a standard one?

16 A. It has certainly been used in previous investigations,
17 yes.

18 Q. If we now turn, please, to the CMA's mobile ecosystems
19 report, appendix C. {AB6/28}. I want to show you what
20 they say there. If we turn, please, to page
21 {AB6/28/11}. Mr Armitage has taken you to some of this
22 but we are going to be looking at different parts.

23 Paragraph 41, this is where the CMA begins its
24 analysis of Apple's ROCE, "Why we use ROCE as a measure
25 of profit":

1 "As set out in our guidelines for market
2 investigations ..."

3 Which is CC3, you will see from the footnote. Just
4 for the transcript, that can be found at {D2/348}, but
5 we do not need to go there, we have what we have here.

6 "As set out in our guidelines ... we normally
7 measure profitability using return on capital employed,
8 derived using accounting profits which are then adjusted
9 to arrive at [a][...] meaningful measure of
10 profitability."

11 So you would accept that the CMA's approach is to
12 start with accounting profits, just as Mr Holt does.
13 Would you agree?

14 A. That is what it says here, yes.

15 Q. What we are going to discuss, as you and I debate the
16 issues in the next few minutes, is about whether there
17 is a need for any material adjustments to arrive at what
18 the CMA would call an economically meaningful measure of
19 profitability. It is right, is it not, that the CMA
20 went on to perform a ROCE and WACC analysis of both
21 Apple as a whole and its devices business, did it not?

22 A. It did, yes.

23 Q. We are going to look at that a bit later.

24 It is also right, is it not, that although it
25 considered various sensitivities which we may look at,

1 it did not actually make any adjustments to that base
2 case, did it?

3 A. No, it did not.

4 Q. If we could just turn ahead while we are in this
5 document to page 21, paragraph 76. I am going to
6 prefigure something we are going to talk about in detail
7 later, but just while we are here, they say, this is
8 after considering sensitivities:

9 "We have therefore maintained our standard approach
10 of including R&D within current costs in our analysis,
11 both on the basis that any alternative treatment would
12 not change our conclusions, and also that we have not
13 seen evidence that Apple's R&D meets the criteria that
14 would support capitalisation."

15 We will turn back to that. It is just for context.

16 So what the CMA has done here, particularly with the
17 devices business, is precisely what you say is
18 impossible because Apple is an ecosystem, that is
19 correct, is it not?

20 A. Yes.

21 Q. You know of course that Mr Holt and Mr Dudney do not
22 accept that, obviously?

23 A. Yes.

24 Q. But to be clear, you have no positive case about either
25 the correct value of ROCE or the correct value of

1 Apple's assets in particular. Sorry, value of the
2 App Store's assets, very important.

3 Let me put my question again to be absolutely clear
4 I was putting it about the App Store.

5 You have no positive case about either the value of
6 ROCE or the value of assets of the App Store for this
7 purpose?

8 A. No, I do not.

9 Q. Let us turn back to your report, please, {C3/5/63}.
10 Paragraph 120 will help us to see what the debate is
11 about assets.

12 What you say, again drawing on what is here
13 described as the CMA, and for the Tribunal's note the
14 CMA and the Oxera report are -- the Oxera report was
15 done for the OFT, in fact it pre-dates the existence
16 offer the CMA, but ...

17 I am sorry, forgive me. I am creating confusion.
18 Your first reference is indeed to a CMA document and the
19 second one is the Oxera report. Forgive me.

20 At 120 you say:

21 "When assessing the extent -- if any -- of excessive
22 profits, the relevant measure of asset value is one
23 based on MEA [(modern equivalent assets)] (or
24 replacement cost)."

25 Then I was going to go to 121, which the Oxera

1 report explains what MEA valuation means.

2 It says:

3 "Theoretically, this is the lowest cost of
4 purchasing assets today that can deliver the same set of
5 goods and services as the existing assets."

6 That definition is not in dispute either. Again,
7 I think we have already established, you have not put
8 forward an MEA valuation for the App Store, have you?

9 A. No, I have not.

10 Q. If we turn forward just a few pages to page {C3/5/68},
11 we can see why, because you say again:

12 "Notwithstanding the fact that Mr Holt has not
13 attempted to do so, the preceding discussion [which we
14 are coming back to] raises the question of whether
15 developing reliable MEA based valuations of the
16 App Store's assets ... is even possible. In my opinion,
17 this would be at best highly challenging ... and, in any
18 event, meaningless in the context of an investigation
19 into alleged excessive pricing."

20 So just like on OPEX, you say that it is both
21 meaningless and presumably, therefore, impossible?

22 A. For the App Store, yes.

23 Q. For the App Store.

24 Now, you will appreciate from the joint experts'
25 statement that Mr Holt makes the point that he has not

1 seen any evidence to suggest that any A values would be
2 significantly different to the capital employed he uses
3 in his profitability analysis. You have seen him say
4 that?

5 A. I have seen him say that. It is interesting that he
6 does not refer to Apple's market cap.

7 Q. I assure you we are coming on to that very shortly,
8 because what I am going to do is go to what you say is
9 indeed the evidence to the contrary and we will explore
10 what it establishes.

11 Again, just for the transcript, just to save time,
12 Mr Holt says that in the joint experts' statement with
13 Dr Barnes, {C4/5/9}, row 8.

14 What I would like to do now is -- sorry, did you
15 want to check that or at least comment on that?

16 A. Just finding where it is.

17 Q. Okay. I was really going to go back to your report now,
18 because I am going to try and come to what you say is
19 the problem here.

20 Sorry, I think I have a wrong reference. (Pause).

21 It says that the problem -- yes, it is the right
22 reference. It is {C3/5/68}. The problem is the
23 challenges arise -- at the bottom of 131 -- for:

24 "... any firm for which intangible assets represent
25 a significant fraction of its asset base."

1 The difficulty lies with intangible assets?

2 A. Yes.

3 Q. Even though we have seen the CMA was quite happy to do
4 this for Apple and indeed its devices, despite obvious
5 presence of intangible assets?

6 A. Can you repeat the question, sorry.

7 Q. The CMA was quite happy to come to a valuation based on
8 in fact book value for both Apple and its devices
9 business which obviously involved intangible assets?

10 A. It did. But if you are asking me, did they properly
11 take account of intangible assets? Then my answer is
12 clearly no.

13 Q. Your answer is, presumably, it is all meaningless?

14 A. I think it is important to distinguish between the
15 question in the context of Apple, which is the: can we
16 get a handle on the value of Apple's intangibles? To
17 which the answer is yes. Then the second question
18 is: can we, in some meaningful way, carve that up and
19 carve out a portion for the App Store? That is where
20 I say that is not possible.

21 Q. I see. We will see how it was done shortly.

22 You are aware, also, I am sure, that the CMA has
23 done the same exercise both for Google Search and for
24 Facebook in its online platform's digital advertising
25 report?

1 A. I think I am aware of that, yes.

2 Q. Let us just look at that briefly, because that is a new
3 document for the Tribunal. This is authorities
4 bundle 6, tab 19, page 37. {AB6/19/37}.

5 Let us go to the first page just to help everybody
6 locate this. {AB6/19/1} This is appendix D. This is
7 not mobile ecosystems, this is online platforms and
8 digital advertising, so it is a different document to
9 the one we have looked at quite a lot. This is
10 "Profitability of Google and Facebook", and indeed it
11 does look at Google but it also looks at Google Search.

12 If we look, please, at {AB6/19/37}, we can see under
13 "Conclusion" -- we are going to go to some reasoning
14 later -- it reaches the view that:

15 "Google's returns are above its cost of capital.
16 Our analysis of ... actual return on capital ... it is
17 earning comfortably in excess of its benchmark cost of
18 capital on any measure. We have undertaken a review of
19 the cost of capital ... around 9%. Google's returns are
20 likely to be well over 40% from search, even after
21 allowing for a potentially higher asset value ... [and
22 capitalisation of some] R&D."

23 So we conclude it is significantly higher than 40%
24 and, again, on the next page, it makes the same
25 conclusion for Facebook, it notes it is a ROCE of 51%.

1 {AB6/19/38}.

2 So again, none of the issues around intangible
3 assets have prevented the CMA from reaching these
4 conclusions, have they?

5 A. I see the conclusions, but I do not know the basis on
6 which they reached the conclusions, so the analyses they
7 did.

8 Q. Okay. Let us go back now to your report, please,
9 {C3/5/64}, paragraph 122. Here we see your two,
10 I think, if I may put it this way, linked objections.
11 If we look at the beginning of paragraph 122, there is
12 no break between the paragraphs, it is about five lines
13 down, you note that:

14 "... at the end of 2023, Apple Inc's balance sheet
15 reported a book value of equity of [\$62 billion] while
16 its market [value] ... was [\$2.6-something trillion], a
17 market to book ratio of approximately 43."

18 Then you say:

19 "The reason for this wedge between market and book
20 value is at least in part certainly due to its
21 intangible assets."

22 Then about five, six lines down you list intangible
23 assets, such as:

24 "... intellectual property, patents, trademarks,
25 brand name, and customer loyalty ..."

1 What we are going to do is break this down into
2 firstly the wedge and then the intellectual property,
3 recognising, as you say, they are linked in your
4 argument.

5 Just to be clear, what you are talking about here is
6 whole Apple, because on your view of the world you
7 cannot divide these things up to distinguish the
8 App Store, is that correct?

9 A. That is correct, yes.

10 Q. Let us firstly start with the market wedge and then we
11 will talk about intangible assets.

12 Here, of course, what we are concerned with is the
13 profitability of Apple, is it not? That is the exercise
14 we are embarked upon?

15 A. The profitability of Apple or the App Store?

16 Q. The App Store, thank you.

17 A. Yes.

18 Q. We are not concerned with the question of how much it
19 would cost a private equity firm to buy Apple, are we?

20 A. No.

21 Q. The market capitalisation, and I am putting to you now
22 a point Mr Dudney made yesterday better than I can. He
23 made the point yesterday, the market capitalisation
24 represents the views of investors as the future cash
25 flow and their assessments of the risks. Would you

1 accept that?

2 A. Yes.

3 Q. What we look at on the balance sheet is the assets and
4 the capital employed by Apple, do we not?

5 A. Yes.

6 Q. Would you accept that is simply a different thing to
7 what --

8 A. Not at all. No, not at all.

9 Q. Okay. Let us look now at the report you rely upon, what
10 Oxera says about market valuation. This is at
11 {D1/1486}.

12 Just to clear up the confusion I caused, you will
13 see it says "Office of Fair Trading" at the top, and
14 then under the title, "A report prepared for the Office
15 of Fair Trading by Oxera in 2003".

16 Can we now turn, please, to page {D1/1486/15} of
17 this report. If we go to -- sorry, I may have given you
18 the wrong reference. I have. I have given you the
19 wrong reference. (Pause).

20 Can we start actually on the previous page
21 {D1/1486/14}, it is 1.19, "Estimating asset values".
22 This is for IRR, obviously a slightly different
23 exercise. It says at 1.19:

24 "The most readily available estimates of asset
25 values are from audited accounts. However, these

1 normally ... based on historical costs, which may bear
2 no resemblance to the MEA value."

3 That is your point.

4 Then it says, if we pick it up four lines down:

5 "This paper therefore describes various techniques
6 that could be used to cross-check the validity of the
7 book value of assets ..."

8 It talks about three techniques, and in the middle
9 it talks about "market valuations", the second bullet
10 point. Do you see that?

