Tuesday, 1 November 2022 1 2 (10.00 am) 3 MS HODGE: Good morning, Chair, we can see you and hear you. 4 The first witness today is Mr Coombs. 5 SIR WYN WILLIAMS: Can I stop you -- oh, I can see you now. 6 Jolly good. 7 Mr Coombs and I have made our acquaintanceship 8 already, in the sense that he and I were on screen about 9 15 minutes ago so we said hello to each other, all 10 riaht? MS HODGE: Thank you, sir. Please can the witness be sworn? 11 12 MICHAEL COOMBS (affirmed) 13 Questioned by MS HODGE 14

MS HODGE: Good morning Mr Coombs, I can hear you reasonably well but I wonder if you might raise your voice a little 15

16 bit to ensure that --

17 A. Is that better?

- Q. Thank you, yes. 18
- 19 A. Is that better?
- 20 Q. Thank you very much. Please give your full name?
- 21 A. My full name is Michael John Barton Coombs.
- 22 You should have in front of you a copy of your witness
 - statement dated 9 September of this year; is that
- 24 correct?

23

25 A. That is correct.

- 1 Horizon project, but before I do I would like to begin 2 with a few questions about your professional background
- 3 Mr Coombs.
- 4 A. Yes.
- 5 Q. You joined International Computers Limited upon
- 6 graduating in 1969 with a degree in engineering; is that
- 7 correct?
- 8 A. That is correct.
- 9 Q. You have explained in your statement that your
- experience was predominantly in the field of project 10
- management, rather than in technical development; is 11
- 12 that fair?
- That is true. 13 Α.
- 14 Q. Would it be right to understand that you did not have
- 15 any personal experience of designing or developing
- 16 software?
- A. No personal experience of doing it. 17
- Q. But is it right that you had, in your earlier project 18
- management roles, overseen software development by 19
- 20 others in ICL?
- A. Yes, I had overseen software developments by others 21
- 22 inside the company and also on projects working to
- 23 customers.
- 24 Q. Is that a role that you considered you were suitably
- 25 qualified to do?

Q. Can I ask you please to turn to page 21 of your 1

- 2 statement?
- 3 A. Yes.
- 4 Q. Do you see your signature there at the end of your
- 5
- 6 A. There is an electronic signature at the end of the
- 7 statement, the one with my -- I have got another copy in
- 8 a binder here which has got my actual signature.
- Q. Could I refer you to that one, please, if I may? 9
- 10 Yes. I have it in front of me. It has my signature on
- 11
- 12 Q. I believe that statement should run to 23 pages in
- 13 total; is that correct?
- 14 A. That is correct.
- 15 Q. With a table of exhibits --
- 16 With a table of exhibits.
- 17 Q. -- on the last two pages, thank you. That statement is
- 18 dated 9 September of this year; is that right?
- 19 9 September of this year, yeah.
- 20 Q. Is the content of that statement true to the best of
- 21 your knowledge and belief?
 - 22 A.
 - 23 Q. Thank you. Your statement and exhibits are now in
- 24 evidence before the Inquiry. I shall be asking you some
- 25 questions about your involvement more generally in the

- A. Yes.
- 2 Q. Your first involvement in Horizon came during the period
- 3 of procurement; is that right?
- 4 A. That is correct.
- 5 Q. I understand you were brought in to provide advice to
- the team responsible for bidding for what was then known 6
- 7 as the Benefits Agency and Post Office Counters Limited
- 8 Automation Programme; is that right?
- 9 A. That is correct.
- Q. You were recruited, I think, by reason of your earlier 10
- experience on a similar project for the Inland Revenue? 11
- A. Yes, and also I had, previous to there, done some work 12
- for DSS and George McCorkell, so I was known to the BA 13
- 14 as well
- 15 Q. The one aspect of Pathway's bid that you specifically
- 16 recall assisting with relates to the rollout of
- 17 terminals to Post Office branches; is that right?
- A. That is correct. 18
- 19 Q. Do you recall what if any challenges were identified by
- 20 Pathway in implementing the rollout of terminals at this
- 21 early bid phase?
- 22 A. At the early bid phase, what was actually identified as
- 23 the biggest risk is being able to do enough Post Offices
- 24 in the time available, so it was all about getting
- 25 a beat rate of delivering stuff to Post Offices and

- 1 keeping that going.
- 2 Q. Did you or any members of the bid team with whom you
- 3 worked undertake any site visits of Post Office branches
- 4 in order to ascertain their readiness for implementation
- 5 during this bid phase?
- 6 A. I certainly didn't during the bid phase but there were
- 7 people who went. One place that was visited was An Post
- 8 in Ireland, because they were using the same software as
- 9 we were proposing for Post Office.
- 10 Q. So An Post in Ireland was where the system was already up and running; is that right? 11
- A. They had a version of the system running successfully. 12
- 13 Q. In terms of the Post Offices in the UK, where Pathway
- 14 were intending to implement this new system, were any
- 15 site visits carried out to your knowledge there?
- 16 A. I was not involved in any but I believe there were.
- 17 I don't know how to prove it but I believe there were
- site visits. 18
- 19 You did not remain on the project when Pathway was
- 20 awarded the contract in May 1996; is that right?
- A. That is correct. 21
- 22 Q. I think you returned to other project management work
- 23 being carried out by ICL Pathway at that time?
- 24 A. When the bid finished I went and worked for one of ICL's
- 25 development organisations in Manchester, looking at
- 1 "Ah, yes, but". And so there was a creeping in the
- 2 requirements that were being put forward.
- 3 You have explained in your statement that you don't
- 4 recall the specific details of the findings you made in
- 5 your review; is that right?
- 6 A. At the time, that was 100 per cent correct but with the
- 7 documents I had been sent latterly, some of them refer
- 8 to it, so I have had some triggered memories.
- 9 Q. Can you explain what you now recall or how your memory
- 10 has been refreshed of --
- 11 A. The refreshment was very much around the fact that one
- 12 of the key issues that I hadn't remembered was that the
- 13 whole project programme was a PFI and the basis behind
- 14 a PFI is the transfer of risk. Whilst it was happening
- 15 with the design change and not baselining it, it was
 - difficult to manage risk being transferred and it raised
- 17 a number of commercial issues which needed to be
- 18 addressed about how the programme could proceed, taking
- 19 account of that.

- 20 Q. Thank you. You participated in a parallel review of the
- 21 programme, which was undertaken by PA Consulting in the
- 22 summer of 1997; is that correct?
- 23 A. That is correct, and I saw that document yesterday was
- 24 passed to me and that was one of the things that
- 25 triggered my memory a bit about --

- 1 large computing. That's where I was working.
- 2 You became involved in the Horizon programme again in 3 the spring of 1997; is that right?
- 4 A. Correct.
- 5 Q. On this occasion you were invited by John Bennett, then
- 6 managing director of ICL Pathway, and Keith Todd, then
- 7 managing director of ICL Group, to conduct an internal
- 8 review of ICL Pathway's management of the programme; is
- 9 that right?
- 10 A. That is correct.
- 11 Q. What did you understand to be the reasons for the
- 12 instigation of this review?
- 13 Inability to meet delivery timescales for software. A.
- 14 Q. In your statement you have referred to difficulties
- 15 baselining the Horizon software. Can you please explain
- 16 what you mean by that?
- 17 **A.** Yes. One thing that happened -- well what happened when
- 18 we started to look at developing the system, what was
- 19 initially an integration project, ie taking existing
- 20 projects, the amount of development in it started to
- 21 increase. Therefore, the workload started to increase
- 22 and there was difficulty in tying down with the other
- 23 parties how certain customer requirements would be met
- 24 and there was, well, requirement creep, so things were
- 25 defined and sent out for agreement and then it came back

 - Q. I believe you were interviewed in connection with that review?
- 3 A. Yes, I was.

1

2

- 4 Q. You were one of the 12 persons who were named as --
- 5 rather one of the 12 persons who received a copy of the
- 6 confidential report produced at the end of that review;
- 7 is that right?
- 8 A. That is correct.
- Q. What I would like to explore with you briefly is the 9
- 10 extent to which your own findings, in the review you
- 11 carried out in the spring of 1997, informed some of the
- 12 conclusions reached by PA Consulting Group, at the time,
- 13 concerning the resourcing and management of the project
- 14
- by ICL Pathway.
- 15 I think you confirmed you have seen a copy of the 16 report. We can bring that up if it would assist. But
- 17 you will have observed, I think, that one of the
- 18 conclusions reached by PA Consulting in their review was
- 19 that ICL Pathway had, at the outset, assumed it could
- 20 deliver Horizon mostly by systems integration. That's
- 21 a point you have highlighted yourself this morning; is
- 22 that correct?
- 23 A. That is correct.
- 24 What PA Consulting concluded was that this had led
- 25 ICL Pathway, to seriously misjudge the amount of

- 1 development work which was needed as well as to 2 underestimate the time and resources required to deliver 3 the project. Did you agree with that conclusion?
- 4 A. Yes. But also, given that there had been a lot of 5 change in terms of what the nature of the project was
- 6 going to end up being, and I wasn't surprised at that
- 7 when I started looking in detail.
- 8 Q. In addition to those observations about resourcing,
- 9 PA Consulting Group in their review noted that
- 10 ICL Pathway had expressed major concern about the
- 11 robustness of the technical architecture. Was that
- 12 a concern with which you were familiar at the time?
- 13 A. Not really. I didn't get involved in the technical
- 14 architecture at that period of time, so that wouldn't
- 15 have informed me at all.
- 16 Q. So if I understand you rightly, you simply weren't
- 17 aware, at the time of your review, in the spring of
- 18 1997, that there were these concerns within ICL Pathway
- 19 about the robustness of the technical architecture?
- 20 A. No, because I do not remember, at that stage, being
- 21 involved in a review on technical architecture. I don't
- 22 think it was covered in that way by the review I did.
- 23 I was more interested in the volume of work, rather than
- 24 the structured work and the architecture from going
- 25 forward. My main focus was on what was needed to do to
- 1 project. So, yes, that's where his role is and that's 2 a fundamental part of the structure for paying benefits 3 through Post Offices.
- 4 Q. There is a reference at AP/5. I understand that to be 5 "action point 5", where it records:

"Mr Crahan to discuss the findings of the internal review of security with Mr Coombs.

"The review of security had been completed and discussed with Mr Coombs. It was agreed that more openness and co-operation would be required in future. A workshop would take place on Thursday to consider a better way forward."

Do you have any recollection of what these issues were in relation to security?

- 15 A. I'm just thinking. No. The problem is: (1) it is
- 16 a long time ago; and (2) that was, I believe, my first
- 17 meeting and in that sort of forum. So there was nothing
- 18 around it that I can pull out of my mind.
- 19 Q. If we could go on to page 3, please. Halfway down the
- 20 page, we can see the heading "Updates"?
- 21 Α.

6

7

8

9

10

11

12

13

14

- 22 Q. At paragraph 2.1 it records "PDA", Programme Delivery 23 Authority.
- 24 A. Yes, that's the organisation I was trying to remember 25 the name of.
 - - 11

- 1 get the programme acceptably back on track and prepared
- 2 for rollout.
- 3 Q. You attended a meeting of the Benefits Agency and Post 4
 - Office Counters Programme Delivery Authority Board on
- 5 23 September 1997. Do you have any recollection of that 6
- meeting?
- 7 A. I don't specifically have any recollection but there's
- 8 so many meetings I went to. You know, if you have got
- 9 a specific question on it that might trigger --
- 10 Q. Indeed. I wonder if we can pull up POL00028310.
- 11 Thank you. We can see here from the heading that
- 12 these are minutes of the board meeting of the
- 13 23 September 1997?
- 14 A. Yes.
- 15 Q. Under the heading "attendees" you are named as the last
- 16 but one; do you see that?
- 17 A. Yes, I do.
- 18 Q. If we could please turn to the next page, at page 2. At
- 19 paragraph 1.2.4.
- 20 There is reference here to you, Mr Coombs and to
- 21 Mr Crahan. I believe that is Peter Crahan. Do you
- 22 recall his role at this stage in the programme?
- 23 A. Yes, Peter Crahan was involved in the Benefits Agency
- 24 automated -- work they were doing on National Insurance
- 25 databases, et cetera. I can't remember the name of the

 - Q. This states:

1

8

25

- 2 "In addition to the written update provided,
- 3 Mr Crahan reported that Release 1c was progressing
- 4 through Model Office Rehearsal and the checkpoint
- 5 meetings. Model Office Testing was due to be completed
- 6 by 26 October and the anticipated release date was now
- 7 3 November."
 - The following paragraph 2.1.1:
- "Significant numbers of category one PinICLs (ICL 9
- 10 software difficulties) needed to be resolved. These
- 11 were in the areas of security, accounting and
- 12 reconciliation. A decision would be taken on
- 13 29 September whether the release was fit for purpose and
- 14 if so, to how many outlets it would be delivered.
- 15 Pathway pointed out that they were striving for release
- 16 in 200 outlets because of the effect on Release 2 of
- 17 anything less."
- 18 We can see PinICLs there described as "ICL software 19 difficulties". Do you consider that to be a fair
- 20 characterisation?
- 21 What they actually are are bugs in the system. So, if 22 you consider those to be -- oh, lost it.
- 23 If you consider those to be ICL difficulties then
- 24 they would be ICL difficulties. Looking at a whole
 - range of them, some of them were minor, had no impact on

- 1 moving forward and others had to be solved before you could move forward.
- Q. It appears from the preceding paragraph that these bugs
 had been raised either in the Model Office rehearsal or
 during the Model Office testing of software release 1c?
- 6 A. Yes.
- 7 Q. Would that be consistent with what you recall about the 8 progress of the programme at this stage?
- 9 **A.** Yes.
- 10 Q. In terms of their severity, how serious were category 111 PinICLs?
- 12 A. They would actually have a problem with the programme
 13 proceeding, either because there was some sort of bug or
 14 failure that had an unacceptable consequence, or because
- 15 they required a certain amount of rework and/or implied
- something that needed to be sorted before you could move on to release 2.2, so release 3.
- 18 Q. Does it follow that they were the most serious types ofbugs in the system?
- A. Yes, they were the most serious but they would have
 a range of seriousness because of the impact. They
- 22 would be the most serious but they --
- Q. So these were problems, I think, of the highest
 severity. They were significant in number and they
 related at this stage to security accounting and
 - 13
- 1 quality and fitness of a software release?
- 2 A. Of "a software release" or this software release?
- 3 Q. Any software release.
- 4 A. Yes, it always is a barometer but it is not an easy
- 5 barometer to read because it is a sort of
- 6 three-dimensional issue. So you get problems that exist
- 7 now, you get timeframes where they need to be cleared
- 8 by, as well as the nature of the (unclear) themselves.
- 9 Q. I quite understand that some inquiry into the root cause
- of a bug and how it might be fixed would need to be
- 11 undertaken but, as a starting point, would their number
- 12 and severity indicate to you that that further inquiry
- 13 needed to be undertaken, that there was a question mark
- 14 as to the fitness for purpose of the software?
- 15 A. It would inform me there were bugs in it but fitness forpurpose, without them being resolved, then there would
- be certainly problems in those areas. There would be
- 18 concerns whether it was fit for the purpose to put out
- for usage. But there might be a difference between
- 20 fitness for purpose and putting it out for the wider
- 21 population, compared to putting it into Model Office
- testing, et cetera, where that is -- where the purpose
- is to actually check whether the software is fit for
- purpose, if you see what I mean.
- 25 So it depends on its usage as to whether it is fit

- 1 reconciliation; is that a fair inference from what we
- 2 can read here at paragraph 2.1.1?
- A. That is a fair inference but there might have been ones
 that weren't within those three headings.
- 5 Q. Such were the --
- 6 A. So yes -- in those areas were included. I can't
- 7 remember the detail at all around here because it was
- 8 all so detailed and so voluminous.
- 9 Q. Lunderstand.
- 10 A. But, yes, your inferences have been perfectly correct.
- 11 Q. Such were the number and severity of outstanding issues
- 12 in release 1c, that they appear from what we have read
- 13 at paragraph 2.1.1 to have called into question whether
- the release was, in fact, fit for purpose. Is that also
- 15 a fair inference to draw?
- 16 A. It is fair but -- yes, it is a fair inference that they
- 17 needed to be resolved for the release to continue to
- 18 progress.
- 19 Q. Did you consider at the time that the number and
- 20 severity of PinICLs was a reasonably accurate barometer
- 21 of the quality and fitness of a software release?
 - 22 A. Sorry, could you repeat that?
 - 23 Q. Yes, of course. Did you consider at the time that the
- 24 number and severity of PinICLs being raised in software
- 25 testing was a reasonably accurate barometer of the
 - 1
- 1 for the purpose. It could well be fit for the purpose
- 2 of testing to find out that the business functionality
- 3 covered by it is accurate and works appropriately.
- 4 Sorry, does that make sense?
- 5 Q. Yes, I think so. But you said it might be fit for
- 6 further testing of its functionality, that is to say of
- 7 the extent to which it meets the functional requirements
- 8 of it as a piece of software?
- 9 A. Yes, which is one part of fitness for purpose.
- 10 **Q.** But would it also not raise a question mark as to the
- 11 suitability of the software being rolled out?
- 12 A. It would raise questions on particular releases and if
- they are suitable for rollout, because the software was
- 14 always moving forward, there are always people looking
- 15 and clearing PinICLS and known errors. So, yes --
- 16 **Q.** By the time PA Consulting Group had concluded its review
- in September 1997, you had been transferred to the
- 18 Horizon project and appointed as its programme director;
- 19 is that right?
- 20 A. That is correct.
- 21 Q. Am I right to understand that your appointment as
- 22 programme director formed part of a general
- 23 restructuring of ICL's Pathway's organisation and
- 24 management, which took place upon completion of your
- 25 review?

- That is true. Α. 1
- 2 Q. In your role as programme director, you were assigned
- 3 overall responsibility for quality and risk management,
- 4 as well as systems and customer requirements; is that
- 5
- 6 **A.** I was given the role, as I remember, of overseeing.
- 7 There was a risk in quality group that was there but
- 8 didn't report to me directly but we did some initial
- 9 work as a group to try and look at where we were with
- 10 risk and quality. So, no, I wasn't directly responsible
- for the function of it but I was asked to get involved 11
- 12 in the early days and we did put some more reviews in
- 13 place, like mid-stage audits on software tech
- 14 development. But there was a person who reported to
- 15 John Bennett who was responsible for quality and risk.
- 16 Q. Do you recall --
- 17 A. It was Martyn Bennett.
- 18 Do you recall whether there existed any formal structure
- 19 within ICL Pathway for conducting internal audit when
- 20 you became programme director?
- 21 A. Yes. As far as I can remember, there were and one would
- 22 expect there to be but I could not tell you exactly what
- 23 they were and how they were set up, because I would not
- 24 have been directly involved in this initially. So the
- 25 first thing I can remember doing on quality is actually
- 1 and function of the Electronic Point of Sale Service?
- 2 A. I don't know what I understood at the time. I know what
- 3 I feel I understand now and there has been nothing
- 4 happening to change it. It was effectively a system
- 5 that worked in accounting in Post Offices, which allowed
- 6 them to act as a normal shop, selling goods, et cetera,
- 7 and it was, if you like, the element of the system for
 - doing that -- I am sure that is an inadequate answer but
- 9 it is sort of the only one I have got in terms of what
- 10 I can remember.

- 11 Q. I would like briefly just to explore three aspects of
- 12 the system with you at a very high level. As
- I understand it, EPOSS was responsible for recording and 13
- 14 processing all of the transactions carried out within
- 15 the post office branch by customers purchasing products
- 16 and services of the Post Office; is that correct? Is
- 17 that consistent with your understanding?
- A. It is a far more elegant way of putting what I was 18
- 19 trying to say.
- 20 Q. It was also responsible for balancing receipts and
- 21 payments; is that right?
- 22 A. I believe so.
- 23 And for producing what was known as the cash account.
- 24 Do you recall what the cash account was?
- 25 A. I'm just thinking for a second. The cash account is

- 1 getting established with something which became
- 2 an annual affair, which was mid-stage audits of releases
- 3 of software.
- 4 Q. I think, if I have understood your evidence correctly,
- 5 you said, upon being appointed programme director, you
- 6 did play some part in ensuring that further audits or 7 further reviews were carried out; is that right?
- 8 A. Yes, it is, and part of it was that we diarised making
- 9 sure that they were linked and that the programme office
- 10 actually followed up and made sure they occurred. They
- 11 were taking place but, if I remember correctly, I felt
- 12 they were deficient in one respect initially, which was
- 13 mid-life or mid-development or mid-time audit of
- 14 progress and issues at that time being more formal.
- 15 Q. You have explained in your statement that the focus of
- 16 your role as programme director was on project
- 17 management issues and that you weren't required to have
- 18 a detailed knowledge of the technical aspects of the
- 19 Horizon system; is that right?
- 20 A. That is correct.

1

- 21 **Q.** Presumably you, nonetheless, had a fairly high level
- 22 understanding of the system's components, including
- 23 their purpose and function; is that right?
- 24 A. At the time I certainly would have had.
- 25 Q. What did you understand at the time about the purpose

- only one thing it can be and that is the final
- 2 documented area, in which all movements of things of
- 3 value, I would think, rather than cash per se, things of
- 4 value being sold off or whatever it actually recorded.
- 5 Q. We can see it described in Pathway's own internal
- 6 documents as the definitive weekly summary of all
- 7 transactions performed within the Post Office branch.
- 8 Does that resonate with you at all?
- A. Yes, that does. Because that's back to the --9
- 10 everything in the Post Office being recorded and that's
- 11 obviously where everything in the Post Office that
- 12 happened was being recorded. Whether all the systems
- did that, whether that stayed a fact, I don't know but, 13
- 14 yes, that does resonate with me.
- 15 I would like to ask you some questions about a report
- 16 which you have been shown. It is dated 14 May 2001 and
- 17 it concerns the activities what was known as the EPOSS
- 18 PinICL task force.

23

- 19 Could the following document be shown FUJ00080690.
- 20 We can see the title of the report at the top:
- 21 "Report on the EPOSS PinICL Task Force."
- 22 This version is version 1.0 and is dated
- 14 May 2001. You have explained in your statement that 24 you don't recall being shown a copy of this report
- 25 during your time on the programme; is that right?

- A. That is correct. On the date shown I had already ceased
 work.
- 3 Q. I think you quite fairly pointed out that you are not
 - named on the distribution list that we can see on the
- 5 bottom there. That carries the names T Austin, which
- 6 I believe is Terry Austin; M Bennett, Martyn Bennett, to
- 7 whom you have referred; and D McDonnell, which I believe
- 8 is a David McDonnell.
- 9 However, if we control down to the second page
- 10 please. Under the heading "Document History" at 0.1, we
- 11 can see that an initial draft of this report was
- 12 produced on 18 September 1998 following completion of
- 13 the task force. This is referred to as version 0-point
- 14 1. Can you see that Mr Coombs?
- 15 A. Yes, I can see that.
- 16 Q. That was at a time when you were acting in the role of
- 17 programme director, is that right?
- 18 A. '98, yes.

- 19 Q. I wonder if we could turn up another report please,
- 20 dated 28 October 1999. We will return to this shortly
- 21 but this other report is FUJ00079782. This is an audit
- report into the development of CSR+?
- 23 A. Yes.
- 24 Q. Do you recall what CSR+ was?
- 25 A. Yes, that's the name for a particular release of
 - 21
- 1 just been mentioning which was -- PinICL task force
- 2 report is what you are saying, isn't it, as
- 3 an associated document?
- 4 Q. Yes, that is right.
- 5 A. Right, so that's not this document. This document --
- 6 Q. No, my apologies. What we have here is a list of
- 7 documents associated with the CSR+ development report.
- 8 So they may be documents that accompanied the report or
- 9 documents that are referred to in the report.
- 10 A. Yes?
- 11 Q. What this tends to suggest, I believe, is that the
- 12 report on EPOSS PinICL task force was brought to the
- 13 attention of the senior managers of ICL Pathway by
- 14 October 1999 at the very latest; would you agree with
- 15 that?
- 16 A. I don't remember seeing that particular report, attached
- 17 report. I'm trying to think. I might have done but
- 18 I can't remember it.
- 19 **Q.** In your statement you confirm that you do recall there
- 20 being problems with the EPOSS code; is that right?
- 21 A. Yes, EPOSS was an issue and there was work done which
- 22 was around these time frames which were quite long and
- 23 ongoing, work being done to look at whether the existing
- 24 EPOSS software that was having problems was replaced by
- 25 another system which went into development or whether