11 A. I do, yes.

12 Q. It says:

13 "The market value of assets in the industry or of
14 comparator companies ... in competitive markets (but not
15 the market value of the company or companies under
16 investigation) ..."

17 Here of course the case is about excessive pricing.

18 Now, you do not mention any of that, do you, in your
19 report?

20 A. I think there is -- there is a very important point to
21 be made here, because the way I interpret this is that
22 this is sort of assuming a situation where you are
23 addressing excessive pricing at the level of the company
24 in question. I think Mr Holt and I discuss it in the --
25 or I even refer to it in my own report, that clearly to

1 the extent that market value embeds an element of that
2 excessive pricing, there would be a circularity in using
3 that market value as a measure of the value of the
4 assets.

5 But the issue that we are faced with here is alleged
6 excessive pricing in the case of the App Store. So
7 certainly I would agree with the proposition that were
8 you to think about determining the MEA for Apple as
9 a whole, you would want to start with that market
10 capitalisation and then strip out any element of that
11 that is due to the excessive pricing in the App Store.
12 That is a reasonably straightforward exercise to do.

13 I cannot -- I could give numbers; I fear I would be
14 stepping into confidential -- the sort of closed
15 testimony territory, but it is easy to do that.

16 Q. You have not done it, though, have you? In fact, you
17 did not address this at all in your report, did you?

18 A. No, but you asked me the question and I think that is
19 a valid response to the question, that if we are talking
20 about the validity of using Apple's market
21 capitalisation as a way of getting a handle of the MEA
22 for Apple, I think the answer I gave is a valid one.

23 Q. But the question we are really grappling with, is it
24 not, is whether there are any assets arising out of this
25 intangible value that ought to be on the balance sheet?

1 A. No, that is not what we are -- this is where I think the
2 confusion arises. When you think about a balance sheet,
3 which is obviously -- so we are squarely in accounting
4 territory. There is a plant, there is some property,
5 plant and equipment here. There are some images here.
6 You can identify them sort of individually.

7 Once you step into thinking about this from an
8 economic perspective, that is not the approach that you
9 are taking. You are right when -- or Mr Dudney was
10 right when he said the market capitalisation of Apple is
11 essentially the market -- the present value of the
12 market's expectation of Apple's future cash flows. But
13 another way of thinking about that is it is essentially
14 the market's perception of the value of the collection
15 of assets that Apple has, both tangible and intangible,
16 that will generate those future cash flows.

17 It is very difficult to say, look, Apple has brand
18 value and it is worth half a billion dollars or
19 whatever -- or half a trillion dollars, whatever the
20 numbers are. It is really difficult to do that on an
21 asset by asset basis. But what the market is saying is
22 this is the value that we perceive, based on all the
23 information that we have, of the value of the collection
24 of assets in totality that are going to generate Apple's
25 future cash flows.

1 Again, I make the point that, yes, you would want to
2 strip out any excess pricing to make sure that there is
3 not a circularity issue, but I think that is where the
4 confusion arises. When we are thinking about assets, it
5 is a very different perspective when you are thinking
6 about it from an accounting historic cost-based
7 approach, to thinking about what would it --
8 essentially, what would it cost -- if Apple disappeared
9 off the face of the earth today, what would it take to
10 put it back together again?

11 That is a slightly crude way of putting it, but that
12 is essentially the way I am thinking about it.

13 Q. Okay. We are going to look at how the Competition
14 Commission and the CMA deal with exactly that issue.

15 Just to remind you of the assets which you say are
16 in issue, if we go to {C3/5/64}, again, if we can go
17 back to the assets you list in your -- thank you -- in
18 your report. It is intellectual property, patents,
19 trademarks, brand name and customer loyalty.

20 Now, would you accept that the costs incurred in
21 generating these things are captured on Apple's profit
22 and loss? They are either COGS, OCOGS or OPEX?

23 A. I think that is an impossible question to answer because
24 what does it -- what does it mean? What does it mean
25 even conceptually to think about the costs incurred in

1 building customer loyalty? This is a challenge you face
2 once you step into intangibles.

3 It is easy to ask the question: how much did it cost
4 me in the past to buy this piece of plant or equipment?
5 But to answer the question of: how much did it cost me
6 to build this customer loyalty? How much did it cost me
7 to create this very valuable brand? It is almost an
8 unanswerable question.

9 Q. Building the brand is, in a sense, a product of the
10 investments and the activities of Apple's workforce that
11 generate the brand value, is it not? The products
12 themselves?

13 A. Yes, so ...

14 Q. The money spent on marketing those products, for
15 example?

16 A. But the cost of building or acquiring something does not
17 necessarily translate into -- or even bear any sort of
18 vaguely close relationships with its current value.

19 Q. We are coming to that in a moment. But would you accept
20 that insofar as costs or investments are required to
21 generate these things, they are captured on the balance
22 sheet?

23 A. No, because, and to be clear, I am not saying you can
24 even use costs to begin with. But as you say, maybe the
25 brand value is created by Apple's workforce. So all --

1 maybe the expenses, the salary expenses going back many,
2 many years have contributed to that brand value. So
3 looking at the balance sheet --

4 Q. Those expenses will be captured, will they not?

5 A. No, by definition --

6 Q. Sorry, on the P&L. On the P&L.

7 A. They are captured on the P&L on the year they are
8 incurred, yes.

9 Q. Yes. Can we now look at the Competition Commission's
10 guidelines on market investigation. This is {D2/348}.
11 You have seen this before, I am sure, Dr Barnes?

12 A. I am not so sure I have.

13 Q. Okay, we will go to it. Mr Holt referred to it.

14 If we can now turn, please, to page {D2/348/89}, it
15 deals at paragraph 14 with I think the issue that we are
16 discussing which says:

17 "It may be necessary to make adjustments to
18 accounting data produced in line with UK GAAP. In
19 particular, the following adjustments may be considered
20 ..."

21 Secondly:

22 "The CC may consider the inclusion of certain
23 intangible assets where the following criteria are met.
24 It must comprise a cost that has been incurred primarily
25 to obtain earnings in the future; this cost must be

1 additional to costs necessarily incurred at the time in
2 running the business; and it must be identifiable as
3 creating such an asset separate from any arising from
4 the general running of the business."

5 Can we -- are you familiar with these criteria?

6 Mr Holt referred to them, in fact.

7 A. Yes, I have seen these criteria before, yes.

8 Q. Can we now look, please, at the CMA's online platforms
9 and digital advertising report. This is {AB6/19}. We
10 looked at this a moment ago. Can we please turn to page
11 {AB6/19/31}. This is a part of the analysis of Facebook
12 and it says:

13 "Frontier Economics, on behalf of Facebook, raised
14 a concern that in the work performed in this appendix
15 ... we did not consider Facebook's intangible assets,
16 which were assessed in detail in the statutory audit
17 services market investigation."

18 Then:

19 "Intangible assets which were identified by Frontier
20 Economics as not recognised on the company's balance
21 sheet but contributing significantly to the company's
22 profitability were: brand, user base, highly skilled
23 workforce, Facebook's technology, patents and
24 trademarks, customer relationships, computer software."

25 That is a similar argument to you, is it not?

1 A. It is, yes.

2 Q. Then what the CMA says is:

3 "In line with existing guidance and past cases,
4 these intangible assets were not included in the
5 assessment of Facebook's asset base. The CMA's normal
6 practice is that these investments in the day-to-day
7 operations should not be included in capital for the
8 purpose of calculating ROCE."

9 Then it cites some previous cases.

10 Then it says:

11 "In order to demonstrate that its costs related to
12 investment in intangible assets which should be
13 included ... we would normally expect Facebook to
14 provide detailed information about its investments in
15 its intangible assets which met the criteria as set out
16 in the guidelines."

17 Those are the criteria we have just looked at, those
18 three bullet points.

19 Then it talks about a sensitivity analysis which we
20 are going to come to, but essentially it says at 123:

21 "Absent the level of detailed information required
22 from Facebook to determine the level of R&D and sales
23 and marketing expenses which may fit the criteria of an
24 intangible asset, we have undertaken a sensitivity
25 analysis."

- 1 We are going to come to the sensitivity in a minute.
- 2 But you do not say that these criteria are actually
- 3 satisfied, do you?
- 4 A. That is not the argument that I am making.
- 5 Q. Let us take it one step at a time, please, Dr Barnes.
- 6 You do not say that these criteria are actually
- 7 satisfied?
- 8 A. No.
- 9 Q. In fact, it is fair to say that although Mr Holt raised
- 10 this in his response in the joint experts' statement,
- 11 you did not address this at all?
- 12 A. No.
- 13 Q. So you are not saying there are any intangibles giving
- 14 rise to assets that ought to be on the balance sheet?
- 15 A. I am saying that there is an enormous amount of
- 16 intangible value in Apple. I am not saying that they
- 17 should be on the balance sheet.
- 18 Q. So we have the costs, insofar as there are any, incurred
- 19 in these intangibles which are in the P&L. We have
- 20 intangible assets that you point to but you do not say
- 21 they should be on the balance sheet, correct?
- 22 A. Correct.
- 23 Q. But you say, even so, because of the value that
- 24 investors would pay if they were trying to buy Apple,
- 25 that this is not a reasonable assessment of the return

1 on capital employed?

2 A. So I think to answer that question, it is important to
3 remember that we are not calculating return on capital
4 employed in a vacuum. It is the first part of
5 a calculation. So we are going to calculate the return
6 on capital employed, and then we are going to compare
7 that with the weighted average cost of capital, and the
8 weighted average cost of capital is set in the financial
9 markets. It is basically sort of saying this is the
10 return that investors demand from investing in this
11 particular company, and if they do not -- if they cannot
12 expect to earn that return they will take the money out
13 and invest it somewhere else that will offer them that
14 return.

15 So immediately you move into the realm of comparing
16 return on capital employed to weighted average cost of
17 capital, it has -- to my mind, the return on capital
18 employed has to take into account market values.

19 I am not sure how useful this analogy is, but if you
20 think about a situation where a hundred years ago you
21 bought a piece of land for £150 and that land is now,
22 for whatever reason, worth £100 million. Saying: I will
23 allow you to earn a rental yield of 10% on the £150 that
24 you paid a hundred years ago, that is problematic, and
25 I think to me that is the situation that we face here.

1 If you say -- if you are going to -- the ROCE versus
2 WACC calculation is essentially a comparison between the
3 profits that Apple or the App Store are actually earning
4 and the profits that they should be allowed to earn in
5 a competitive setting. So if those two things are not
6 computed on a like-for-like basis, then the
7 conclusion -- the comparison is a completely spurious
8 one.

9 Q. So you think that when the CMA looked at this in the
10 case of Facebook, it should have said, well, it does not
11 matter whether this gives rise to any asset, we should
12 just look at the market capitalisation in Facebook?
13 That is your suggestion, is it not?

14 A. It is certainly a starting point.

15 Q. The CMA was just completely wrong to have failed to take
16 that approach?

17 A. All I can say is that that approach could lead to
18 a situation where -- let me -- sorry, let me try again.

19 If you take that approach, and imagine applying it
20 to a situation where there is no dispute at all about
21 sort of anti-competitive practices, this is a company
22 that operates in a perfectly competitive industry and
23 you say, we are going to impose a price cap and we are
24 going to put that price cap at a level which allows you
25 to earn just the weighted average cost of capital on the

1 initial cost of the assets that you acquired. You will,
2 in many, many cases, end up in a situation where you are
3 saying to investors: you are not entitled to earn a fair
4 rate of return from your investment.