- 1 software.
- 2 Q. I think it is the Core System Release Plus?
- 3 A. Yes.
- 4 Q. I don't propose to take you through the detail of his
- 5 report now but if we scroll down to the distribution
- 6 list. Forgive me, perhaps if we could go back to the
- 7 top. Just to confirm, this report is dated
- 8 28 October 1999?
- 9 **A.** Yes.
- 10 Q. At a time when you remained on the programme I believe?
- 11 A. Yes
- 12 Q. We can see you named on the distribution list at the top
- 13 of the right-hand column?
- 14 A. Yes
- 15 Q. Would it be fair to infer that you received a copy of
- 16 this report at the time?
- 17 A. I have no reason to believe I didn't.
- 18 Q. If we could scroll down to the second page, please.
- 19 Under the heading "associated documents" at 0.3 we can
- 20 see a number of documents referenced. At [6] there is
- 21 reference to the "Report on EPOSS PinICL Task Force"
- dated 29 September 1998. So this was a report that was
- 23 associated with the CSR development audit distributed to
- 24 you?
- 25 A. Can I ask a question please? The document that you have
- 1 effort was put in to make -- overcome the issues that
- were being seen on EPOSS by further development. So the
- 3 decision to spend money was made, so there was money
- 4 available, but the issue was, "should it be for a new
- 5 development or for an exercise to clean up the existing
- 6 work development". So yes I remember that quite
- 7 distinctly, what I can't remember is the outcome of that
- 8 decision. I can't remember what we were -- what was
- 9 decided to be done.
- 10 Q. Just starting, if we can, with what you understood about
- 11 problems with the EPOSS code. What did you understand
- 12 at the time about the nature and the cause of these
- 13 problems?
- 14 A. I'm still thinking a bit. So you are talking about,
- 15 with the product itself, the nature and --
- 16 **Q.** Problems with the underlying code that supported the
- 17 application.
- 18 **A.** I know they were them because of the points I had made
- 19 about the existing release versus new release.
- 20 I can't -- I have no -- I cannot recall what the issues
- 21 were.
- 22 Q. It might assist you -- I think we will see -- but if we
- return to the report at FUJ00080690, please. This is
- 24 the report that was produced on the EPOSS PinICL task
- force. If we scroll down a bit a little bit. We can

see the authors of the report were J Holmes --I believe, Jan Holmes --A. That's correct. Q. -- and David McDonnell, to whom you referred earlier on in the distribution list. At page 17, we can see that one of the key concerns, raised in the report, related to the quality of code in the EPOSS product. A. Is this the document from -- what the date of this document I'm looking at now? I'm beginning to lose timescale. Q. Of course, sorry. So this is version 1.0 of the EPOSS PinICL task force, dated 14 May 2001. What we have established is an initial draft of this document was produced on 29 September 1998 and, therefore, at a time when you were still involved in the programme as its director. What I would like to establish is whether what is recorded in this report assists you at all in recollecting what you understood about problems with the EPOSS code at the time. Does that make sense? A. It makes perfect sense. Q. Thank you. So under paragraph 7.3, please, we can see it bears the subheading "Existing Code" and in the

that:
"This section has been produced with the assistance

there are undeniably problems and there were a lot of PinICL fixes and yet, at times, there were concerns about the quality and number of PinICL fixes but I couldn't tell you how many there were, what category there were, et cetera, because I cannot remember this level of detail. It just doesn't come back to me.

square box at the top there is a note to the effect

Q. I understand. You have also confirmed in your statement
 that you recall there being a high number of faults in
 the EPOSS component of the system; is that right?

10 A. Yes. Trying to add some sense there; I mean, one of the
11 issues with EPOSS was the number of PinICLs and the work
12 needed to clear the PinICLs. So I think that is the
13 core thing that I hold onto as a memory. But going
14 below that is somewhat difficult and going to where they
15 put in code is even more difficult.

16 Q. I think your recollections of issues with EPOSS mirror
17 another area of concern which was raised by the authors
18 of the task force report. If we could go back, please,
19 to page 7., under the heading "EPOSS Code (Section
20 7.2)".

A. Yes.

Q. What we see in the first paragraph broadly reflects whatwe have already covered --

A. Yes.

25 Q. -- but, for consistency, I will repeat it:

of Dave McDonnell and Martin Smith and their combined experience of structured programming."

It goes on to say that:

"Although parts of the EPOSS code are well written, significant sections are a combination of poor technical design, bad programming and ill thought out bug fixes. The negative impact of these factors will continue and spread as long as the PinICL fixing culture continues. This is partly due to the nature/size of the bug-fixing task and partly due to the quality and professionalism of certain individuals within the team."

The report goes on to give a series of illustrations, of quite a technical nature, of the problems that had been discovered in the code. Do those general observations resonate with you at all in relation to what you understood at the time to be the problems with the EPOSS code?

A. Certainly, what I'm looking at with existing coding, it's so much more depth than I would have looked at or needed to look at. The conclusions don't resonate because I can't remember this actually ever being successfully concluded. I don't know and can't remember anything happening in my time on the programme to say what happened to EPOSS. So I have that as a problem in fixing this, as to I can read the words there and, yes,

"It is clear that senior members of the Task Force are extremely concerned about the quality of code in the EPOSS product. Earlier this year the EPOSS code was reengineered by Escher and the expectation is that the work carried out in Boston was to a high standard and of good quality. Since then many hundreds of PinICL fixes have been applied to the code and the fear is that code decay will, assuming it hasn't already, cause the product to become unstable. This ['presents', I think it should be, with an 'S'] a situation where there is no guarantee that a PinICL fix or additional functionality can be made without adversely affect [I think it should be 'affecting'] another part of the system."

The report goes on to state:

"However, a more worrying concern from the Programme's perspective should be the reliance on the EPOSS product in its current state as a basis for planning and delivery. During the Task Force there was relatively little testing that directly impacted EPOSS and yet [more than] 200 PinICLs, roughly 50 per week, were raised. Immediately following the conclusion of the Task Force it is intended to re-run System Test Main Pass and various other test streams. While I am confident that the fixes delivered by the Task Force will prove to be reliable I fully expect the PinICL rate

12

to increase as further testing is carried out.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1

4

5

6

7

8

9

10

11

12

"Lack of code reviews in the development and fix process has resulted in pour workmanship and bad code."

Reference is then made to the four examples which were cited at the end of section 7.3, to which we have referred.

Bearing in mind that you recall an issue with high volume of PinICLs, again, do these conclusions that you have read here resonate with you in terms of the seriousness and severity of the problems that Pathway were facing in September 1998?

A. I think people were becoming aware of it as a main issue, which is why the task force was set up, so, yes, there were issues there. If you ask me to look at that and the rest -- as I say, senior members of the task force -- I don't know. It talks about people and I don't know the people or what their role was because there are certainly different views about what to do with EPOSS, based on what we actually had or could get.

And what I can't do is I can't disagree with anything you have said. There were problems with it but whether it would cause -- a lot of what is there is a view of a person, which may be totally accurate, but it is a view which may be disputed or not agreed to by people responsible for it. As I say, the systems or

- Can you see me as well?
- 2 A. I can hear and see you.
- 3 Q. Thank you.

Before the break, we were discussing the findings of the EPOSS PinICL task force report, originally produced in September 1998. Before we move on from that topic, there is one further question I would like to raise with you.

One of the risks identified in that report was that the application of PinICL fixes risked causing code decay, which I understand to mean a further deterioration in the quality of the EPOSS code. Was that a risk to which you were alive at the time?

13 14 A. No, it wasn't. I was alive to the fact there were 15 PinICLs that needed to be resolved but I cannot remember 16 any discussion about decay of the product but it must 17 have been part of the discussion that was being had 18 because there were two EPOSSes being discussed. One was 19 a redevelopment and one was the existing one. I am 20 sure, within the task force themselves, they must have 21 had discussions as to how many PinICLs and the likely

22 impact. But I have no knowledge of anybody making the

23 comment that it would actually cause decay. So it is

24 not something I was actually alive to at all, nor can

25 I remember it and I have not seen it in a document. 1 development director took a personal interest in it.

2 Q. I think the point you are making is that this was the 3 opinion of the authors of the report; is that right?

4 A. What I do remember is the fact that there was

a discussion around using existing EPOSS versus a new

6 EPOSS and part of the new EPOSS approach was doing so

7 much stuff with Escher. That I remember. What I can't

8 remember is which one was used. I just can't -- I don't

9 know the outcome of this, it is a big problem I'm

10 having. So not knowing the outcome I find it difficult

11 to comment in detail on some of the position that may or

may not have existed. Am I making myself clear?

13 Q. Yes, you are, Mr Coombs. We will come on in due course 14 to what appears to have been the outcome but this may be 15 a convenient time in which to take a short break and we 16 have been going for 50 minutes.

17 Sir, would you be content for us to break for 18 10 minutes --

19 SIR WYN WILLIAMS: Yes, certainly.

20 MS HODGE: Thank you very much.

21 (10.51 am)

22 (A short break)

23 (11.03 am)

MS HODGE: Thank you, sir. Mr Coombs, can you hear me? 24

A. Yes, I can.

30

1 One of the problems I have with going through this, 2 on this particular topic, is the fact that there seems 3 to be a long gap in terms of documentation between the 4 1998 report and the one that I had already stopped 5 working for before it came out in May 2001 and I have no 6 recollection of what happened in the middle. Which 7

8 Q. You have explained in your statement that you took 9 a period of medical leave from work in the spring of 10 1999 and that you returned on lighter duties in or

11 around June 1999; is that right?

makes it rather difficult.

12 That is correct.

13 Q. You would have learned upon your return to work in 14 June 1999 that the Benefits Agency had withdrawn from

15 the programme --

16 A. Yes.

17 Q. -- and that the Horizon system had progressed into

18 an operational live trial; is that right?

19 A. Yes.

20 Q. Do you have any recollection of your involvement in the 21 acceptance of the Horizon system after completion of the

22 operational live trial?

23 A. So you are talking about acceptance for entering

24 rollout.

25 Q. That is right.

31

- Right. I know there was -- I have virtually no memory 1 Α.
- 2 of it. I couldn't say that I remember what happened at
- 3 the time or where we were at the time. If you had asked
- 4 me two days ago I would have said "I can't remember
- 5 anything". I can remember more now because I got
- 6 a document, which was provided by the Inquiry yesterday
- 7 afternoon, which actually covered some of those aspects.
- 8 I have scanned it but I haven't actually managed to make
- 9 sure it sinks in. It was a document sent to me late
- 10 vesterday afternoon.
- Q. You might be assisted if we turn up the minutes of 11
- 12 a meeting which you attended in August 1999. Please
- 13 could we show POL00043681. This is a copy of an email
- 14 from an Andrew Simpkins, a consultant employed by French
- 15 Thornton who was working for Post Office Counters at the
- 16 time. It is addressed to Peter Copping and David Rees,
- 17 two employees of PA Consulting Group, who had been
- 18 involved in the earlier review conducted in the summer
- 19 of 1997 --
- 20 A. Yes.

2

3

4

5

6

7

8

- 21 Q. -- and it is copied to a number of recipients, including
- 22 you. We can see your name after Keith Baines and Min
- 23 Burdett; can you see that?
- 24 Α. Yes. I can.
- 25 This email contained, as an attachment, the minutes of

had been attributed to the incident, a short description of the incident in the next column, and then the ratings ascribed to each incident by ICL Pathway and Post Office Counters.

Out of the incidents listed there, three had been ascribed a high severity by Post Office Counters. We can see that at Al376. I don't know if that can be highlighted.

- 9 A. Yes.
- Q. That incident was described as the "Derived cash 10 account". 11
- A. Yes, I can see it highlighted now. 12
- Q. Thank you. We can then see Al218 "Training", also 13
- 14 categorised as high by Post Office Counters. Thirdly,
- 15 Al298, which is described briefly as "Counter
- 16 lockup/freezes".
- 17 A. Of the three that you have identified there, I remember
- 18 one and the situation, which is "Training". And the
- 19 situation was a situation where their training was being
- 20 prepared, piloted and run and there was
- 21 a disagreement -- I think is the right way of putting
- 22 it -- between the two parties as to how much training
- 23 actually came under the contract or the PFI contract and
- 24 what class of training. So there was some disagreement
- 25 on training.

- 1 a management resolution meeting, which you attended on
- 2 12 August 1999. We can see those minutes at page 2,
- 3 please. Under the heading "Attendees", you appear to be
- listed as one of two representatives of ICL Pathway? 4
- 5 A. Yes, the other one is a John Dicks, who was the 6
 - requirements director.
- 7 Q. We can look at some aspects of the minute shortly but it
- is clear from reviewing these minutes that the purpose 8
- 9 of the management resolution meeting on 12 August was to
- 10 discuss the status of Acceptance Incidents which had
- 11 been raised during the operational live trial of the
- 12 Horizon system. Do you have any recollection of what
- 13 those Acceptance Incidents were?
- 14 A. I was heavily involved in this whole area and there was
- 15 a lot going on, to put it mildly, at this time, in terms
- 16 of areas that were being looked at to try and work out
- 17 how we proceeded. So, it is not unfamiliar but do
- 18 I recognise each individual point on the minutes? Then
- 19 some of them I can't remember.
- 20 Q. If we scroll down to the heading "Current Status of
- 21 Disputed Severity Ratings on Hot List", what I think we
- 22 can see are the --
- 23 A. For the first time, I recognise that I have seen this
- 24 document.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

25 Q. So we have, in the left-hand column, the number which

So I believe that is a different nature to the other two, which are probably to do with system training was not directly -- and I am sure it was agreed in the end and there was a passing backwards and forwards into special contractual -- what training was contracted for because it was specified, so by being specified had limits.