5 Q. Can we look now at how the CMA dealt with this even in
6 the case of Apple itself. If we go now, please, to the
7 mobile ecosystem's appendix. {AB6/28/22}. We can see
8 Apple making the same argument you make to the CMA but
9 unsuccessfully. This time it is under the heading of
10 "Sensitivities to the definition of intangible assets",
11 and you agreed with me earlier that in the end the CMA
12 made no adjustments to Apple's book value.

13 If we look at paragraph 83, it says:

14 "Apple stated that it is one of the largest firms in
15 the world in [respect] of R&D investment and it has
16 [a] significant brand value."

17 So this is exactly the argument you are making, is
18 it not?

19 A. Yes.

20 Q. Then they suggested it is therefore inconceivable that
21 it had no intangible assets. So perhaps here it is not
22 being quite as bold as you, just to say its market value
23 is indeed the figure which ought to go into the ROCE
24 calculation.

25 But let us look at what the CMA did. It says:

1 "Apple further argued that although the inclusion of
2 intangible assets may not materially affect ROCE ... the
3 accumulation of intangible assets is likely to affect
4 (and lower) the ROCE in future ...

5 "Apple calculated, as an illustrative example ..."

6 Just pausing there, "illustrative".

7 "... an alternative scenario for ROCE ... taking
8 a different approaching to measuring intangible assets."

9 This was the capitalisation of R&D costs.

10 "... adding them back to EBIT, and took a similar
11 approach to advertising expenses and amortised its
12 investments in R&D and brand over a ten-year period."

13 So it provided that illustration.

14 Then the CMA said at 86:

15 "... there are likely to be some uncapitalised
16 intangible assets, [yet] we consider that these are
17 likely to be less than under Apple's assumptions. Yet
18 even [then] ... very high levels of ROCE."

19 So here, there is no suggestion that what should be
20 done is some form of just substitution of the market
21 value, and what I am suggesting to you is that this
22 orthodox approach by the CMA is the right way to do
23 this?

24 A. I do not know why or how the CMA reached the conclusions
25 that it did, and I do not know why Apple provided that

1 specific illustrative example. All I can do is sort of,
2 based on my sort of experience and expertise, tell you
3 what I believe is the right way to do it.

4 Q. So probably for about the fifth time today, you are
5 saying the expert regulator just got this wrong?

6 A. I think that is an overly stark sort of
7 characterisation. Obviously I was not involved in this
8 investigation. I have had no communications with them.
9 I do not know -- I can read what is in front of me,
10 but ...

11 Q. This investigation the CMA was carrying out was not an
12 excessive pricing investigation at all. According to
13 you, what it should have done is said, well, Apple's
14 market capitalisation is 2.7 trillion and that should
15 form the basis of our ROCE calculation, never mind
16 whether there are any intangible assets to add to the
17 balance sheet?

18 A. What I am saying is that if you base a ROCE calculation
19 on book value of equity of 62 billion when the market
20 capitalisation is 43 times higher, then -- then an
21 inevitable consequence of that is that investors do not
22 earn a fair rate of return on their investment.

23 Q. Dr Barnes, what I am going to put to you is that the
24 approach of the CMA, where it looked at the costs of
25 these investments and put them in the P&L and the assets

1 that put them on the balance sheet was appropriate, and
2 it did not capitalise the intangible assets and it was
3 right not to do so. You do not accept that?

4 A. I do not, no.

5 Q. But you are not -- just to be clear, though, you are not
6 arguing in this case that there should be any
7 capitalisation of intangible assets in the case of the
8 App Store?

9 A. What I am saying is that -- so that question I think is
10 predicated on an assumption that you start with the book
11 value balance sheet and make some adjustments to it.

12 Q. Yes, that is the CMA's approach.

13 A. I am saying that the appropriate place to start is the
14 data point that you have in terms of the market value of
15 the assets. So certainly if I start with the
16 2.7 trillion, I am not going to be adjusting for the
17 capitalisation of R&D because that is already embedded
18 in there. My point is that capitalisation of R&D is
19 moving, to use the terms I used in the report, is
20 taking -- it is accounting for a tiny part of that
21 wedge.

22 DR BISHOP: May I ask a question.

23 Mr Barnes, if you start with the current market
24 value, the current market value will capitalise the
25 expected stream of revenues going forward. Those, you

1 said this earlier I believe, they may include, and the
2 allegation here is that they do include excessive
3 returns. So are you not just baking in -- and let me
4 put one further point.

5 A. Yes, of course.

6 DR BISHOP: You expressed some tenderness towards investors
7 and I understand that. On the other hand, the
8 investors, where there is a company earning very high
9 returns from arguably illegal activities, or at least
10 excessive profits, when you buy the share in that
11 company you are taking a bet that the regulator will not
12 intervene.

13 Are you saying that the courts and competition
14 system should always validate the choice of the
15 investors given the maximum value of the bet?

16 A. No, no. That is a very good point. Let me try and
17 answer this by using some hypothetical numbers so I do
18 not step into confidential sort of territory.

19 Within the various reports we obviously have the
20 App Store's actual revenues and we have sort of
21 counterfactuals scenarios that basically say if the
22 commission was set at a competitive level, this is what
23 the revenues would be.

24 So what I could do, and just for the sake of
25 argument I will make these completely divorced from the

1 real numbers, let us say that the actual revenues in
2 a given year were 50 and the counterfactual competitive
3 revenues would have been 20. So there is 30 of excess
4 revenues in that year. The market sees the revenues
5 that Apple is generating and bakes that 30 of excess
6 profit, excess revenue, into its market capitalisation.

7 How would it do that? Well, essentially it would
8 calculate a present value of those excessive prices,
9 excessive revenues. So let us say that the cost --
10 again, making it easy, the cost of capital is 10% and
11 there is no expected growth in revenues, a standard
12 calculation would say you put a multiple of 10 on it.
13 So in other words, you would -- embedded within the
14 market value of Apple at that point in time would be 300
15 of expected excessive pricing going into the future.

16 So that is what you could do here. You could say,
17 okay, well, even if we accept -- and to be clear, I am
18 not, but even if we accept that there is excessive
19 pricing in the App Store, I can do that calculation and
20 I can do it very easily, and I can take the 2.7 trillion
21 and I can take out the part of that 2.7 trillion that is
22 accounted for by the issue that you just raised and
23 without, I am not giving any numbers, but it will not
24 move the needle very much.

25 MR WARD: I have put my case on this and I want to just show

1 you how Mr Dudney dealt with this issue in sensitivity
2 which you criticise.

3 Can we go, please, to Mr Dudney's second report at
4 {C2/9/14}. This was an amortisation of R&D, and in
5 fairness you do not even say that this is relevant, but
6 let us look at what Mr Dudney did. At 5.2(b) we can see
7 he capitalised Apple's R&D -- sorry, the App Store R&D
8 on a straight line basis over a period of four years.

9 If we now turn, please, to Mr Holt's third report,
10 {C2/10/79}. He considers the results of this
11 sensitivity and he says at 201:

12 "In this regard, Mr Dudney has tested the impact on
13 the App Store's profitability of capitalising the
14 implicit R&D investments he allocates to the App Store
15 instead of being expensed to the P&L ..."

16 I think you accept in your report that expensing to
17 the P&L is the ordinary way of dealing with R&D?

18 A. Yes.

19 Q. That is right, is it not?

20 A. Yes.

21 Q. So capitalising it would be very much by way of an
22 exception?

23 A. Yes, it would not be -- almost certainly in the US it
24 would not be GAAP compliant.

25 Q. We saw that the CMA looked at this as a sensitivity both

1 in the Facebook case and in the Apple case. We have
2 already looked at that.

3 So what Mr Holt says is if we look now at the top of
4 page {C2/10/80}, he says:

5 "His findings [meaning Mr Dudney's] show the
6 App Store still achieves high profitability across all
7 the profitability metrics he assessed, including
8 operating profit, ROA and ROCE, for each year of the
9 relevant period at the different commission levels."

10 Of course, what we are really concerned with is 30%,
11 albeit the effective commission is a bit lower. You see
12 the figures he gives there.

13 Then he concludes at the bottom of paragraph 202:

14 "This shows that my finding of the App Store's
15 excessive profitability is not sensitive to whether the
16 R&D investments are treated as part of the OPEX expenses
17 or capitalised as intangible assets ..."

18 Do you agree with that conclusion?

19 A. That is a very limited conclusion and, yes, I agree with
20 it.

21 Q. You made some criticisms of Mr Dudney's sensitives and
22 I am just going to deal with those, just to be
23 abundantly cautious that I have put my case, even though
24 I think you have essentially disavowed any reliance on
25 this.

1 Can we look, please, at what you say, and this is
2 back in your report, {C3/5/67}. At 130 you make two
3 criticisms of Mr Dudney's approach to this
4 capitalisation. You say, firstly, he is capitalising an
5 arbitrary amount of R&D expenditure, and that really is
6 the issue you debated with Mr Armitage this morning, is
7 it not?

8 A. It is, yes.

9 Q. So we do not need to go back to that. But you also say
10 that it is arbitrary because it is amortised on
11 a straight line basis over four years, and you say:

12 "By contrast, a true attempt to estimate ROCE on the
13 basis of economic value would require the capitalisation
14 of the R&D expenditure ... in order to generate the
15 App Store's revenue, with amortisation ... over the
16 period that it is expected to benefit from it."

17 It is right, is it not, that Apple has adduced no
18 evidence at all of how long it expects to benefit from
19 the R&D incurred during the period of this claim?

20 A. I do not think it does. I think that is a very
21 difficult question to answer.

22 Q. Sure. What Mr Dudney has done here is go with
23 four years in a straight line. Can I show you now
24 {D1/775/38}. Let us start on the first page, {D1/775}.
25 This is Apple's 10-K in fact for 2013 but this is just

1 illustrative.

2 Can we please turn to page 38 and go to the bottom.
3 This is under the heading "Property, plant and
4 equipment".

5 What it says is:

6 "Depreciation on property, plant and equipment is
7 recognised on a straight-line basis over the estimated
8 useful lives of the assets, which for buildings is the
9 lesser of 30 years or the remaining life ... between one
10 and five years for machinery and equipment."

11 Then moving to the next line:

12 "Capitalised costs related to internal-use software
13 are amortised on a straight-line basis over the
14 estimated useful lives of the assets, which range from
15 three to five years."

16 So what Mr Dudney has done is broadly reflective of
17 Apple's approach to property, plant and equipment,
18 putting aside buildings, is it not?

19 A. Yes, and I think that illustrates the challenges that
20 you face when you are looking at intangibles. It is
21 relatively straightforward to buy a piece of equipment
22 and estimate how long you are going to get benefits from
23 it. How long do you get benefits for a piece of R&D
24 for?

25 Q. Can we now turn back, please, to {AB6/19}. This is

1 again the appendix D to the online platforms report, the
2 profitability Google and Facebook annex. If we turn now
3 to page {AB6/19/32}, this is where -- again, we looked
4 at this already -- the CMA is grappling with exactly the
5 argument that you are running.

6 At 123 at the bottom of the page, it says:

7 "Absent the level of detailed information required
8 from Facebook to determine levels of R&D and sales and
9 marketing expenses which may fit the criteria of an
10 intangible asset ..."