And if I remember correctly, Pathway were being asked to exceed what we believed was our contractual requirement. This is one of the areas where commercial bumped into programme issues with the nature of the contract. So that is a different sort and I think was actually resolved fairly easily in the end by deferring to contract.

The derived cash account, counter lockup and freezes -- derived cash account, well, I wouldn't know what that was. It doesn't trigger -- this far away, I can't remember the technicalities in either. Counter lockup and freezes. Yeah, well ...

- 20 Q. I propose to come back to each of those Als shortly 21 Mr Coombs, but before I do, we can see that, whereas 22 Post Office Counters has graded each of these incidents
- 23 as high, by contrast, Pathway has ascribed to Al376
- 24 a low severity rating. It has deemed Al218 to be closed

36

25 and Al298 to be low.

What do you think accounted for this difference in severity rating as between Post Office Counters on the one hand and ICL Pathway on the other.

4 A. Well, on training, I've explained what it was there. On 5 the other one, I cannot explain it without having 6 a better understanding of what they were and what the 7 position of both parties, or just the position of ICL, 8 was. I can't really comment because I can't think of 9 any reason -- apart from point proving and point 10 scoring, which do occasionally go on on large projects, I can't see any reason in the information we were 11 12 looking at to be able to say it was because of this or 13 because of that. I know insufficient about how the 14 counter locked up and froze, how often did it occur, 15 what was the impact? I don't know those questions.

> Without understanding that, I can't, from memory, say why there was the discrepancy. One I can understand, the other two I can't.

- 19 Q. Do you recall what the thresholds for acceptance of the 20 Horizon system were in the summer of 1999?
- 21 No. It is out of my brain. Α.

1

2

3

16

17

18

1

2

3

4

5

6

7

8

12

13

14

15

16

17

18

19

20

22 From the documents obtained by the Inquiry, we know that 23 the existence of one or more high severity faults or 24 deficiencies would have resulted in the Horizon system 25 failing to meet the threshold for acceptance; does that

But some of the views that Pathway had probably were optimistic in terms of low impact of things and also the other way. So one we have discussed, training: the amount of training that was trying to be got as an extension or to get us through this was actually quite high.

Sorry, could you repeat the last question, if I haven't --

9 Q. No, I don't think there's any need. I'm satisfied that 10 you have given an answer to that question, Mr Coombs, 11 thank you.

> If we could turn to the issue of training, which is the one, I think, in relation to which you have better recall. We know that, shortly before this meeting which you attended on 12 August, you were copied into some correspondence between John Dicks, the director of customer inquiries at ICL Pathway, and Bruce McNiven, who was then Horizon programme director. You have referred to some of that correspondence in your statement --

- 21 Α. Yes
- 22 Q. -- is that right? Please could we show POL00028365. 23 This is a letter dated 10 August 1999, addressed to John 24 Dicks. We can see from its title that it relates to 25
 - Acceptance Incident 218 and the issue of training.

1 resonate with you at all?

- 2 A. No, it doesn't. In my head I know it was low, the 3 number, but I didn't think it was that low. So, no, it 4 is not something I would remember. It doesn't resonate 5
- 6 **Q.** Would you have been aware at the time that a failure by 7 Horizon to achieve contractual acceptance would have 8 placed ICL's Pathway's right to payment for the design 9 and development of the system in jeopardy; is that 10 an issue you would have been alive to, do you think?
- A. Yes, I would have been alive to it because commercial 11 12 directors would want to know progress at a very high 13 level as to when the actual amounts were triggered, 14 because they were not insignificant.
- 15 Q. Would it be fair to say or to infer that there would 16 have been a strong imperative at this time for 17 ICL Pathway to secure the downgrading of these high 18 severity incidents, in order to retain -- in order to 19 obtain a return on the substantial investment, which it 20 had made in designing and developing the Horizon system?
- 21 A. There would have been an imperative to make sure that 22 they were understood by whoever was looking at them, the
- 23 systems director, and that there was an agreement on the 24 levels. So I can see this as a starting point going
- 25 through and looking at the effects on acceptance.

1 If we scroll down to the second page, please. We 2 can see there what is described earlier as an analysis 3 of the evaluation that had been carried out in the 4 preceding weeks against the business impacts identified 5 in the Acceptance Incident.

- 6 A. Right.
- 7 Q. Now --
- 8 A. It shows to me that previous document with "Training" in 9 it, when I said it was an issue which was contractual --10 to do with the amount of training, that was a different issue. This is --11
- 12 Q. We can come to that letter. I think the letter to which 13 you have referred is a response to this letter. So if 14 we perhaps take them in their chronological order. This 15 was the letter from Post Office Counters to Pathway. We 16 can come onto the response. If we just look briefly at 17 the left hand column, which bears the heading "Business 18
- Yes. 19 A.

23

24

25

20 Q. I don't propose to take you through all of the detail 21 but the first box there identifies as a business impact 22 of this incident:

> "The Office Managers ability to undertake daily balancing and produce a cash account is adversely impacted resulting in a failure to support accurate

| 1 | | [Post Office Counters Limited] accounting. This is |
|---|----|--|
| 2 | | a high severity impact on [Post Office Counters' |
| 3 | | Limited's] ability to perform its normal business |
| 4 | | functions." |
| 5 | A. | Yes. |
| 6 | Q. | What this appears to suggest is that issues in relat |
| 7 | | to training were not simply a question of how much |

elation 8 training was being provided but whether or not it was 9 equipping office managers adequately to carry out their 10 daily balancing and produce a cash account. Does that 11 resonate at all with you in relation to what you 12 understood about training issues at the time?

13 A. I'm trying to think. It doesn't resonate at this level.

14 Was I copied on this? I was, wasn't I?

Q. Forgive me, yes. If we scroll up to the bottom of the 15 16 first page. Thank you, we can see ~...

17 A. I think I was. I think I saw it at the time but -- it 18 looks familiar but ...

19 Q. My question really is, were you aware that Post Office 20 Counters' concerns about training were focused 21 particularly upon the cash account module and the 22 adequacy of that module to prepare office managers for 23 balancing on Horizon?

24 A. Not in the way that you say. What I was aware of on 25 training was that we were trying to get into a situation

1 where we had training which enabled a rollout. A lot 2 was to do with resourcing standards, approaches etc. 3 I certainly didn't pick this up as being that way. No 4 I certainly didn't pick this up. I can't remember what I did at the time, whether I did or whether I didn't. 5 For the moment -- it is familiar but I don't understand 6 7 what -- again, what resulted from it. Is it worth 8 taking me through the next page and seeing if that 9 triggers anything. 10 Q. Thank you. If we go back to page 2. In the middle of

11 the column we have "summary of success criteria measure" 12 and these were essentially some criteria, as 13 I understand it, that Post Office Counters requested be 14 met and in the final column an evaluation confirming 15 that at least the second two criteria had been met and 16 albeit there is a longer explanation, the first appears 17 also to have been met. So we know that there was 18 a period of review of this incident and that some of the 19 criteria against which Pathway were required to perform 20 had been satisfied. If we could however scroll to the 21 final page please. Under the heading "Qualitative 22 Measures". What it records at paragraph 3.1 is that:

> "Although the small sample size of 18 responses limits the validity of the findings, some significant improvements were found in comparison to Live Trial 1",

which comprised a sample of 102 offices:

"Overall, attitudes towards Horizon are better at the LT2..."

Which I believe is a reference to live trial 2:

"... compared to the LT1 experience. The key outstanding issues to emerge from research were as follows ..."

It then follows a list of four issues. The first of which was that:

"The course is still considered to be too short and intensive."

The second that there was a need for further stream --

"The need to further stream the training groups."

Thirdly, it was noted that there was "variation in trainer quality" and, finally, that there were "significant problems with technical and software faults in the training sessions".

So, as at 10 August 1999, these issues, it appears, remained outstanding?

21 Α.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

22 Q. I think in the response to which you have referred 23 that's dated the 11th August 1999, if you could just 24 bear with me a moment?

25 A. One comment on these 3.1 the qualitative -- the first 43

one, of course still considered too short and intensive, that was actually a programme commercial issue clash under the contract, I think being asked to do more, working out who can do what and who had to pay for what. I can remember that issue -- an issue coming up like that in terms of training, which is what I referred to earlier in this period. There were some very hard discussions on training which you can do, train as you can really do lots and lots of training, if you can get 10 the resource to do the training -- which is always 11 an issue -- you can do lots and lots of training but 12 somebody has to fund it and the contract says 13 such-and-such is expected then it's -- something just

15 I don't think that made much sense. Sorry about 16 that.

needs to be resolved commercially.

17 Q. No, not at all. I think you make the point there were 18 commercial discussions to be had --

19 A. Yes

23

24

25

1

2

3

4

5

6

7

8

9

14

Q. -- as to who would fund the more expansive training 20 21 course that Post Office Counters were seeking from ICL 22 Pathway; is that fair?

23 A. That is fair.

24 Q. Before we move on to ICL Pathway's response to this 25 letter, we can see at the final bullet point the

1 reference to significant problems with technical and 2 software faults. This appears to raise the possibility 3 that the problems which end users were experiencing when trying to balance their accounts and produce a cash 4 5 account were not necessarily caused entirely, or 6 predominantly, by issues in relation to the quality of 7 the training that they were receiving, but could also 8 have been related to on going technical and software 9 faults that were being observed during the training 10 sessions. Do you think that's fair inference to draw 11 from the point that's being raised there?

A. I would look at that differently. Yes, it makes a statement about significant problems with technical and software faults in training. So I see those significant faults/problems might be as a result of training code itself, rather than the product behind it because training systems were set up to do it.

The other thing I would take from that is there was an identification of something that needed to be rectified. So I would expect this to be -- this round to be rectified to a level suitable and that fitted with the contract by rollout. So I would see it as an indication of further work that needs to be done and making it quite clear that it is seen as significant. So I don't necessarily -- well, I don't disagree with

you were saying, does it relate to -- then no, I had this problem with the EPOSS that everything disappears

Excuse me, I'm getting confused here. Could you ask me your last question again?

6 Q. Yes, of course. You confirmed earlier in your evidence 7 that you were aware of problems with the EPOSS code; 8 that is correct, isn't it --

from my mind before the end point. I still --

9 A. Yes.

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1

2

3

4

5

- Q. As at August 1999, it was being brought to your 10 attention that end users, such as subpostmasters and 11 12 office managers, were experiencing significant 13 difficulties in balancing their accounts in producing 14 a cash account, which was a function of EPOSS, was it 15 not?
- A. I believe it was. 16
- 17 Q. My question to you was whether it occurred to you at the 18 time that these difficulties might not be attributable 19 principally to training or user error but rather to 20 bugs, errors and defects in the EPOSS application.
- 21 Could you just say that last bit of what you said again? Α.
- 22 Q. Yes, of course. The question is whether the reported 23 concerns about the difficulties which office managers 24 were experiencing in attempting to balance their 25 accounts, might be attributable, in fact, to bugs,

- 1 you but I would just read it a different way.
- 2 Q. The response which I think you have mentioned in your 3 statement you discussed with John Dicks at the time and
 - which was sent with this letter, was dated
- 11 August 1999. It is FUJ00079159. We don't need to 5
- 6 turn it up because I know you have seen it and you
- 7 explain in your statement that, essentially, you reached
- 8 the conclusion in discussion with Mr Dicks that
- 9 ICL Pathway had delivered further training at the
- 10 request of Post Office Counters and that the remaining
- 11 issues, so far as you were concerned, appeared to relate
- 12 to how Post Office Counters was managing change within
- 13 its business. Is that a fair summary of your position
- 14 as at August 1999?
- 15 A. It is the document you want to -- yes, that would have 16 been my position.
- 17 Q. Bearing in mind what you knew about the problems with the EPOSS code, did you consider that some of the 18 19 problems which end users were experiencing when trying
- 20 to balance their accounts and produce the weekly cash
- 21 account might, in fact, be attributable to bugs, errors
- 22 or faults in the EPOSS product?
- 23 A. No, I didn't consider that -- it may have occurred to me 24 and I might have -- we're probably aware, I'm sitting
- 25 now, do you I remember it being in a position where what
 - errors and defects in the EPOSS application?
- 2 A. This was for software in -- actually used in Post Office
- 3 or are we talking about training systems or are we 4 talking about --
- 5 Q. As I understand it, by this time, EPOSS had been in
- 6 operational live trial and rolled out to at least 200 7
- offices.