11 You would accept we do not have that information
12 here either, do we?

13 A. No.

14 Q. Then:

15 "... we have undertaken a sensitivity analysis which
16 capitalises a percentage of these expenses."

17 I think in our case, Mr Dudney capitalised all of
18 them.

19 Then it says:

20 "The intangible assets which may fit the criteria
21 are technology and computer software and they applied
22 Facebook's depreciation policy for its computer
23 software, office equipment and other for two to
24 five years."

25 Would you agree that in the absence of better

1 information, what Mr Dudney did here was reasonable in
2 terms of amortisation?

3 A. I do not think I can say one way or the other. It is
4 a choice.

5 Q. Supposing a longer period was used for amortisation, the
6 effect would be the assets would stay on the balance
7 sheet for longer, would they not?

8 A. They would, yes.

9 Q. But it would also mean there was less depreciation
10 expense each year and therefore higher operating margin?

11 A. Yes, that is correct.

12 Q. So we actually have no reason to think the net effect
13 would be materially different if one changed the
14 amortisation period?

15 A. No, without doing the analysis I do not know. I mean,
16 if you -- obviously we are not talking about land here,
17 but land is assumed to have an infinite useful life, so
18 it is not subject to any depreciation, and exactly, you
19 know, moving from a policy of depreciating over
20 four years to a policy, or amortising it over four years
21 to 10, 15, 20, 50, whatever, you cannot determine the
22 overall impact without doing the underlying analysis.

23 Q. Can we look now at your report again. This time we are
24 going to -- sorry, I think I might have a wrong
25 reference. Just give me a moment. Yes, it is page

1 {C3/5/46}. You do your own sensitivity on amortisation
2 and you say:

3 "I have reproduced the tables in Mr Dudney's report
4 on the basis of the following arbitrary allocation of
5 ... OPEX."

6 You say:

7 "Allocate Apple's SG&A expenses using the same
8 method and allocate 50% of Apple's annual R&D expenses
9 to the App Store ..."

10 You amortise over ten years.

11 If we just move ahead a couple of pages, please, to
12 paragraph 89 on page {C3/5/49}.

13 You say, paragraph 89, second line:

14 "To be clear, I am not asserting that this analysis
15 provides the 'correct' answers."

16 So you are not saying that 50% R&D allocated over
17 ten years is a plausible approach, are you?

18 A. I am not making any statement one way or the other of
19 whether it is plausible, I am just saying it is
20 illustrative, and it is equally as arbitrary as what
21 Mr Dudney did.

22 Q. I see. Indeed, it is your case that none of this can be
23 done meaningfully anyway because you cannot allocate R&D
24 meaningfully to the App Store?

25 A. Correct.

1 Q. Can we look now at another point you make about R&D on
2 page 69, {C3/5/69}. You say at paragraph 133:

3 "Another flaw in Mr Holt's approach is that he fails
4 to recognise the ex post nature of his analysis ...
5 Investments (particularly in R&D) are inherently risky
6 at the time the investment is being made, the future
7 cash flows, if any, that will result from the investment
8 are uncertain. Indeed, this ... explains why R&D is
9 expensed immediately ..."

10 And then if we move on, please, to page 71,
11 paragraph 136. Towards the bottom of page 136, the last
12 six lines, you say:

13 "This has implications for Mr Holt's conclusion
14 that, but for the conduct, the App Store's purported
15 excessive profitability would be competed away -- an
16 assessment of the incentives faced by a potential new
17 entrant would need to account for not only the
18 significant amounts of investment ... that would be
19 incurred but also the uncertainty as to whether it would
20 be successful ..."

21 To be clear, what we are concerned with here is the
22 profitability of the App Store, is it not? That is what
23 you have been asked to opine on?

24 A. That was the exam question in terms of responding to
25 Mr Dudney, but here I am responding to Mr Holt.

1 Q. Indeed. But even in respect of Mr Holt, you are not
2 instructed, are you, to consider the competitive
3 counterfactual. That is a matter for the economists in
4 this case.

5 We can look at your instructions together,
6 Dr Barnes, if you are in doubt about it.

7 A. Let us look at the instructions.

8 Q. Let us look at the instructions. It is {C3/5/4}.
9 Paragraph 7. By all means read this to yourself. It
10 goes over to the next page.

11 A. Can we go to the next page?

12 Q. Yes, please {C3/5/5}.

13 A. So I think subparagraph (c) is the relevant one here.

14 Q. This is about the profitability metrics, isn't it? It
15 is no part of your instruction to consider the
16 competitive counterfactual. That is a matter for the
17 economists in this case?

18 A. I am not -- I do not believe I am considering the
19 competitive counterfactual. What I am -- at the end of
20 subparagraph (c) I was asked to consider the extent to
21 which, if at all, this analysis provides support for
22 Mr Holt's opinion, which leads to the conclusion of
23 profitability. The purpose of paragraph 136 is to
24 say -- is simply to point out the ex post nature of the
25 exercise.

1 All I am doing here is to say that if you make an
2 investment that you do not know is going to -- for sure
3 is going to be successful, and at the time you make the
4 investment it is basically zero NPV, and the coin flip
5 turns up heads and things go well, you cannot use that
6 fact to conclude that at the time you made the
7 investment you knew that it was going to be profitable.
8 That is the point that I am making here.

9 Q. Indeed. But we are doing a ROCE/WACC analysis, not an
10 NPV analysis, aren't we?

11 A. But as part of my consideration of the ROCE versus WACC
12 analysis, there is a discussion of how -- of why NPV/IRR
13 should be taken into account.

14 Q. Indeed. But we covered at the beginning of our
15 discussions that although NPV and IRR can be used, it is
16 also conventional to use a ROCE/WACC analysis which is
17 what we are engaged in. Would you accept that?

18 A. Again -- yes, it has certainly been used before,
19 I cannot remember exactly where, but I do make note in
20 the report, or possibly one of the -- in the joint
21 report, that the statement in the Oxera report about IRR
22 not having been used by competition authorities has been
23 a little bit somewhat superseded, because it has been
24 used. I cannot remember exactly --

25 Q. No one is suggesting it was never used. The point I put

1 to you, rather, is the usual method of the CMA is
2 ROCE/WACC and indeed that is conventional?

3 A. Yes.

4 Q. Thank you. So what I suggest to you is the issues you
5 raise here make no difference to the ROCE/WACC analysis,
6 whatever the position may be on NPV/IRR?

7 A. I think it is -- if I just read 7(c) again carefully.
8 (Pause).

9 So you are correct to say that the assignment I was
10 given does not specifically mention NPV or IRR. I was
11 asked to consider both the analysis -- the comparison
12 that Mr Holt did and the way in which he used that to
13 reach his conclusion about the excess profitability.

14 Q. You have not done an NPV or IRR assessment yourself,
15 have you?

16 A. No, for the very good reason that -- we have talked at
17 length about how you might go around determining MEA for
18 Apple. We have not yet sort of gone through, I am sure
19 we will, the challenges, to put it mildly, of figuring
20 out what that would be for the App Store.

21 Q. I have already put to you Mr Holt's case on that. But
22 you have no NPV/IRR analysis to compare to what Mr Holt
23 and Mr Dudney have done, have you?

24 A. No.

25 Q. There is just one more point I want to make on ROCE and

1 probably then it would be convenient to break.

2 Can we go this time to the joint experts' statement
3 at {C4/5/11}. It is at the bottom of the page. It is
4 proposition 11 which says:

5 "Mr Holt's conclusion regarding the App Store's
6 purported 'excessive profitability' relies on a purely
7 subjective determination of the extent to which ROCE can
8 exceed the WACC under competitive market conditions."

9 I hazard a guess you might have drafted that,
10 Dr Barnes, but in any event you agree with it?

11 A. Yes.

12 Q. You say -- well, Mr Holt notes:

13 "The level of excessive profit cumulatively over the
14 relevant period is [a confidential number] which is
15 significantly greater than I estimate" - this is
16 quoting, Mr Holt, these are not yours. "[T]hat I
17 estimate would reflect fair pricing. I am not suggesting
18 that any excess profit above a benchmark...would represent
19 profit arising from unfair prices. In fact, taking 15%
20 as the counterfactual commission, I would expect the App
21 Store to have earned a cumulative profit above WACC of
22 [31 billion]."

23 You appreciate his competitive counterfactual is
24 15%.

25 "That profit, while clearly a substantial

1 alternative, could be argued to represent the
2 fair degree of producers' surplus."

3 That is Mr Holt.

4 Then you say:

5 "He appears to have no scientific basis on which to
6 conclude that 31.4 billion is not due to unfair pricing
7 while the remaining [redacted] represents excess
8 profits ..."

9 I am so sorry, I have read a confidential number.

10 I am so sorry.

11 THE CHAIRMAN: The best thing is to keep going.

12 MR WARD: I am very sorry.

13 You make the point that if 15% is not unfair then
14 how can we say that 30% is unfair.

15 What I am really going to suggest to you is that
16 what Mr Holt has done here, as I think you know, is
17 carry out a profitability analysis to show the price is
18 excessive. Then he has considered fairness based on
19 what would be the price in workable competition. But
20 those issues of fairness in workable competition, they
21 are outside your instructions, are they not?

22 A. They are, yes.

23 Q. So to the extent it is within your instructions at all
24 to discuss this, there is nothing about this that is
25 illogical or purely subjective. It is just a judgment

1 on the application of the fairness test. Would you
2 accept that?

3 A. So I think in the question you said there is nothing
4 that is subjective but it involves judgment which --

5 Q. It is not --

6 A. -- seems sort of to be ...

7 Q. To call it a purely subjective determination, if all you
8 mean by that is judgment was applied on the evidence;
9 a reasonable judgment applied on the evidence we can
10 agree. But if it is intended to suggest something more
11 arbitrary then we do not agree?

12 A. So the point I was trying to make here is that Mr Holt
13 is essentially saying, I have a diagnostic tool here,
14 and that diagnostic tool is a comparison of ROCE versus
15 WACC, and that diagnostic tool will enable you to
16 determine whether or not there is excessive pricing.

17 To me, it follows logically that if that diagnostic
18 tool is to have any probative value, it has to be the
19 case that when you apply that diagnostic tool to
20 a competitive situation there is no excess, because
21 otherwise there is no -- it has no ability to
22 distinguish sort of excess profitability from normal
23 profitability.

24 So Mr Holt, completely independently from anything
25 I have looked at, has said 15% is a counterfactual

1 competitive commission, and even under that
2 counterfactual competitive commission there is still an
3 enormous amount of excess profit. It is actually not
4 31.4, I think he added the numbers up incorrectly. It
5 is more like 43.

6 So he is essentially saying that in his -- sorry,
7 the point that I was making is that I just do not see
8 any basis for concluding that a significant fraction of
9 the alleged excessive pricing is fine but the rest of it
10 is not. To me, that is just not scientific.

11 Q. I put to you, and indeed, sir, obviously this takes us
12 into the issues of fairness or limb 2 of the test which
13 no doubt Mr Holt will be questioned on in the economic
14 evidence.

15 Sir, if that is a convenient moment, I am about to
16 move on to a new topic.

17 THE CHAIRMAN: Yes, we will take a ten-minute break.

18 MR WARD: I should say we are doing well.

19 (3.08 pm)

20 (A short break)

21 (3.19 pm)

22 MR WARD: Now, Dr Barnes, we are going to look at your
23 criticisms of the balance sheet Mr Dudney constructed
24 for the App Store. Could we look, please, at {C3/5/49}.
25 This is where your critique starts which goes over about

1 three pages.