1

- 8 Δ Yes? Unless somebody raised EPOSS as an issue with me,
- which I don't remember at this stage, which apart from 9
- 10 the bits we discussed so far, I can't remember anything
- else, then, no, it would not have occurred to me. 11
- 12 Because
- 13 Q. We know that one of the other high severity Acceptance
- 14 Incidents which was observed by Post Office Counters
- 15 during the operational live trial related to the
- 16 integrity of data being processed by Horizon, this was
- 17 Acceptance Incident number 376.
- 18 I don't think you have much recollection of that 19 incident; is that correct?
- 20 A. That is correct.
- 21 It appears from the documents obtained by the Inquiry 22 that this incident related to discrepancies between the 23 daily transactions recorded on the branch counter and
- 24 the cash account that was being generated by Horizon.
- 25 Essentially, Horizon was not accurately accounting for

- all of the transactions being performed by the end user 1 2 at the branch counter. Does that brief explanation
- 3 assist you at all in your recollection of this incident?
- 4 A. No, it doesn't. One of the problems with trying to
- 5 recollect is that I didn't have responsibility for the
- 6 development of the testing and the rest, so I'm trying
- 7 to remember things across 20 years that were probably in
- 8 memos, letters and meetings, and there are better people
- 9 that existed in the programme at the time who should be
- 10 able to answer this question much better than me. But
- 11 I will continue trying the questions.
- 12 Before we move on from acceptance, Mr Coombs, the final Q.
- 13 incident which was graded as high severity was Al298.
- 14 This related to counter lockups and freezes. Do you
- 15 recall what, if anything, you understood about that at
- 16 the time?
- 17 A. I'm trying to think what I would have been aware of at
- 18 the time or what I'm aware of now. No, I wouldn't
- 19 necessarily have picked up on that, unless it was raised
- 20 in a review I attended and I cannot remember it being in
- 21 a review, either internal or with a customer, that I can
- 22 remember. So no ...
- 23 Q. We know that it was raised at the management resolution
- 24 meeting on 12 August. I think really what I would like
- 25 to establish is whether you understood counter lockups
 - were made in this report, in this audit report, about
- 2 the quality of the EPOSS product?
- 3 A. I cannot remember but I am sure it is in the document.
- 4 Q. Please could we turn to page 17. Can we go to the
- 5 following page, please. Sorry, that must be my
- 6 reference. The paragraph I'm looking for is
- 7 paragraph 4.2.1 under the heading "[Post Office
- Counters] Infrastructure". I think it must be possibly 8
- 9 page 19.

10

- Mr Coombs, you should be able to see there at the
- top a heading "[Post Office Counters Limited] 11
- 12 Infrastructure" --
- 13 Α. Yes.
- 14 Q. -- followed by a subheading "Electronic Point of Sale
- 15 Service".
- A. Yes. 16
- Q. Under the title "Commentary", we have, essentially, the 17
- 18 findings of the audit report, relating to the EPOSS
- product. The first paragraph reads: 19
- 20 "From the CSR+ perspective the development of the
- 21 EPOSS product has been successful with software drops
- 22 being made according to planned schedules and confidence

in the team that future drops will also be achieved on

24 time."

23

25 Can you see that?

- 1 and freezes to be a hardware issue, a software issue or
- 2 possibly a combination of both.
- 3 A. I don't recall them enough to be able to make that
 - statement. I don't know how to answer that question
- 5 because I didn't have a view. I'm not aware I had
- 6 a view.

4

- 7 Q. Mr Coombs, I have one final topic I would like to raise
- 8 with you but now may be a convenient time to take
- 9 another short break before I deal with that final topic.
- 10 Would that suit you?
- 11 A. I'm happy to continue if you wish to.
- 12 Q. Thank you.
- 13 I would like to turn to the audit of the Core System
- 14 Release Plus, which was conducted in September 1999, at
- 15 the time when negotiations were on going between ICL
- 16 Pathway and Post Office Counters over the resolution of
- 17 the high severity Acceptance Incidents which we have
- 18 just discussed.
- 19 We have pulled up this report before. It is
- 20 FUJ00079782. When we looked at this document earlier
- 21 this morning you agreed, I believe, that you were named
- 22 as one of the senior managers to whom this report was
- 23 distributed.
- 24 Α. Yes
- 25 Q. What if anything do you recall about the findings which
- 1 A. Yes, I can see that. What's the date of this document 2
 - again?
- 3 Q. Forgive me, this was produced in October 1999.
- 4 I believe it was on or around 18 October. If we go back
- 5 to the top, we should be able to see -- forgive me,
- 6 28 October 1999.
 - The second paragraph reads:
- 8 "Unfortunately EPOSS continues to be resource hungry
- in dealing with live problems associated with CSR [the 9
- 10 Core System Release] and in ensuring that these fixes
- 11 are broad forward and incorporated into the CSR+
- 12 product."
- 13 A. Yes.

7

- 14 Q. Do you have that?
- 15 Α.

23

- Q. The third paragraph really gets to the substance of the 16
- 17 concerns that were raised and it refers back to the
- 18 EPOSS task force report that we discussed earlier in
- 19 your evidence. That was the report produced in
- 20 September 1998?
- 21 That was the '98 one. This is '99.
- 22 Q. That is correct, October 1999. It confirms that:
- "The EPOSS Task Force Report raised the question of 24 the maintainability and resilience of the EPOSS code
- 25
 - following the 6 week PinICL blitz where some 550 PinICLs

1 were processed. Since then a further [approximately] 2 996 PinICLs have been raised -- using the 'Product ...'" 3 Then this is a search criteria, which is: 4 "EPOSS and Target Release = IR-CSR or PDR-CSR..." 5 That appears to be a search criteria used by the 6 auditors to identify which of the PinICLs related to the 7 EPOSS product.

8 A. Yes.

9

10

11 12

13

14

15

16

17

21

22

23

24

25

7

8

10

11

12

13

14

15

Q. It goes on to say that:

"In particular the maintainability, resilience and potential for change aspects must be subject to doubt. The report also identified many instances of poor programming technique and application of coding standards and while CSR+ changes have been reviewed by the Team Leader no attempts have been made to address the significant body of code not affected."

So, if we go on, please, a little further down.

18 A. Yes.

19 Q. Above the table there are two paragraphs. The first 20

"To ... support the recommendations statistics on EPOSS & Desktop PinICLs raised since 1st October 1998 were obtained."

It then describes the selection criteria used. Again, I understand these to be a reference to the

1 because I'm not recognising a lot of this and I should.

- 2 Q. The date of the document is 28 October 1999.
- 3 A. Version 1?
- 4 Q. If we scroll to the top. Yes, Version 1.0.
- 5 A. Right, I scanned it.
- 6 Q. If it assists, if we could highlight the box, please,
 - with the text in italics. This records that "The EPOSS
 - Solutions Report", which is a document we don't have but
- 9 which was produced in September 1999, had:

"... made specific recommendations to consider the redesign and rewrite of EPOSS, in part or in whole, to address the then known shortcomings."

It goes on to say that:

"In light of the continued evidence of poor product quality these recommendations should be reconsidered."

- 16 A. Right.
- 17 Q. Do you have any recollection of --
- A. I have recollection of a lot of discussions and lots of 18 19
 - meetings about EPOSS and, reading the highlighted ones
- 20 again, I recognise those, having seen it. The big
- 21 problem I have got, as I said before with EPOSS, is
- 22 I don't know what's happened. I'm looking at two
- 23 options and I cannot remember, for the life of me, which
- 24 option was followed. If I look at some of the
- 25 documents, I would think it is probably going to be that 55

1 search terms used to identify which PinICLs related to

2 EPOSS. We see in a table below the months, starting

3 October 1998. Can you see that in the left-hand column?

4 A. Yes, I can.

8

9

10

11

13

14

15

16

17

18

19

20

21

22

5 Q. Then, in the two other columns, the number of PinICLs 6 which match the criteria "EPOSS & DT", Desktop, or 7 simply "EPOSS".

> If we could carry on, please, to the following page. This takes us all the way through to October 1999, which is when the audit report was produced.

I'm sorry, could you finish by scrolling down.

12 The report records:

> "The figures [those that we can see in the table above] indicate that the problems facing EPOSS during the Task Force period have not diminished. Of greater concern are the non-EPOSS PinICLs within the group suggesting that there are still serious quality problems in this vital, customer facing element of the system."

In terms of the recommendations that arose from this, do you recall specifically what was recommended, in light of the high volume of PinICLs that were still being raised against the EPOSS product in October 1999?

- 23 A. I was copied on this document, was I?
- 24 You are named on the distribution list.
- 25 When was it -- the first version, when did it come out

- 1 but it might be the other and nowhere in the
- 2 documentation have I seen anything which said what
- 3 decision was actually made. I can't understand why not.
- 4 Q. Sorry, Mr Coombs. If we reflect for a minute on the
- 5 chronology of these reports, what we know -- or what
- 6 appears to be shown by this audit report is that
- 7 a recommendation to consider redesigning and re-writing
- 8 EPOSS was first made in September 1999?
- 9 A. Yes.
- 10 Q. That was at a time when Post Office Counters was in
- negotiation with ICL Pathway over the granting of 11
- 12 conditional acceptance to the Horizon systems. Is that
- 13 something that you are familiar with, that resonates in
- 14 terms of timings?
- 15 A. Yes. It fits with the timing but, you know --
- 16 Q. So we have a first recommendation in September 1999. It would appear that --17
- 18 Which was a recommendation to consider --
- 19 **Q.** To consider redesigning and rewriting EPOSS?
- 20 A. Right, so I am sure it was considered but what I don't 21 know is what the result of that consideration was.
- 22 Q. We then have a further recommendation in late
- 23 October 1999 to reconsider the recommendation to
- 24 redesign and rewrite EPOSS. Could it reasonably be
- 25 inferred then that the decision, if it was taken in

- 1 September, was not to redesign and rewrite EPOSS?
- 2 A. I would be guessing or making an inference which is
- 3 a bit too strong, I feel. I don't know what to infer
- 4 from that. The only thing I get out of that is the fact
- 5 that they were going to consider it. It was going to be
- 6 looked at and I am sure it would have been looked at
- 7 because it was so visible at the time but what
- 8 I can't -- what I don't know is what actually happened.
- 9 So it was a long-term issue that was running, and me
- 10 developing or even doing an exercise on -- well of
- 11 course, it takes time and it can take a lot of time. So
- 12 it would have been a visible thing. It wouldn't have
- 13 disappeared but I just do not know how to find out which
- 14 approach to EPOSS was adopted. I just don't know.
- 15 SIR WYN WILLIAMS: Mr Coombs, can I ask you, do you have any
- 16 memory about whether you were consulted about which
- 17 choice should be made?
- No, I don't. 18 Α.
- 19 SIR WYN WILLIAMS: Would you have expected to have been
- 20 consulted about it?
- 21 A. "Consulted" might be a strong word. I would have
- 22 expected it to go to one of the change control places,
- 23 which I might or might not have been invited -- change
- 24 control, because it was somebody sponsoring it, to do
- 25 whatever was the outcoming, and I may not have been told
- 1 A. That's the audit. You mean this audit document here?
- 2 Q. Yes, sorry, the findings made in this audit report. The
- 3 recommendation to the effect that EPOSS should be
- 4 redesigned and rewritten. To your recollection was that
- 5 brought to the attention of Post Office Counters Limited
- 6 at the time?
- 7 A. I'm thinking because -- I will probably talk as I think
 - because it helps -- look at that, just seeing it, it
- 9 depends where -- no. No, I do not have recollection of
- 10

- 11 **Q.** Do you consider that the findings and recommendations
- 12 should have been brought to the attention of Post Office
- 13 Counters Limited?
- 14 A. They may well have been brought but it depends
- 15 whether -- it depends on how they entered being passed
- 16 over, whether it led to a change in requirements or
- 17 a clarification of requirements which means that it
- 18 could have happened via requirements directorate which
- 19 I would not have necessarily seen unless there was any
- outcome. Or if it was handing over another release, 20
- 21 that would be done through the development systems group

59

- 22 and their interfaces with it. So I can see that people
- 23 could be brought in, not just using the development
- 24 audit, which was there basically to serve a different
- purpose than to communicate to the Post Office. So 25

- 1 of it at the time.
- SIR WYN WILLIAMS: Can I just summarise, you can't remember
- 3 whether you were consulted but it is not necessarily the
 - case that you would have been; is that right?
- 5 A. That is right.

4

11

15

- 6 SIR WYN WILLIAMS: Okay, thank you.
- 7 MS HODGE: Thank you, sir. Mr Coombs, one of the final
- 8 documents I propose to take you to is the schedule of
- 9 corrective actions which accompanied this report.
- 10 Before I do I would like to ask you whether you recall
 - EPOSS, whether you recall these ever being reported to

the findings and recommendations to redesign and rewrite

- 12
- 13 Post Office Counters at the time.
- 14 A. Could I interrupt? Sorry to interrupt. I have got some
 - noise coming off left, I will shut the door otherwise
- 16 I'm not going to hear you. I will be a minute or two.
- 17 Is that okay?
- 18 Q. Of course.
- 19 SIR WYN WILLIAMS: Of course, please do. (Pause)
- 20 **A.** Sorry about that.
- 21 MS HODGE: Thank you, Mr Coombs. My question was whether or
- 22 not the findings and recommend -- whether you recall the
- 23 findings and recommendations made in this audit report
- 24 were brought to the attention of Post Office Counters
- 25 Limited at the time.

58

- 1 I have no recollection but it doesn't mean that there
- 2 wasn't.

5

- 3 Q. My second question, Mr Coombs, is whether you think ICL
- 4 Pathway ought to have brought these findings and
 - recommendations to the attention of Post Office Counters
- 6 Limited at a time when Post Office Counters was
- 7 considering conditional acceptance of the system and the
- 8 implementation of its rollout.
- 9 A. Yes, it should have done, what I'm saying is I don't
- 10 know that it didn't do so. Because there are other
- 11 routes and communications, the way it could have come
- 12 through. Can you put up your circulation list of the
- 13 development audit itself again, just so I can look at
- 14 that, and that might help me try and remember.
- 15 Q. Yes, of course. It is on the first page. But,
- 16 Mr Coombs, my question isn't really whether it was as
- 17 a matter of fact -- that's something we can explore in
- 18 other avenues -- but whether you consider it should have
- 19 been. I think your answer is that you do consider that
- 20 the findings and recommendations ought to have been
- 21 brought to their attention?
- 22 A. I would consider that the content of the development
- 23 audit, not necessarily the development audit itself,
- 24 should have been communicated and taken to the customer

25 and specifically anywhere that mentioned specific

| 1 | products or processes or things which they had |
|---|---|
| 2 | an interest in. So they should specifically have been |
| 3 | brought ves |

- 4 Q. Before we leave, I think you can see there the 5 distribution list --
- 6 A. Yes.

9

10

11 12

13

14

15

16

17

18

19

24

25

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

- 7 Q. -- if that assists you at all.
- 8 A. No, it doesn't. (Unclear).

It might have been one of those that was done with library exchanges. Certain things that would go to their library would automatically come to us and vice versa. But I do not think that is necessarily that helpful, so no. But, yes, it should -- the contents, specifically to do with anything that can affect major problems, should have been brought forwards.

But all the individual problems, I am sure, were logged via the known problem register, via the PinICL list. So I think the information would flow. It's whether it flows in a way that is useful.

20 MS HODGE: Thank you, Mr Coombs.

21 I propose we take another short break now for about 22 10 minutes before we return to deal with the final parts 23 of your evidence.

Sir. is that a convenient time to break? SIR WYN WILLIAMS: Yes. What's the time now?

1 system?

> A. Well, awareness of the PinICLs and bugs and KPRs in the system, that was visible -- they were in part of the loop for actually dealing with that, in terms of impact. I know that happened. The other thing you were asking was where was my head in terms of new versus old EPOSS. was that what I was thinking?

Certainly that was in POCL's domain. I have seen somewhere in this process a document that says that but I cannot remember the detail. So there was a link, on the information to do with maintain or redevelop and that was known to POCL and is in a document with POCL people in it but it is somewhere -- I've seen it somewhere which means it is somewhere in the folders around me but I wouldn't know where to pick it out.

I think there was knowledge but whether it was the right sort of knowledge, so the key issue for me is: did it include the requirements thing as well? Because that level of change you are talking about, you would need to reset the requirements' baseline to make sure you don't take the product off or swerve away from its intended position

And that would have been under John Dicks' directorship and I have no idea whether that dialogue was had because I would not necessarily have been privy 63

MS HODGE: It is midday. 1

SIR WYN WILLIAMS: So 12.10.

MS HODGE: Thank you. 3

4 (12.01 pm)

(A short break) 5

6 (12.11 pm)

7 MS HODGE: Good afternoon, sir, can you hear and see me?

SIR WYN WILLIAMS: Yes, I can, sorry.

MS HODGE: Mr Coombs, can you hear and see me? 9

10 A. Yes I can.

16

17

18

19

20

21

22

23

24

25

5

6

7

8

9

10

11 Q. Thank you. Before the break, Mr Coombs, we were 12 discussing what, if anything, you recalled about the 13 findings and recommendations recorded in the audit 14 report being brought to the attention of Post Office 15 Counters.

> In your statement you say that, whilst you do not recall whether or not Post Office Counters was informed about issues with EPOSS, you would have expected them to have been aware, and I would like to explore with you briefly what the basis of that assumption is, please.

When you refer to issues with EPOSS, are you referring specifically to the recommendation that it be redesigned and rewritten in light of the poor quality of the code or are you referring more generally to knowledge of the existence of PinICLs and bugs in the

1 to it.

2 Q. The document to which you refer in your statement is the "Report on the EPOSS PinICL Task Force", which we have 3 4 looked at already. That is FUJ00080690.

At paragraph 7.1.2 of that report, if we could scroll down, please, you can see that's on page 16, I think you rely, Mr Coombs, on the reference here to Post Office Counters Limited's involvement. Is this the document to which you were referring just a short time ago?

11 A. Who is on the circulation list for this one?

12 Q. If we go back to the top, please?

13 Sorry about this.

14 Q. No, not at all. This is an internal ICL Pathway 15 document.

16 A. Yes.

17 Q. We can see that from its title.

18 Forgive me, to the first page where the distribution 19 is recorded, please.

20 A. I'm looking for it. Yes.

21 Q. So the names we have there are Terry Austin, Martyn

22 Bennett, David McDonnell and the library?

23 A. Terry is on it -- sorry. Mr Austin is on it, that's the 24 systems development directorate, and he had -- he worked

25 through EPOSS a lot more than I did. He would know who

- 1 was told at the working level when reviewing what was
- 2 issue 1. So that would come up very much at that view.
- This is a one-off thing which -- I don't know who asked
- 4 for the task force there but I would probably say it was
- 5 Martyn Bennett and Terry to try and understand -- as you
- 6 can see from the rest of the document. So ...
- 7 Q. Mr Coombs -- sorry --
- 8 A. I would not necessarily have expected to see this
- 9 document. I know I have but ...
- 10 Q. Mr Coombs --
- 11 A. -- it is very difficult actually because I was probably
- 12 there -- that's 14 May 2001, wasn't it? By which time
- 13 I was in a hospital bed. So anything that was
- 14 immediately before this or comes after it, I would not
- 15 have seen. But I am sure communication must have
- 16 continued and must have occurred and I would have
- 17 expected Terry to keep that up.
- 18 Q. Mr Coombs, what I'm trying to explore with you -- and
- 19 I apologise, I have not posed the question very
- 20 clearly -- but you have made an assertion in your
- 21 statement that you would have expected Post Office
- 22 Counters to have been made aware of the issues with
- 23 EPOSS; that is correct, isn't it?
- 24 A. That is correct.
- 25 **Q.** I understand by issues with EPOSS that you mean both the
 - supported by a schedule of corrective actions, is that
- 2 right?
- 3 A. I can't remember specifically but I would have expected
- 4 it.

- 5 Q. We have a copy of the schedule of corrective actions,
- 6 which was prepared in connection with the CSR+
- 7 development audit carried out in October 1999. Please
- 8 could we show FUJ00079783. Mr Coombs, I hope you can
- 9 see the title of the document "Schedule of Corrective
- 10 Actions"?
- 11 A. Yes, I can see that.
- 12 Q. The version is 0.1, in the top right-hand corner and the
- 13 document is dated 22 November 1999.
- 14 A. Yes.
- 15 Q. A little further down the page, as we have established,
- we can see you named on the distribution list.
- 17 **A.** Yes.
- 18 Q. And at the top of this second page please, under the
- 19 heading "Document history" we can see a reference to
- 20 version 0.1 dated 22 November 1999 and it reads:
- 21 "Initial draft [of the schedule] following
- 22 preliminary analysis with MJBC", and the date,
- 23 17 November, in brackets.
- 24 Are those your initials?
- 25 A. Yes, they are.

- 1 occurrence of bugs, errors and defects but also the
- 2 specific recommendation that was made to redesign and
- 3 re-write the application; is that right?
- 4 A. Yes, and I would have expected there to be discussion,
- 5 at least not -- a discussion I was involved in.
- 6 Q. What I'm trying to establish is the basis on which you
- 7 had that expectation.
- 8 A. A number of reasons. One of which is there would be
- 9 a need to steer us through the acceptance type hurdles
- with that product and without some movement or change in
- 11 intention or product, then I do not see how that could
- 12 occur. It would become a blocker. It all gets tangled
- 13 up in broader discussions. And I would have expected in
- 14 review -- and I don't know what reviews were going on in
- 15 development division -- but there would be reviews which
- 16 included then requirements and representatives in POCL,
- 17 I know that occurred but I don't know if it occurred for
- 18 this. Or whether this was an isolated activity, ie not
- 19 connected into mainstream but I can't see how it could
- 20 be. I would have an expectation that this was visible
- 21 to the customer either via development or via
- 22 requirement.
- 23 Q. Thank you, Mr Coombs.
- 24 I understand that it was the practice for each
- 25 internal audit carried out by ICL Pathway to be
 - 60
 - **Q.** So this would suggest that you had some discussion of
- 2 the schedule of corrective actions with its author on
- 3 17 November; would that be fair?
- 4 A. Yes, that would be very fair.
- 5 Q. On page 3 please we can see at point 3, there is a key
- 6 to plan -- what is described as a key to plan, and we
- 7 see certain terms are there defined. The term "Owner"
- 8 relates to the identified owner of the corrective action
- 9 and underneath it the term "MTM"?
- 10 A. I'm looking at "Key to plan".
- 11 Q. Forgive me "Key to Plan", in yellow highlight in the
- 12 left-hand column, I hope you can see the "Owner"?
- 13 **A.** Yes

1

- 14 Q. That's the term used in the plan. It appears to donate
- the identified owner of the corrective action.
- 16 I understand that to be the individual who is to take
- 17 primary responsibility for --
- 18 A. For progressing and resolving it if it is an issue.
- 19 **Q.** Precisely. Underneath "owner", "MTM", which is the
- defined as the "management team member to whom the
- 21 corrective action owner reports". Bearing those in
- mind, if we could please proceed to page 4. The
- 23 corrective actions are recorded here in a table and in
- the top row we see the "Report Observation or
 Recommendation" in the third column, at the top. C

Recommendation" in the third column, at the top. Can 68

- 1 you see that in bold?
- 2 A. Yes, I can.
- 3 Q. The next column along identifies the owner of the
- 4 corrective action.
- 5 A. Yes.
- 6 Q. The fourth column, the management team member to whom
- 7 the owner of the corrective action is to report?
- 8 A. Yes.
- 9 $\,$ $\,$ $\,$ Q. You follow that. Thank you. If we could then carry on
- 10 please to page 8. (Pause)
- 11 I'm sorry for keeping you waiting, Mr Coombs.
- 12 A. That's okay.
- 13 Q. Under the heading "Report Observation/Recommendation",
- we can see the commentary there. The first paragraph
- 15 reads
- 16 "The audit identified that EPOSS continues to be
- 17 unstable. PinICL evidence illustrated the numbers of
- 18 PinICLs raised since the 1998 Task Force and the rate of
- 19 their being raised.
- 20 "The EPOSS solutions report made specific
- 21 recommendations to consider the redesign and rewrite of
- EPOSS, in part or in whole, to address the then known
- 23 shortcomings. In light of the continued evidence of
- 24 poor product quality these recommendations should be
- 25 reconsidered."

- 1 A. That would be relevant to customer services.
- 2 Q. "... and BD."