2 You say, heading "C" above paragraph 90:

3 "It is not possible to [create] a meaningful balance
4 sheet for the App Store."

5 So that is -- if I may say, your theme has
6 reappeared in respect of the balance sheet, has not it?

7 A. It has, yes.

8 Q. At paragraph 92, {C3/5/50}, you in a sense ask the
9 question, what is Mr Dudney doing? Although Mr Dudney
10 states he estimates the balance sheet, he does not
11 explain what he means by the App Store's balance sheet.

12 I hope it would be clear from his report. He
13 appears to be making the implicit assumption that if
14 Apple were to be split into separate entities, one
15 operating the App Store, the aggregate would be
16 identical to Apple's balance sheet. In other words, it
17 is possible to carve up the balance sheet in
18 a meaningful way, notwithstanding it is an integrated
19 ecosystem, and of course you say then it is inconsistent
20 with the notion of integrated ecosystem.

21 So again, we are in a situation where any measure of
22 supervision that requires a balance sheet for the
23 App Store or another part of Apple's business, whether
24 for competition, financial services or anything else, is
25 simply impossible according to you, is that not right?

- 1 A. Yes.
- 2 Q. Of course the App Store is not an independent company,
3 is it, obviously. So then it goes without saying that
4 any attempt to make a balance sheet is going to involve
5 some method of allocation of the assets and capital
6 employed, is it not?
- 7 A. Let me just make the following point, that we obviously
8 had a long discussion this morning about cost allocation
9 and there is clearly some dispute about how to do it,
10 but I will acknowledge that cost allocation is -- it is
11 covered in the accounting literature. It is a well
12 understood approach.
- 13 I have not -- never seen, and I have not found any
14 reference in those textbooks, to this notion of
15 allocation in order to derive a balance sheet.
- 16 Q. What Mr Dudney has done here is apply his judgment to
17 systematically allocate them, has not he?
- 18 A. Frankly, I am not sure there is any judgment involved.
19 It is a mechanical revenue-based allocation.
- 20 Q. That in itself is an exercise of judgment, is it not,
21 Dr Barnes?
- 22 A. It is an exercise of judgment if it is based on solid
23 economic reasoning. If it is just: this is what I am
24 going to do and here is the result, I am not sure how
25 much judgment is involved.

1 Q. The reasoning was talked about earlier this morning.

2 Can we look at {C3/5/49}, please. This is your
3 paragraph 90 where you explain what ROCE is. It says in
4 the fourth line:

5 "It is a ratio of a measure of return (ie profit)
6 and a measure of the balance sheet resources ... used to
7 generate that return."

8 This formulation itself reflects the obvious facts
9 that the assets are used to support the generation of
10 the return, are they not?

11 A. It is a question of which assets and which capital
12 employed.

13 Q. Indeed. What I am suggesting to you is that Mr Dudney's
14 approach reflects this logic.

15 A. I think we are back in the realm of an answer I gave
16 earlier.

17 Q. We are.

18 A. Which is that if the argument is all of these resources
19 are used to generate revenues, then any allocation is
20 based on revenues, end of story.

21 Q. It was indeed covered this morning and Mr Armitage has
22 put our case on that.

23 I want to look now at the three specific points that
24 you make on the balance sheet. That starts at page 51.
25 In fact, it is almost all on page {C3/5/51} at

1 paragraph 93. But the starting point is that you have
2 cited no evidence at all from Apple about which assets
3 it actually uses for the purpose of the App Store, have
4 you?

5 A. I have not, because I am not aware of any evidence that
6 suggests that Apple believes it is possible to do that.

7 Q. You have not identified any assets that Mr Dudney has
8 actually failed to include, have you?

9 A. Apart from the -- we are back in the book value question
10 again -- apart from the 2-point odd trillion of
11 intangibles, no.

12 Q. No, okay. I am going to suggest to you that nothing in
13 your criticism gives rise to any material concerns about
14 Mr Dudney's analysis.

15 Let us look now at what you say in paragraphs 93 and
16 94. In paragraph 93 you say:

17 "For example, based on a consideration of the terms
18 on which Apple purportedly pays developers, Mr Dudney
19 allocates [8 billion odd] of Apple's FY2023 accounts
20 payable of [62 billion] to the App Store."

21 It might be useful to see what Mr Dudney actually
22 did before we look at your criticism. That is at
23 {C2/7/53}. So this is under the heading of "Accounts
24 Payable". He says -- there is a word that mysteriously
25 is treated as confidential but I will try to respect it:

1 "When a consumer makes a purchase on the App Store,
2 the App Store considers this aggregate amount to be the
3 [redacted] for the App Store purchase. However the [now
4 not confidential word] are not equivalent to revenues
5 recorded ... This is because the App Store charges
6 a commission on app and in-app purchases. Therefore,
7 the App Store's revenue (in simplified terms) is 30% of
8 the transacted price, and the remaining 70% will be
9 remitted to the ... developer.

10 "In the period between the purchase and the point at
11 which Apple pays the developer, the App Store will have
12 a payables balance ... on its balance sheet of 70% of
13 the value of the transaction. I am aware that Apple
14 pays its developers 45 days following the last day of
15 a given month."

16 Then over the page:

17 "I make my allocation in respect of accounts payable
18 by:

19 "(a) calculating the implied billings of the
20 App Store, assuming the actual weighted average
21 commission rates achieved by the App Store in the
22 relevant period;

23 "(b) multiplying the implied billings by the
24 percentage that is remitted to developers; and

25 "(c) dividing the annual amount owing to developers

1 by 365 days and multiplying the result by 45 days to
2 reflect Apple's payable terms with developers."

3 So that is what Mr Dudney actually did. I think it
4 is fair to say you make no criticism of any of that in
5 itself, do you?

6 A. That is correct.

7 Q. But let us look at what you do say which is at
8 {C3/5/51}.

9 You say, this is in the third line:

10 "However, he fails to consider how accounts payable
11 arise in other areas of Apple's business (for example,
12 payments to suppliers of the raw materials used in the
13 production of the iPhone). Consequently, he has no
14 basis for determining the extent to which the amount he
15 has allocated to the App Store is reasonable."

16 Now, it is right to say, is it not, that there is no
17 evidence from Apple about some accounts payable that
18 ought to be included which Mr Dudney has omitted, is it
19 not?

20 A. That is correct, yes.

21 Q. Your example is completely hypothetical, is it not?

22 A. No, I do not believe it is hypothetical to assume that
23 Apple pays for raw materials and pays with a delay.

24 Q. It is hypothetical in the sense that the suggestion that
25 this should somehow be allocatable to the balance sheet

1 for the App Store, there is no factual basis for that?

2 A. No, that is not the point I am making. What I am saying
3 is Mr Dudney has adopted what, on the face of it,
4 appears to be a reasonable approach to determining the
5 accounts payable for the App Store, but what he hasn't
6 done is said: let me look at the other parts of the
7 business and figure out, adopting the same or similar
8 approach, what the outcome would be and see whether
9 I end up in aggregate with the App Store's -- so with
10 Apple's total accounts payable.

11 So he is taking one piece and, as I acknowledge,
12 what he is doing does not appear so unreasonable, but he
13 has just failed to sort of sanity check it against other
14 data points.

15 Q. But you have come up with absolutely nothing that you
16 say he should have considered and failed to?

17 A. Mr Dudney is putting forward -- he is affirmatively
18 saying this is an approach that I believe is
19 appropriate, and my point is that he has not supported
20 that.

21 Q. I think we have to agree to disagree that far.

22 Let us look at your next point. This is PPE,
23 property, plant and equipment. You say:

24 "By contrast, the amount of property, plant and
25 equipment ... allocated ... represents 6.1% of the

1 balance sheet because it is based on revenue allocation.
2 Mr Dudney provides no explanation as to why he believes
3 there should be a simple linear relationship between PPE
4 and revenues -- once again it is arbitrary."

5 We have talked about the substance of that already.

6 Can I just show you what Mr Dudney says. It is at
7 {C2/7/52}. It is the bottom of the page, the last
8 paragraph:

9 "I understand that the majority of Apple's PPE
10 relates to land and buildings, machinery, equipment and
11 internal-use software. Although the App Store is
12 a digital marketplace, it still requires PPE, therefore
13 I consider it reasonable to include an allocation of it
14 ... using my revenue allocation methodology."

15 Dr Barnes, you have given no reason to suggest that
16 is an underestimate, still less a material
17 underestimate, have you?

18 A. I am not -- I do not think I claimed that it is an
19 underestimate or an overestimate. My point is it is an
20 arbitrary estimate.

21 Q. Yes, we have certainly discussed that.

22 Let us look now at your final point, please.
23 {C3/5/51}. Paragraph 94. This is something you say is
24 particularly problematic.

25 "Particularly problematic is the fact that none of

1 the \$132 billion in marketable securities is allocated
2 to the App Store."

3 Shall we just see if we can agree what marketable
4 securities are. I hope you will agree; this ought to be
5 easy. These are short and long-term liquid assets that
6 can be turned into cash?

7 A. Yes.

8 Q. Thank you. Let us again look at what Mr Dudney said
9 about this. This is {C2/7/54}. A3.4 towards the bottom
10 of the page:

11 "In the relevant period, the Apple balance sheet
12 contained significant marketable securities assets of
13 between ..."

14 Then there are some large number ranges there, up to
15 194 billion.

16 Then what Mr Dudney says is:

17 "I understand that Apple's large marketable
18 securities balances may in part be a function of its
19 decision not to repatriate profits earned in overseas
20 jurisdictions back to the United States due to tax
21 liabilities [that is] may generate. For example, in its
22 Form 10-Q [which is a quarterly version of the 10-K in
23 simpler terms] relating to the first quarter of FY17,
24 Apple noted on the first day of the financial year its
25 foreign subsidiaries held 216 billion in marketable

1 securities, which I observe was the total amount of
2 marketable securities held at that time. Apple further
3 noted that amounts held by foreign subsidiaries are
4 generally subject to US income taxation on
5 repatriation ..."

6 He says:

7 "Consequently, I consider the marketable securities
8 ... not to represent capital employed ... but instead to
9 be excess profits that have been retained but not
10 otherwise reinvested in the business."

11 Thus far, it is right to say, is it not, Apple has
12 adduced no evidence at all about how its marketable
13 securities are used?

14 A. I think that is right.

15 Q. But even then, however, Mr Dudney makes a conservative
16 assumption:

17 "... I am aware that Apple may use some of its
18 marketable securities as collateral against commercial
19 paper and other debt instruments in the US."

20 If we look at that footnote, it actually comes from
21 an article in the Wall Street Journal rather than any
22 information that Apple has provided in this trial. But
23 even so, Mr Dudney says:

24 "In this instance, the marketable securities used as
25 collateral would properly be considered operating assets

1 of the App Store and should be allocated to it. The
2 same net effect can be achieved by not recognising
3 either the marketable securities, or the debt against
4 which they serve as collateral.

5 "Therefore, for simplicity, in order to properly
6 reflect the assets and liabilities of the App Store in
7 my analysis, I do not include any marketable securities
8 in the App Store's balance sheet and also do not
9 recognise any commercial paper or current portion of
10 long-term debt. This treatment has the effect of
11 removing any excess profits, net of any associated
12 short-term debt, from my calculation ..."

13 So on the basis of this Wall Street Journal article,
14 Mr Dudney has carried out a netting off exercise, has he
15 not?

16 A. Yes.

17 Q. Would you agree there is no information from Apple to
18 suggest that anything that Mr Dudney has done here is,
19 in a sense, wrong?

20 A. Well, two observations. All of Mr Dudney's logic would
21 apply equally to any part of Apple. So what he is
22 essentially saying is that he would not allocate that
23 130 billion anywhere. Second, it would never be
24 correct, when -- and I am in danger of getting into
25 accounting technicalities here -- but it would never be

1 appropriate to subtract commercial paper and short-term
2 debt from capital employed when you are starting from
3 the assets and liabilities.

4 I mean, it is actually easier, I think, when
5 thinking about capital employed, to actually look at the
6 words "capital employed" and to start from -- it is the
7 equity plus the debt that is used to finance the
8 business.

9 The way your balance sheet works is assets minus
10 current liabilities will get you to the same place but
11 not if, in those current liabilities, you include the
12 short-term debt. That is mixing and matching two
13 approaches to get into capital employed.

14 Q. The key point here, Dr Barnes, is that based on the
15 information that Apple has advanced, Mr Dudney has
16 concluded that the assets are not required to operate
17 the App Store and therefore it would be inappropriate to
18 allocate a portion to them, do you not accept that? The
19 logic of that is right, is it not?

20 A. I think it could go either way.

21 Q. There is no information at all, is there, to suggest
22 that Mr Dudney is wrong about that, is there?

23 A. No, but I think you have to look at the thing
24 holistically, the capital employed number that he ends
25 up with.

1 Q. Let us look at what you said about this, having said it
2 was particularly problematic. Can we go back to your
3 report at {C3/5/51}. What you say here, if I may say,
4 in an effort to fill the evidential vacuum from Apple,
5 in the fifth line you say:

6 "This appears somewhat inconsistent with Apple Inc's
7 disclosure [this is from the 10-K] that it believes its
8 balances of cash, cash equivalents and unrestricted
9 marketable securities ... along with cash generated by
10 ongoing operations and continued access to the debt
11 market, will be sufficient to satisfy its cash
12 requirements and capital return programme over the next
13 12 months ..."

14 I would suggest to you that nothing here at all
15 suggests that marketable securities are in fact used to
16 fund the activities of the App Store. Would you accept
17 that?

18 A. I think if you look -- focus on the words "will be
19 sufficient to satisfy its cash requirement", I think
20 a very plausible interpretation of that is that Apple is
21 holding that cash to fund its day-to-day activities and
22 to fund its R&D.

23 Also, to be clear, I think if we go down to the
24 bottom of paragraph 94 and just over the page, I am not
25 affirmatively saying that this should be the -- I am

1 just trying to illustrate again the arbitrary nature of
2 this, that what is essentially an arbitrary choice leads
3 to a very, very different answer.

4 Q. You have saved me a lot of time with your answer,
5 Dr Barnes, because the short point is you are not even
6 arguing positively that these marketable securities
7 should be included on the balance sheet; is that not
8 right? Is that not indeed what you just said?

9 A. I am not -- no, that is correct.

10 Q. I am putting to you that Mr Dudney's balance sheet is
11 both reasonable and conservative and you have given no
12 reason to suppose that it should be changed in a way
13 that would materially affect the profitability analysis?

14 A. So again, let me try and put this in context.

15 The capital -- with capital employed, the question
16 that we are trying to answer is how much would it cost
17 us to replicate this -- how much would it cost us to put
18 this back together again, to put the App Store back
19 together again?

20 This number is not highlighted so I assume that
21 I can refer to it?

22 THE CHAIRMAN: On this page here?

23 A. Yes, it is the number on the very top.

24 THE CHAIRMAN: Yes, that is fine.

25 A. Okay, great, thank you.

1 So we have Apple with a market capitalisation of
2 2.7 trillion, and according to Mr Dudney it would cost
3 5 billion to recreate the App Store.

4 MR WARD: I will put to you again, Dr Barnes. I have
5 already put this. But the question of how much it would
6 cost to put the App Store back together is precisely
7 what Mr Dudney has measured, but you do not accept that?

8 A. I think that is entirely inconsistent with the
9 information on how valuable the market sees Apple.

10 MR WARD: I have put my case on that too. I have no more
11 questions, thank you very much.

12 Re-examination by MR PICCININ

13 MR PICCININ: Dr Barnes, I have just one short set of
14 questions for you. Do you remember earlier today when
15 Mr Armitage was asking you some questions, he asked you
16 some questions about the 2019 assessment or documents?

17 A. Yes.

18 Q. There were some questions about whether they were fully
19 burdened or not?

20 A. Yes.

21 Q. Do you remember that, yes?

22 A. Yes.

23 Q. So I am just going to summarise where it got to and then
24 I will ask you my question at the end.

25 You were shown what you had quoted from Ms Casey's

1 evidence in Australia about that, which was that those
2 allocations were not fully burdened. Then you were also
3 shown what Mr Parekh said when he was cross-examined
4 about it here, which was that they were fully burdened.
5 It was put to you that Mr Parekh's evidence and
6 Ms Casey's evidence on this issue were inconsistent. Do
7 you remember that?

8 A. Yes.

9 Q. There was also some discussion about the different uses
10 of the term "fully burdened". One definition was simply
11 that all of the costs are allocated somewhere, and the
12 other definition was that the App Store's P&L that you
13 actually end up with has all of the costs that are
14 incurred in generating those revenues.

15 So I just want to show you a couple of documents and
16 then ask you a question.

17 First, can we look at Ms Casey's document from
18 Australia which is at {G1/4/3}. If you just read
19 paragraph 11 to yourself. (Pause)

20 A. Yes.

21 Q. How do you understand Ms Casey to be using the term
22 "fully burdened" in that context?

23 A. The language I think is pretty plain. I will sort of
24 manoeuvre the words around, but "fully burdened" is
25 fully and accurately allocating all direct and indirect

1 costs attributable to a product or service.

2 Q. I would also like to show you the cross-examination of
3 Ms Casey in Australia. That is at {G2/22/33}. These
4 transcripts are structured a little bit differently from
5 the ones that we have here in that you have the question
6 and then there is a dash dash and then you have the
7 answer. But if you could just read the first three
8 paragraphs -- I should tell you, this is talking about
9 the same documents, the 2019 documents. (Pause)

10 A. Yes.

11 Q. Then if we could just go back to Mr Parekh's evidence,
12 so that was {TB/5/45}. If we just focus on 174.
13 I think you have now probably read this a few times but
14 if you could just refresh your memory briefly there?

15 A. Yes, yes. (Pause).

16 Q. I am now going to ask you some questions and I am not
17 going to use the term "fully burdened" in my questions
18 so as to avoid any confusion.

19 Do you understand there to be any difference between
20 Ms Casey's evidence and Mr Parekh's evidence on whether
21 the cost allocations in the 2019 documents actually
22 allocate all of the costs to somewhere?

23 A. No, I believe that they both say all of the costs are
24 allocated somewhere.

25 Q. In your opinion, is it the case that all of the costs

1 are allocated somewhere or not?

2 A. Yes, it is just mathematical. There are 41 billion on
3 one side, 41 billion on the other.

4 Q. Do you understand there to be any difference between
5 Ms Casey's evidence and Mr Parekh's evidence on whether
6 the cost allocations that we were looking at there
7 attribute to the App Store all of the costs that are
8 incurred in generating the App Store's revenues?

9 A. As far as I can tell, neither of them believe that they
10 are.

11 Q. What is your opinion on the matter?

12 A. The same, they are not.

13 MR PICCININ: I do not have any further questions for you,
14 but it may be the Tribunal does.

15 Questions by THE TRIBUNAL

16 MR FRAZER: Dr Barnes, I just have one question, and it is
17 just to make sure I take account of all the evidence.

18 Would you mind if I took you back to this morning,
19 and this is paragraph 60 of your report which is
20 {C3/5/31}. This is where you are talking about
21 different allocation methods and in that paragraph you
22 say:

23 "If different allocation methods ..."

24 This is for operating expenditure.

25 "If different allocation methods give rise to

1 broadly similar results, or if there is a compelling
2 argument for the choice of a particular method ... then
3 concerns regarding the potentially arbitrary nature of
4 the allocation exercise may dissolve."

5 So I think you are saying there that because they do
6 give rise to different results that they are potentially
7 arbitrary.

8 Then you go on:

9 "If, however, there is no obvious choice of cost
10 driver and different allocation methods may give rise to
11 very different results, the arbitrariness of the
12 exercise is accentuated - and this is the case in the
13 current matter."

14 I think you repeat that in the joint experts'
15 statement in which you talk about because the results
16 may be sensitive to the method of allocation, there
17 could be very substantial differences.

18 In paragraph 61 of your report you give an example
19 about R&D which could be allocated in different ways.

20 Is it true that you have not indicated the extent of
21 the sensitivity, in other words, calculating it through
22 to what difference it would make to any profitability
23 measures of the App Store, or have I missed that?

24 A. No, that, that is fair.

25 MR FRAZER: So we do not know how sensitive they are to the

1 different methodologies; is that correct?

2 A. I have not done any analysis along those lines. I think
3 you will get some indication at least in one dimension
4 if you look at the pricing committee document where
5 there is the [redacted].

6 THE CHAIRMAN: Yes, you are conscious that we are in public.
7 It is fine. Do you need to refer to that document
8 specifically?

9 A. No. So that document, compare that with Mr Dudney's
10 analysis for the same year, I think you will see
11 a reasonably substantial difference.

12 MR FRAZER: Right. I think -- was it correct, we had
13 a discussion that the calculation by reference to
14 billings would be somewhat unusual; is that correct?

15 A. I am not sure I would say that. I think Mr Dudney and
16 I are in agreement that, given Apple's operating model,
17 I do not think there is any dispute that revenues should
18 be determined on a net basis.

19 I think the -- I think, to be fair, it would be
20 unusual only in the sense because a lot of the
21 situations in which you are thinking about allocation,
22 there is no distinction between billings and revenues.
23 There is no need to conserve the vast volume of free
24 transactions.

25 So, yes, revenue-based allocation is commonly used,

1 but typically -- think about, for example, the previous
2 pharmaceutical cases. These are drugs which have been
3 sold and there is a selling price and there are
4 revenues.

5 So the same concept or the same construct applies
6 across all of the different segments. The challenge
7 here is obviously with the way in which the App Store is
8 organised, that you do not have that, and that I think
9 is precisely the issue, that it may be in these other
10 cases these different methodologies would not give
11 vastly different results, but the facts and
12 circumstances here are, I think, quite unique.

13 MR FRAZER: Thank you, that is very helpful. Thank you.

14 THE CHAIRMAN: Is there anything arising from that? No,
15 good.

16 Dr Barnes, thank you very much. That concludes your
17 evidence and you are released from the witness box.
18 Thank you.

19 (The witness withdrew)

20 Housekeeping

21 MR PICCININ: Sir, just a couple of points of housekeeping.

22 THE CHAIRMAN: I have a couple too. Let us see if yours are
23 the same as mine.

24 MR PICCININ: One is a point of clarification, actually,
25 about the procedure for the hot tub and the expert --

1 THE CHAIRMAN: Yes, on my list.

2 MR PICCININ: Next week. On our side, we recall the
3 Tribunal having indicated that the way it would work is
4 that the experts would be sworn at the start of the
5 hot tub and would obviously be in purdah for its
6 duration but after that they would be released from
7 purdah.