8

- 3 Would that be a reference to business development?
- 4 A. Business development. That is, if I'm reading this
- 5 correctly, because we are still on EPOSS, there was
- 6 an expectation or a possibility of passing of the
- 7 business development forward by offering services to
 - other people round an EPOSS type situation. So it was
- 9 seen as a potential -- business development were looking
- 10 at that and business development, as far as I'm
- 11 concerned, do not exist.
- 12 I refuse to accept they existed because I was just
- focusing on the programme, not on what we do
- 14 post-programme. That is not my remit. So they could
- put that in the action to me, as much as they like, "BD"and they would all know that they would not get
- 17 a response, unless Mr Bennett wanted to enter his name
- 18 on this list.
- 19 Q. Against that entry date of 17 November we see your
- 20 initials again, "MJBC to speak with TPA direct".
- 21 A. Yes.
- 22 Q. Can you see that? So it appears that you were in
- 23 discussions with Mr Austin as to how to action this
- recommendation on or around 17 November 1999.
- 25 A. Yes.

- A. That's the same as before.
- 2 Q. Indeed. That reflects the findings that we saw in the
- 3 CSR+ development audit.
- 4 A. And this is, remind me?
- 5 Q. This is called the "Schedule of Corrective Actions".
- 6 Yes.
- 7 A. And is the follow on from the CSR audit?
- 8 Q. Precisely. If we look there in the fourth column along,
- 9 the owner of this particular action is recorded as
- 10 "TPA". Is that a reference to Terry Austin?
- 11 A. That's Terry Austin, yes.
- 12 Q. Under the next column, the management team member, who
- has been identified as the individual to whom the owner
- should report, we have two initials, "JHB", the first,
- 15 would that be John Bennett.
- 16 A. That is John Bennett.
- 17 Q. The second are your initials, MJBC?
- 18 A. Yes.

23

- 19 Q. Thank you. In the final column, please -- sorry, the
- 20 penultimate column, under "Agreed Action/Commentary", we
- see a number of dated entries. The first of these is
- 22 dated 17 November. It provides:
 - "This action falls within Development but requires
- 24 higher level drive. Has links with CS ..."
- 25 Would that be reference to customer services?

7

- 1 Q. I think that follows from what we can see here.
- 2 A. Yes.
- 3 **Q.** Then, in the following entry, dated 25 November, albeit
- 4 it is not entirely clear who has made this entry, what
- 5 we see recorded as work on Al298, which was the
- 6 Acceptance Incident relating to counter lockups and
- 7 freezes, identified that --
- 8 A. Can you just run back through that? You lost me as to
- 9 which documents --
- 10 Q. Yes, of course, forgive me. We are looking at the
- 11 column entitled "Agreed Action/Commentary".
- 12 A. That is the one that has been magnified for me, so I can
- 13 read it.
- 14 Q. Exactly. That's one of several columns in the schedule
- 15 of corrective actions.
- 16 **A.** Yes.
- 17 Q. These are agreed actions and commentaries against the
- 18 recommendation to reconsider the proposal to redesign
- 19 and rewrite EPOSS.
- 20 **A.** These are all the ones that come under 4.2.1?
- 21 Q. Precisely.
- 22 **A.** I'm with you now.
- 23 Q. Not at all. Thank you. So the entry on 25 November
- 24 reads as follows:
- 25 "Work on Al298 [which we have discussed earlier in

2

3

4

5

6

7

8

- your evidence as an Acceptance Incident in relation to
 counter lockups and freezes] identified that majority of
 problems ([approximately] 80%) were to do with error and
 print error handling. Daily meetings had been
 instigated. TPA of view that while original code had
 not been good it would be difficult to justify the case
 for rewriting now."
- 8 **A.** Yes.
- Q. Does that entry resonate at all with you in relation to
 your recollection of your discussions with Terry Austin
 at that time?
- A. No, my discussions with Terry were much more about I am sure, with Terry, was much more about which
 version, was there going to be a development or was
 there going to be a maintenance thing, rather than this.
 It is quite difficult to link some of these back to each
- Q. I think it might help, Mr Coombs, if we go to a later
 version of this document. It is a version dated
 May 2000 and it is at WINT04600104.

other, isn't it? It is quite tortuous.

- We have seen in the top right-hand column this is version 2.0 --
- 23 A. Yes.

17

- Q. -- produced on 10 May. It is substantially the same as
 the November version, save that it includes some
- A. I don't recognise it. It is a person so I would assume
 it is release management.
- 3 Q. It says --
- 4 A. Is it possible just to go right a little bit? The blown
 5 up bit, I'm missing the right-hand side. That's it.
 6 The dates weren't showing.
- 7 Q. It also says at the first entry, dated 8 December:
- 8 "Also informed TPA [Terry Austin] that requires 9 agreement of MJBC before this can be closed."
- 10 **A.** Yes.
- Q. So we had earlier a recommendation from Terry Austin
 that there wasn't a proper case for redesigning and
 rewriting the EPOSS code and that the recommendation
 should accordingly be closed but it appears that that
 recommendation to close the action was subject to your
 agreement. Does that seem right?
- 17 A. Yes, it was, and initially I wasn't happy. I'm trying18 to remember what happened.
- 19 Q. A further entry -- sorry, Mr Coombs.
- 20 A. No, it is okay. Carry on.
- Q. A further entry on 8 December records that your initialsMJBC:
- "... confirmed that unless RM statistics
 contradicted reports provided by PJ", which I believe is
 Peter Jeram.

additional commentary and agreed actions.

If we could scroll down to page 7, please.

Apologies, it is at page 9, for the record. Mr Coombs, you should be able to see what is essentially the same table as we have been looking at, a short time ago, with the reports, observations and recommendations in the third column from the left, and the agreed action and commentary in the second column in from the right.

We discussed very briefly the entries of 17 November
and 25 November. If we carry on, please, to page 10.

- 11 A. Before you do, can I just finish reading something?
- 12 Q. Please, by all means.
- 13 A. Yes. Sorry about that.
- 14 Q. I think you have said that the entry dated 25 November
 15 doesn't assist particularly in recollecting what you
 16 discussed with Terry Austin at the time in relation to
- 17 this recommendation; is that right?
- 18 A. Yes.
- 19 Q. What we can see on the following page is some further
 20 entries. The first is dated 8 December. It records
 21 that:
- "JH requested statistics on fixes delivered to livefrom RM."
- What "RM" be a reference to release management, do you think?

74

- 1 **A.** Yes.
- 2 Q. "... the recommendation could be closed."
- 3 A. Yes.
- 4 Q. Do you have any recollection of that?
- 5 A. I have the recollection of the discussion with Terry.
- 6 Yes, you can see there my view was that it needed
- 7 closing -- I'm trying to remember what we were talking8 about. We are talking about EPOSS again, aren't we?
- 9 **Q.** Yes, there appears to be some consideration as to
- 10 whether or not the volume of PinICLs and fixes were such
- 11 that it was right to approve closure of the report.
- 12 Does that seem broadly --
- 13 A. It now rings a bell. The question was quite a simple
- one and that is: had the number of errors that had
- occurred reduced in volume of those coming in and had
- sufficiently been cleared, including in the key areas
- for us to close the report and continue with the
- 18 product. I had forgotten this one completely.
- Q. So that appears to be the position as at 8 December,
 namely that inquiries needed to be made as to the volume
 of PinICLs and fixes in order to ascertain whether or

22 not it was proper to close down this recommendation.

The next entry on 7 April refers to an email to you, MJBC, Terry Austin and Peter Jeram, "providing details of RM. EPOSS fixes to live".

75

2

7

17

18

19

- Δ Provided the information.
- 2 Q. It appears that was provided as requested, and the 3
- 4 "Asked for confirmation that matched PJ reports ..."
- 5 So, asking for confirmation as to whether that
- 6 matched Peter Jeram's reports:
- "If it does then will close." 7 8 The next entry, we see, is dated 3 May.
- 9 Hold on. Yes, 3 May.
- Α.
- 10 That records that a "Reminder email [has] been sent to Q.
- [the] above", I assume that means you, Terry Austin and 11
- 12 Peter Jeram --
- 13 A. Yes.

1

- Q. -- "seeking early response"? 14
- A. Chased on the same day. 15
- 16 "Chased on same day."
- 17 So that's approximately one month later in early
- 18 May.
- 19 Α. Yes.
- 20 Q. It appears that confirmation that EPOSS fixes to live
- 21 were matching Peter Jeram's reports hadn't been
- 22 provided, at least at that stage. Is that a reasonable
- 23 inference?
- 24 A. Yes. I will hold that thought while you continue.
- 25 Q. Thank you, Mr Coombs.

77

- 1 Q. Let's break it down a little, Mr Coombs. It appears
- 2 this was a collective decision of the management team;
- 3 is that correct?
- 4 A. I'm not certain. At this time, it may not have been
- 5 because I believe, at this time, John Bennett had
- 6 recently -- or during this process, at some time, John
- 7 Bennett moved on and Mike Stares arrives. So it might
- 8 have been a partial management team agreement, because
- 9 I don't know how up to speed Mike Stares would have been
- 10 at this stage. John Bennett's name was there,
- obviously, because it has commercial impact, and mine 11
- 12 because it had programme impact.
- 13 Q. Whether or not Mr Bennett played a part in that
- 14 decision, it appears that you weren't the sole
- 15 decision-maker, it was something that had been discussed
 - amongst the management team, at the time?
- 17 A. Discussed amongst the management team, and so there's
- 18 myself, there's Terry Austin, there's Martyn Bennett, as
- 19 well as people like Pete Jeram, who is a senior member.
- 20 So, yes, it was a discussion based on the then view of
- 21 members of PinICLs -- outstanding PinICLs coming in and
- 22 PinICLs going out.

16

23

24

So the decision was made, which I had forgotten all about completely -- a decision was made to continue with

79

25 the existing product. Unless it needed to be open for Finally, an entry dated 10 May, which records:

"Following response received from MJBC ..."

3 The following entry is in quotation marks and, 4 therefore, presumably reflects the content of an email

5 or a conversation you had had with the author. It says:

6 "As discussed this should be closed. Effectively as a management team we have accepted the ongoing cost of 8 maintenance rather than the cost of a rewrite. Rewrites 9 of the product will only be considered if we need to 10 reopen the code to introduce significant changes in 11 functionality. We will continue to monitor the code 12 quality (based on product defects) as we progress 13 through the final passes of testing and the introduction

14 of the modified [C14] codeset into live usage in the

15 network. PJ can we make sure this is specifically

16 covered in our reviews of the B&TC test cycles."

> It is then recorded that the recommendations and agreed actions are closed. Do you see that as the final entry?

20 A. Yes, I do. This is the missing bit of information 21 I didn't have in my head that made me uncertain about

22 all the discussions on EPOSS. It didn't lead anywhere,

23 and it had to lead somewhere, and I've never seen where

24 it leads to. I would never have amended this level of

25 detail without prompting.

78

- 1 any future reasons but I don't know whether that effort 2
 - occurred since, so I don't know.
- 3 Q. What we see there is, effectively, you are recorded as 4 saying the management team have accepted "the ongoing
- 5 cost of maintenance rather than the cost of a rewrite".
- 6 A Yes
- 7 By the "cost of maintenance" did you mean the ongoing 8 cost of applying fixes to bugs, errors and defects as
- and when they were identified in the system? 9
- 10 A. That is certainly one thing and the other is also -- it
- was the air of change. So it was -- there is 11
- 12 a reference there to -- it would only be done by
- 13 maintenance unless there was a need to open the product
- 14 to make significant changes. If I remember correctly,
- 15 there was always a possibility that that could occur as
- 16 further requirements came or were clarified from Post
- 17 Office.
- 18 Q. So is it right to infer, Mr Coombs, that rather than
- 19 addressing the underlying problem, namely the quality of
- 20 the EPOSS code, the management team decided in May 1999
- 21 to continue in the practice of applying software fixes
- 22 to the product?
- 23 A. Having looked at the figures produced by Pete Jeram to
- 24 say whether that was a sustainable position, the view
- must have been that it was. Because the decisions to 25

11

- 1 rewrite products are actually large ones to make because 2 you can introduce other faults, other problems, 3 interface issues and the rest. So that was a management 4 decision made by group of management that the product
- 5 was sufficient -- sufficiently developed and cleaned to 6 be usable by systems.
- 7 Q. Forgive me. The CSR development audit report, to which 8 this schedule of corrective actions related, had 9 reported that the application of software fixes was 10 liable itself to cause a further deterioration in the 11 quality of the EPOSS code. Do you recall that specific 12 concern being raised?
- 13 A. No, you mentioned it before and that's when I started 14 saying that sometimes you need to understand who, or 15 what organisation they are in, making these comments to 16 understand how possible it is to go with them. It could 17 be a subjective view rather than anything --
- 18 **Q.** You have explained that you yourself were a programme 19 manager not a technical expert. Did you not trust the 20 opinions of those who had been entrusted with the task 21 of producing, developing and rectifying the problem --
- 22 A. I trusted them and they carried on working and doing 23 work on it but the point I'm making is that there were 24 people who had different views on whether it should be 25 maintained or be re-written. Those different views can
- 1 A. The situation of doing maintenance on a product will --2 one thing to remember is this a long ongoing saga with 3 the product. So that things have changed as we go 4 through and certainly there was a need to get down a lot 5 of the PinICLs situation -- the only was I can answer 6 your question about the efficacy of the decision is by 7 understanding what's happened since.