8 THE CHAIRMAN: Yes, that is it exactly. So I think the idea
9 is that because no doubt -- well, one of them, one of
10 the Class Representative's economic experts, will then
11 go straight into giving evidence.

12 MR PICCININ: Exactly.

13 THE CHAIRMAN: It may or may not matter. There may be
14 a request to have him released, whoever it is. Do you
15 know who it is going to be first?

16 MR WARD: Dr Singer.

17 THE CHAIRMAN: So Dr Singer, it may be you want to speak to
18 Dr Singer between his evidence and the hot tub.

19 MR WARD: It seems likely.

20 THE CHAIRMAN: In that case, I think we will release all of
21 them and re-swear them as they all come to give
22 evidence.

23 MR PICCININ: That makes sense. When we swear them for the
24 hot tub, I had understood that we would be swearing them
25 on their reports.

1 THE CHAIRMAN: Well, I think it is probably better to deal
2 with their reports when they give their
3 evidence-in-chief, is it not?

4 MR PICCININ: That is fine.

5 THE CHAIRMAN: In a way I think -- I do not think --
6 I anticipate -- you have seen the agenda and I hope that
7 is helpful. It is not designed to be exclusive of what
8 we might get into, of course, but it was just
9 recognising that we do not have very long and to give
10 you a sense of what we thought was most interesting.

11 MR PICCININ: Absolutely. I was not pushing any particular
12 agenda.

13 THE CHAIRMAN: Hopefully you will see the generality of
14 I think not getting into the reports, we would probably
15 rather not be looking at reports and so on. We would
16 rather I think leave that issue to the actual
17 evidence-in-chief.

18 MR PICCININ: Okay.

19 My next agenda item --

20 THE CHAIRMAN: Just before you do that. On the hot tub,
21 just so we are clear, we were assuming that they are
22 going to sit in the front row here and you will move
23 back. I am sorry to do that to you, but if you do not
24 mind doing that. I appreciate that makes things quite
25 tight in here because there is not a lot of space, but

1 hopefully people will be able to accommodate that for a
2 day and a half.

3 MR PICCININ: I think it would be tighter if we tried to
4 squeeze them all in.

5 THE CHAIRMAN: It would probably not work so well.

6 MR PICCININ: My next item then, if there is nothing else on
7 the hot tub, is about what we might call Singer 4.5.
8 You recall this was the letter that was supposed to be
9 coming between yesterday responding to the points on
10 Hitt 4. I can show it to you in a moment, but
11 unfortunately the issue that has arisen is it does not
12 correspond in any way to the scope of the permission
13 that you granted. It will not take me very long to show
14 you that. Can I just bring up the ...

15 THE CHAIRMAN: Yes, of course. So just to remind me. We
16 got to the point where Hitt 4 ended up being a much
17 smaller document.

18 MR PICCININ: That is what I was going to show you first, so
19 you can see what is being responded to.

20 THE CHAIRMAN: I think the (inaudible) was to respond to
21 whatever is in Singer --

22 MR PICCININ: Yes. {C3/9/3} is Hitt 4. So this is the
23 shortened version and there are two parts to it. So
24 paragraph 2 was the old paragraph 9, which was
25 responding to paragraph 9 also in Singer 4 which was

1 about the steering issue. So that is just reproduced
2 there.

3 Then if we go over to page {C3/9/5} you can see
4 paragraph 3 which corresponds to the old paragraph 19
5 which then had a 19(a) and a 19(b). That was -- the
6 context for that, just so we all remember, was that
7 Professor Hitt had done a statistical test called the
8 Hausman test for the presence of the IIA property in the
9 logit progressions that Dr Singer had deployed, and
10 Professor Hitt put that test forward during the joint
11 expert meetings.

12 So Dr Singer then responded to that in Singer 4 and
13 he did that in multiple levels. He said it was not
14 necessary to do a test at all. Then he also criticised
15 the test that Professor Hitt had done on the basis that
16 it came up with an error code. That is the specific
17 thing that Professor Hitt was responding to here. It is
18 exclusively about the error code in the Hausman test.

19 There were other parts of Hitt 4 that you might
20 remember we did not get permission to put in, which were
21 responding to those other parts of Singer 4 about
22 whether you need to do a test at all, or whether the
23 regression analysis already, for example, tells you that
24 the IIA property is satisfied.

25 So that was Hitt 4.

1 Now if we go to the letter. It is at {CB2/27}.

2 Sorry, I think that is the wrong reference. It is
3 {CB2/28}. That is the one.

4 So just starting with paragraph 1, it accurately
5 records the scope of the permission that Dr Kent was
6 given, which is that it was limited to what used to be
7 paragraph 19(a) and (b), and the Tribunal did not give
8 permission to respond to what used to be paragraph 9,
9 the steering points. If you would like to see the
10 transcript of that, we can, but what is said there is --

11 THE CHAIRMAN: Yes, was there a dispute about that?

12 MR PICCININ: I do not know, but you can see what happens is
13 that in the very next paragraph what they do is they set
14 out Dr Singer's response on the steering issue,
15 responding to paragraph 2, ie old paragraph 9. There
16 was just no permission for that at all.

17 THE CHAIRMAN: That is the point of contention, is it?

18 MR PICCININ: That is one of the points of contention. Then
19 over the page, I will just take you through it. Most of
20 that is the same, it is just all paragraph 2.

21 When we get down to paragraph 3 at the bottom, that
22 is where at least they are responding to the right part
23 of Professor Hitt's report.

24 3(a) is fine. It does not actually respond to what
25 Professor Hitt has explained in substance but at least

1 it is vaguely on the right topic of the error code.

2 If we go over the page, paragraph 3(b) is not
3 responsive to that issue at all. It is on the topic
4 that we were not permitted to address in Hitt 4, which
5 is namely whether you need to be testing for IIA at all
6 or whether the logit regression already proves that you
7 do not need to look any further. So we were not even
8 allowed to put that in Hitt 4 and yet there is more of
9 this in Singer 4.5.

10 Then paragraph 3(c) is also not on the issue of
11 whether there was an error in the Hausman test. Now we
12 are on a different point, which is whether it was a good
13 indeed idea to do a Hausman test at all. Of course,
14 that was something Dr Singer was able to put in evidence
15 on in response to the joint experts' statement where the
16 Hausman test was set out for the first time.

17 So it is not addressing here the issue of whether
18 the test was successfully implemented, ie whether there
19 was an error. He has gone off on another topic.

20 Then over the page 3(d), page {CB2/28/4}. Once
21 again, we are back on the test of -- the question of
22 whether we need to be testing for IIA at all again,
23 which again is not an issue that we are allowed to put
24 in evidence on in Hitt 4.

25 I would not normally be standing up here making this

1 kind of point, but since we had a dispute about Hitt 4,
2 and then there was the resolution which we had where we
3 cut it right down to the parts that we were permitted
4 to, and that was on the basis that there needs to be an
5 orderly process, and my learned friend waxed lyrical,
6 almost operatic, for the need for that.

7 A very clear direction, if I may say so, was given
8 by the Tribunal as to what should happen next, and this
9 is just an absolutely flagrant and unheralded violation
10 of what they were told they could do.

11 THE CHAIRMAN: Shall we see what Mr Ward has to say about
12 it.

13 MR WARD: Yes, thank you, sir.

14 Of course one needs to keep in mind how this all
15 started, I do not need to ventilate it, but of course
16 how we got to where we are. The first point that was
17 made by my learned friend took me by surprise, so I need
18 to go very cautiously in case I am sincerely at
19 a misunderstanding of what the Tribunal ordered.

20 Of course there was a larger Hitt 4. It was cut
21 down. What Dr Singer does via this letter is respond to
22 the cut-down Hitt 4. If we look at the start of the
23 letter, I thought I heard that this part was
24 uncontroversial, and if I have got this wrong I will be
25 glad to be corrected.

1 THE CHAIRMAN: I think what is being said is that in
2 paragraph 1 it is uncontroversial in the sense that it
3 records an entitlement to respond to 19(a) and (b).

4 MR WARD: Which is now paragraphs 2 and 3.

5 THE CHAIRMAN: I do not think that is right. I do not think
6 paragraph 2 is corresponding.

7 MR WARD: That is the issue in that case. I am sorry if we
8 have got that wrong.

9 THE CHAIRMAN: I think -- certainly that is my
10 understanding, and perhaps you might go away and have
11 a look at it again.

12 MR WARD: We should look at it again.

13 THE CHAIRMAN: Unless Mr Piccinin and I both got it wrong,
14 I think you should not have anything responsive to
15 paragraph 9.

16 MR WARD: I see. I am so sorry. I think we have to put our
17 hands up to that, actually, if that is what the
18 transcript says.

19 THE CHAIRMAN: Then in relation to the other bits. Just,
20 again, my recollection of this was that the whole point
21 of this letter was that because of the timing and
22 because of the way it was all working and you were busy
23 doing other things, this saved you doing a formal
24 report, but that it was intended that this would be used
25 to adduce further evidence-in-chief from Dr Singer when

1 he came along.

2 On that basis, it seems to me that you should not be
3 doing anything other than responding to paragraph 3 of
4 Professor Hitt's supplemental report, which is about the
5 error, and in a way, if you want to write to Apple's
6 solicitors and say what Dr Singer says about it, fine,
7 I cannot stop you doing that, and you have done that.

8 But as far as what you are going to be permitted to
9 put to Dr Singer by way of evidence-in-chief and the
10 record of that and however that is being recorded, it is
11 going to have to comply with the direction that was
12 given, and unless you tell me something different,
13 I think that is the response to paragraph 3 which
14 I think is -- can we go over the page, please.

15 MR WARD: Yes, so the response to paragraph 3 starts at
16 paragraph 3 of this letter. {C3 2/28/2}. Just to
17 remind you, though, of what was said in paragraph 3 of
18 Professor Hitt's report, it is useful to start there.
19 It is {C3/9/5}. It says:

20 "In relation to a test for IIA, Dr Singer claims
21 that I ran a new analysis ... which results in an
22 error."

23 Then what Professor Hitt says at 3(b):

24 "It does not imply the test ... "

25 Sorry, this test, it is just worth recalling the

1 test is supposed to show that the IIA assumption is not
2 met. That is the proposition that Professor Hitt is
3 advancing. At (b) it says:

4 "Contrary to what Dr Singer claims, the error code
5 does not imply that the test ... is 'unusable'."

6 Then there is some technical language.

7 Then in the last four lines it says:

8 "Moreover, as Stata explains: 'When the difference
9 in the a variance matrices is not positive definite, a
10 Moore-Penrose generalised inverse is used'."

11 A Moore-Penrose generalised inverse, I am pleased to
12 inform at least two members of the Tribunal, is
13 a mathematical device. I am not going further than
14 that. In other words, it is a workaround.

15 Then Professor Hitt's conclusion, it is put very
16 briefly but it is important:

17 "This allows me to test for and strongly reject the
18 IIA assumption."

19 The core of what Dr Singer is doing here is
20 responding to that.

21 THE CHAIRMAN: I do not think he is, really, is he?

22 MR WARD: Sir, can I show you?

23 THE CHAIRMAN: I have to say that I think the fact that
24 Professor Hitt ends with that, and we know that is what
25 he is saying, that is what he said before --

1 MR WARD: No, sir, this is new. So Dr Singer --

2 THE CHAIRMAN: Not the fact that he has tested for and
3 rejected the IIA assumption. That is not new.

4 MR WARD: No, but what is new is he says, okay, not
5 withstanding this error code, there is a workaround
6 which allows me to strongly reject the IIA assumption.

7 THE CHAIRMAN: I think, and I am now going to be in deeper
8 water than you are, but does he not say the fact that
9 there is some sort of error that Dr Singer has
10 identified does not mean there is a problem because --

11 MR WARD: He can do a --

12 THE CHAIRMAN: -- says about the significance of that. All
13 of that is a fair game, and that is there for Dr Singer.
14 But I think, as Mr Piccinin just showed us, if we go
15 back to the letter, please, it seemed to me that that
16 was what he was dealing with in 3(a). If we go over the
17 page and look at 3(b), you are back in --

18 MR WARD: In 3(b) he is addressing what this test is
19 supposed to show that allows a strong rejection of the
20 IIA assumption.

21 THE CHAIRMAN: But we know that. That is not really -- that
22 is not what Hitt 4 is about. I am afraid to say I do
23 think it is pretty obvious that you are -- I do not know
24 what the expression is, off piste or something. But as
25 far as I can see, the bit that you are entitled to do is

1 3(b), and unless you can give me some reason otherwise,
2 which you are not at the moment, that is the bit which
3 you should be leading by way of -- 3(a), that you should
4 be leading by way of evidence-in-chief as 3(a), and that
5 will (inaudible) into the record. The rest of it, as we
6 discussed, that may come out in the hot tub, it may come
7 out in cross-examination, but that is not going to form
8 part of his formal evidence.

9 As Mr Piccinin said, we did this mainly because we
10 were very dissatisfied with the process, and this late
11 expert evidence coming in, I do not like it at all, it
12 is very unhelpful to everybody, but we fully accept that
13 these things will open up in discussion and nobody can
14 do anything about that, other than that things that
15 should have been put in earlier should not be turning up
16 by surprise.

17 So I just think there is -- what I am seeing here is
18 a repetition of this idea that somebody wants to have
19 the last word on something, and obviously Dr Singer is
20 going to have a word on it when he is cross-examined on
21 it and if he wants to say anything on it, that is fine.

22 MR WARD: Sir, would you give me just a moment to take
23 instructions in light of your observations.

24 THE CHAIRMAN: Yes, of course. (Pause)

25 MR WARD: Sir, we have heard what you have said. Any

1 evidence-in-chief will be limited to the point in 3(a).

2 In a sense, whether or not helpfully, my friends have
3 had an advance view of Dr Singer's views on all of these
4 issues, whether they like it or not, but I fully accept
5 that the evidence-in-chief can only be limited to
6 point 3(a).

7 THE CHAIRMAN: Yes, thank you. I think just on the advance
8 notice, obviously everybody has had quite a lot of
9 advance notice of what Dr Singer is saying, and that is
10 not necessarily a bad thing, but in terms of the orderly
11 process this is what is going into the record.

12 MR WARD: Sir, I understand.

13 THE CHAIRMAN: Good, thank you very much.

14 Was there anything else from ...

15 MR PICCININ: Nothing from me, no.

16 THE CHAIRMAN: That wasn't on my list.

17 Just a couple of other things, very quickly. One
18 is, as you know, we are not sitting on Thursday the 6th.
19 There will be another case in here, I am afraid.

20 (Pause)

21 In that case, you do not need to worry about moving
22 out of here on Thursday. We are still not sitting. The
23 idea was that someone else was going to sit here on
24 Thursday but it sounds as if they have been moved.

25 MR PICCININ: Could I also just clarify, that reminds me,

1 which is that Dr Singer will be around all week, if
2 I can put it that way.

3 THE CHAIRMAN: He will be in purdah, will not he from --

4 MR PICCININ: I mean being cross-examined.

5 MR WARD: What is the question, sorry?

6 MR PICCININ: There is no hard stop. We have not at the
7 moment given any separate time estimates I do not think
8 for when we will be finished with Dr Singer and have to
9 start with Mr Holt.

10 MR WARD: It is rather overdue, if I may respectfully say
11 so, to give that time estimate because obviously our
12 experts do need to organise our lives and we also have
13 to organise our preparation for the separate hearings.

14 MR PICCININ: That is what I am doing right now, sir, which
15 is saying that we are likely to require Dr Singer until
16 the Friday.

17 THE CHAIRMAN: So you think you might drift over into Friday
18 with him.

19 MR PICCININ: Yes.

20 MR WARD: To be clear then, you are going to question
21 Mr Holt on the Monday?

22 MR PICCININ: It would also be helpful for Mr Holt to be
23 around on the Friday because we may finish Dr Singer at
24 some point on the Friday and start with Mr Holt on the
25 Friday as well. That is my best estimate.

1 THE CHAIRMAN: Then you will finish on the Monday. That is
2 still your expectation.

3 MR PICCININ: That is right, sir, but that is subject to one
4 point which is that Dr Kent said that they required
5 four days and actually we took the same view that it is
6 looking in that direction. There is not a spare half
7 day to give us but I thought what the Tribunal had
8 indicated was that we could sit early and late if we
9 need to, so we will just see how we go with Dr Singer.

10 THE CHAIRMAN: That is entirely fair and that is exactly
11 where we were. It is possible -- who knows how long the
12 hot tub goes. We will set ourselves a hard stop on
13 Tuesday but it is not necessarily the case it will
14 run --

15 MR WARD: Sir, I say this not as a pure tit-for-tat but we
16 have reached the same view that long sitting days if
17 available might be very helpful for us as well.

18 THE CHAIRMAN: Okay, let us see how we go. The one thing
19 I would say is apart from --

20 MR PICCININ: Just on that point, they do already have
21 four days so they have taken the extra half day already.

22 THE CHAIRMAN: That is right. I think our starting position
23 is that four days for two experts is a pretty good
24 allocation of time. We would like you to work to that.

25 MR PICCININ: Of course.

1 THE CHAIRMAN: If you have half an hour here or there that
2 is a different thing and if you think you need the four
3 days, we will find you that time.

4 MR PICCININ: That is right because we only have three and
5 a half actual days.

6 THE CHAIRMAN: I understand that so if you think you need it
7 we will find it.

8 MR PICCININ: I am grateful.

9 THE CHAIRMAN: But I suspect that what none of you want to
10 do is to sit on the 17th. I imagine that is a very
11 unattractive proposition, so what you need to do
12 collectively is to find somewhere to make sure we get it
13 all done and there will be some limits on how long the
14 days can be, partly for the transcriber of course and
15 partly for the witnesses. I do not want to find we have
16 very tired experts who say things they regret or rather
17 regret when they have less time.

18 Okay, and then just one last point. So the position
19 is we will not be sitting on the 6th.

20 MS DEMETRIOU: Are we not sitting on the 6th? Might that be
21 revisited or is that because of the Tribunal's
22 availability? I was just wondering.

23 THE CHAIRMAN: That is now a possibility if the court is not
24 required. Could you -- I suppose it would be helpful to
25 know, would it not?

1 MS HIGGINS: It may also depend I suppose on the experts on
2 the other side' availability, so maybe we should just
3 leave it as it is.

4 THE CHAIRMAN: I am certainly not averse to switching. Of
5 course it would give us a little bit of overflow.
6 I think what I was concerned about when we originally
7 talked about this, I did not like the idea of sitting
8 for a half day and getting everybody in here in
9 circumstances where it was not clear to me that we could
10 not actually find the time elsewhere. If we really are
11 under that much pressure, maybe we should be thinking
12 about using -- it is a heavy week though, is it not?

13 MR WARD: It is a very heavy week, sir, for everyone.

14 THE CHAIRMAN: This is a really heavy bit of the case. It
15 feels like we have done quite a lot of the heavy bits.

16 MR WARD: It is just getting started actually but, yes.

17 THE CHAIRMAN: This is going to be pretty hard work and I
18 just do worry about sitting five days a week. But if
19 people have a preference as to whether we do not sit on
20 the 6th or the 7th at the moment -- Perhaps it is just
21 helpful to understand one of the reasons this has
22 happened is because we are under a lot of pressure with
23 court space here at the moment. Cases are going over to
24 the Rolls Building and actually we thought we would be
25 putting the Merrick settlement and the evidence drifted

1 out and then when that drifted out, Boyle came in. Now
2 I just do not want to commit to it without checking that
3 they have not got something else they might want to put
4 in here.

5 But I am perfectly happy to work on the basis that
6 we could switch that if there is no demand from the
7 Tribunal.

8 MR PICCININ: It might be helpful just in terms of not
9 needing such long hours on each day if we have in theory
10 at least the five days.

11 THE CHAIRMAN: Currently, can I leave it like this: do you
12 want to go away. You have a blank sheet of paper
13 subject to the registry saying, actually we do need it
14 for something else because there were an awful lot of
15 things stacked up I think, but on the assumption that it
16 turns out to be free, can I leave it with you as the two
17 teams just to work out what you think the best way is to
18 get this done with putting the least pressure on the
19 witnesses and of course yourselves and the transcriber.

20 That may well be utilising the 6th and the 7th.
21 I think we are open to suggestions on that, and we could
22 canvas that first thing on Monday morning.

23 MR PICCININ: Very grateful.

24 THE CHAIRMAN: Good.

25 Then the just the very last thing, if I may, and

1 this may, you may why am I raising it now. I just want
2 to get ahead of it, closings, particularly the length of
3 closings. I imagine you are at least thinking about
4 them if not writing them. Again, you might give some
5 thought as to what an appropriate limit might be. Just
6 to give a bit of a steer on that. We are not going to
7 be -- I think we will find them helpful I am sure and
8 the more focused the more helpful they will be and
9 therefore the shorter the better. But we are not in the
10 business of saying -- we do not want to give you an
11 unreasonably short limit. We do not want huge documents
12 because frankly they are not that helpful when you start
13 to look for things. You just cannot find them. So if
14 you could think about what you think would be a good
15 page limit, that would be helpful and again no urgency
16 on that but we can have discussion on that in due
17 course.

18 MR PICCININ: It is very sensible, if I may say, to raise
19 that early because we do not want to find ourselves
20 needing to cut large volumes.

21 THE CHAIRMAN: No, exactly. I do not want you to end up in
22 the wrong place.

23 MR PICCININ: Perhaps we could come back to that next week
24 as well then.

25 THE CHAIRMAN: Exactly. Is that all?

1 MR WARD: Yes, sir, thank you.

2 THE CHAIRMAN: Thank you very much. Hope you all have
3 something of a weekend and see you Monday morning at
4 10.30.

5 (4.16 pm)

6 (The hearing adjourned until Monday, 3 February at 10.30 am)

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15

16

17

18

19

20

21

22

23

24

25

INDEX

1

2 (Open session)1

3 DR RONNIE BARNES (affirmed)1

4 Examination-in-chief by MR PICCININ1

5 Cross-examination by MR ARMITAGE2

6 (Private session)58

7 (Open session)58

8 Cross-examination by MR WARD58

9 Re-examination by MR PICCININ118

10 Questions by THE TRIBUNAL121

11 Housekeeping124

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1

2

3

4

5