8

9

10

11 12

13

14

15

16

It is one of those -- you only know if you are right on the development when it has actually been done. The key thing was there was a lot of people looking at it and a lot of work had gone in to come to a conclusion. I can only -- without any further information -- like historic information since then, in the 20-odd years to see what actually happened -- I don't see how I can say anything other than, my memory was that it was closed and a decision was made. Whether it is right or wrong,

- 17 Q. At the time when this decision was made, you were alive, 18 19 were you not, to the risk that the application of software fixes could cause a degradation in the 20 21 performance of the EPOSS code -- were you not -- by 22 10 May 1999.
- 23 24 the heart of the question, which was the best way 25 forward, was it -- which was the best way forward for

2 a view. So, given that there's the outcome of work done 3 from Pete Jeram and release management information that 4 eventually came to the conclusion that it was sustainable, yes that might appear to be at odds and it 5 6 might indeed be at odds with the previous statement to 7 do with code degeneration. But that was known and with 8 the overall view that was (unclear), and management 9 decision, was that the interests of the programme, and 10 hence Pathway, were best served by actually continuing

come through as being fact rather than just being

12 So I think it is a valid thing to do. But it relies 13 on -- and who would I actually prefer to believe, 14 somebody in release management or Peter Jeram? That is

with it on the maintenance basis that I have mentioned.

- 15 difficult because I know Peter very well. He is 16 a pragmatist who gets things done.
- 17 Q. If the -- sorry, Mr Coombs, I didn't mean to interrupt 18 you.
- 19 A. No. I have finished.
- 20 Q. If the authors of the audit report were right, that the 21 application of software fixes -- the continued 22 application of software fixes was liable to lead to 23 a degeneration in the EPOSS product and its code, rather 24 than providing a solution to the problem did this

25 decision not simply make the situation worse?

- is a different question for other people.
- A. I was aware of that that was a view and that that was at 83

1 the overall reasons in terms of costs, sustainability 2 and the rest and that was the view that we came to.

4 Q. We have an exchange of emails in May 2000. Please could 5 we turn up FUJ00079333. Mr Coombs, we see the first 6 email, or more correctly the last email, in the chain is 7 dated 10 May 2000, sent at 6.28 pm. It is from you to 8 Terry Austin and Stephen Muchow -- I believe, is the 9 corrected pronunciation.

Some people might say it was the wrong decision.

10 The subject of the email is "The current issue on 11 [C14] EPOSS".

12 Α.

3

- Do you recall what "C14 EPOSS" was? 13
- 14 I cannot tell you how it differs from any other EPOSS.
- 15 Q. I believe it was --
- 16 A. -- I do not understand the "C14" bit.
- 17 Q. I believe it was a new software release, relating to 18 EPOSS that was due to be implemented as part of the Core 19 System Release Plus. Does that ring any bells?
- 20 A. None at all.
- 21 Q. If we look down to the body of that email, it reads:
- 22

23

24

25

"As a group we need to address your concerns. Can you please add these to the migration meeting you are calling for the week I return from leave.

2

3

4

5

9

10

11

12

13

22

23

24

25

15

16

17

18

19

20

21

22

23

24

25

1 "Mike C."

2

3

4

5

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

I think, to understand those concerns, to what you are referring, we need to scroll down to the email from Stephen Muchow, which is dated 27 April -- if we go down a little bit further, please.

- 6 A. 27 April 2000.
- 7 Q. That is right. We can see that timed at 19.15 on
 8 27 April, from Stephen Muchow to you and Terry Austin.
 9 It reads:

"Mike/Terry,

"Please see below, report from Pat Lywood on [C14] implementation.

"I am particularly concerned with the risks of degraded counter and cash account performance and of code regression between [C13] and [C14]. Also, given the dependence on [Post Office] Backfill Training but without the benefit of experience of PONU's (which I think is Post Office Network Unit) track record on this activity -- there must be significantly increased risk that HSH (the Helpdesk service) performance against SLAs will be severely impaired.

Regards Stephen."

If we scroll up, we can see Terry Austin's response on 10 May, shortly before your own. It reads:

"Steve, I share your concerns regarding counter

85

the possibility of this occurring to an absolute minimum and I have recently requested a reconciliation where it is possible to do so.

"I also have no faith in PO backfill training but I'm not sure how I can help mitigate the risk. PO have an obligation to understand the implications on the counter of all the changes they have requested and ensure that the staff are informed and trained appropriately."

So the terms used repeatedly in this exchange are "counter performance" and "code regression". What did you understand by the term code regression?

- A. Well, I do not know what I understood at the time but what I would understand now is the worst sort of regression is where you find that problems reoccur that you got rid of in a previous release, you regress in terms of functionality and performance, or something. So that's what it would be but it doesn't tell me what it is
- it is.
 Q. What this appears to show, Mr Coombs, is that on
 10 May 2000, the very day on which the decision was
 either made or recorded to close the recommendation to
 rewrite and redesign EPOSS, it was brought to your
 attention that code regression appeared to be occurring
 in the EPOSS application. Is that a fair reading of

performance and code regression. To that end we are focusing on those areas of functionality where we appear to be experiencing performance degradation and attempting to establish where the problem lies."

Do you follow me, Mr Coombs?

- 6 A. I follow you. I know exactly where you are in the7 paragraph.
- 8 Q. Thank you:

"I have been personally aware of these problems for several weeks and would not expect CS to authorise [C14] unless these issues were resolved. I have raised the issue of extra work during weekly balancing with Mike who will be discussing it with Dave Smith."

Dave Smith was an employee of Post Office Counters,

I think, at the time?

- 16 A. Yes, he was my equivalent in Post Office Counters.
- 17 Q. "This has been introduced by [Post Office Counters18 Limited] to support LFS."
- 19 Do you know what LFS refers to, Mr Coombs?
- 20 A. No, I don't.
- 21 Q. I think it might be the logistics feeder service:

"I cannot give you a 100% guarantee that code regression will not occur at [C14] because by its very nature it is not fully automated and never will be.

However, our end to end processes are designed to reduce

8

1 this?

- A. That there was a risk of code regression, and a concernbut that people were alive to it.
- 4 Q. Did these concerns cause you to --
- 5 A. Sorry. I can see you now. I have lost the document.
- 6 Q. We can bring it back up if you like?
- 7 A. Continue.
- 8 Q. Did these concerns cause you to reconsider the decision9 not to redesign or rewrite the EPOSS product?
- A. Anything I say is going to be, sort of, with a hindsight view 20 years on, where I'm sitting at the moment, and I would say, I will always look at reconsidering it if
 I felt there was a need. But what I don't understand sufficient of is the nature.

What I would have done is had a discussion with Terry and Steve and try to understand the concerns that were coming in and whether it was deemed to be real.

Code regression happens. Sometimes it is a nightmare, sometimes it is not. I see where you are coming from in terms of what you are actually showing me is concerns about EPOSS, which is a fundamental product, and I understand why. I don't really see what else I can add on that one. Because, yes, I would be not happy about the fact that there was regression going to be found and I would do something about it with the

87

people there. How successful that would be, who can say.

> The decision has been made and it took a long time to take a decision, so if I was given that today in front of me as an option, would I do a new product? I might, but not until I had done a lot more work in understanding whether the improvements implied by Pete Jeram and through the group have been proven to be right or not. So it would have required more work.

No, I think it would be a bit premature to imply that there was regression because somebody said there might be regression in the future.

13 Q. Mr Coombs, did it --

Sorry, I apologise for interrupting.

15 A. No, I finished.

1

2

3

4

5

6

7

8

9

10

11

12

14

- 16 Bearing in mind the decision-making we saw recorded in 17 the schedule of corrective actions, did it simply come down to balancing the likely cost of a full redesign and 18 19 rewrite of EPOSS against the ongoing cost of software 20 fixes? Is that what was ultimately determinative of
- 21 this decision?
- 22 A. That was, I believe, effectively where we ended up.
- 23 A decision was made that the product was sufficient
- 24 after all the work that had been done looking at it and
- 25 trying to improve it. We thought it was the best
- 1 Ms Hodge pulled up for you to look at included, as one 2 of the recipients, a man called Gareth Jenkins.
- 3 A. Yes.
- 4 SIR WYN WILLIAMS: Did you know Mr Jenkins?
- 5 A. Yes. I did.
- 6 SIR WYN WILLIAMS: Can you tell me what his position in ICL
- 7 was --
- 8 Α. Who?

20

21

22

23

25

- 9 SIR WYN WILLIAMS: -- or partly? What his position was as 10 far as you are aware?
- A. I thought he was in the development group. 11
- **SIR WYN WILLIAMS:** So he was in the development group. 12
- 13 A. Nothing to do with Pathway. If I'm thinking of the 14 right Gareth Jenkins, he was in the development group up 15 in Manchester. I might be thinking of the wrong Gareth 16 .lenkins
- 17 SIR WYN WILLIAMS: All right. Can we just put that email chain up again because it is not just Gareth Jenkins, 18 19 there are two letters after him.

So if you scroll down slightly, so we get just above the bolder type -- "Steve, I share your concerns" -- you see there is a list of the people to whom that email was copied and the last but one is "Jenkins Gareth, GI".

91

24 That is the person I'm asking about.

Do you know who that is, Mr Coombs?

1 option, because there is always a risk when you start

2 redesigning a product from scratch -- especially in the

3 environment which we were facing, where there were

4 problems with requirements creep, from when I first got

5 along, if anybody went near to open it, then another

idea would come from somewhere amongst the sponsors of

7 the development that would be useful. We also took that

8

6

9 Q. Finally, Mr Coombs, because we are almost at the lunch 10

break but I think I can finish very shortly. Were you

11 aware, during your time working as programme director,

12 that Post Office Counters Limited were intending to

13 place reliance upon data recorded on Horizon to support

14 the bringing of civil and criminal proceedings against

15 subpostmasters and office managers suspected of fraud?

16 A. I didn't have the faintest idea they were considering 17 using the information and I had no idea at all they were 18 considering taking the step of prosecuting members of 19 their own organisation. I had no knowledge of any of it

20 at all, with respect.

21 MS HODGE: Thank you, Mr Coombs, I have no further questions 22 for you. The chair may have some before you are

23 released.

24

1

Questioned by SIR WYN WILLIAMS

25 SIR WYN WILLIAMS: Mr Coombs, that last email chain that

A. No, I don't. I know a Gareth Jenkins but, as I said,

2 I thought he was up in Manchester. This one, it could

3 be the same and end up here. But I don't know him and

4 I don't understand "GI".

5 SIR WYN WILLIAMS: All right then. That's fine. Thank you 6 very much.

7 Are there any other questions for Mr Coombs by 8 anvone?

MS HODGE: No, sir. 9

SIR WYN WILLIAMS: Then I think that completes your evidence 10

11 Mr Coombs and I'm very grateful to you taking the time

12 and trouble to give evidence to the Inquiry. Thank you

13 very much.

14 So we will break now until, shall we say, 2.10 pm? 15 Will that give sufficient time this afternoon?

MS HODGE: Yes, thank you, sir. 16

17 SIR WYN WILLIAMS: Fine. 2.10, then everyone.

18 (1.06 pm)

19 (The short adjournment)

20 (2.10 pm)

SIR WYN WILLIAMS: Good afternoon, Mr Sweetman. 21

THE WITNESS: Good afternoon, sir. 22

23 MR STEVENS: Sir, we are waiting to see Mr Sweetman.

24 I hope you don't mind, sir, I took the liberty of 25

telling Mr Sweetman he could take off his jacket to give

| 1 | | evidence. |
|----|-----|--|
| 2 | SIR | WYN WILLIAMS: That's fine. |
| 3 | | STUART SWEETMAN (affirmed) |
| 4 | | Questioned by MR STEVENS |
| 5 | MR | STEVENS: Please could you state your full name? |
| 6 | A. | Stuart John Sweetman. |
| 7 | Q. | Mr Sweetman you should have a witness statement in front |
| 8 | | of you running to 11 pages, could I just ask you to have |
| 9 | | that to hand? |
| 10 | A. | Yes, I have. |
| 11 | Q. | It is dated 21 September 2022. Could I ask you to turn |
| 12 | | to page 11 of that statement? |
| 13 | A. | Yes. |
| 14 | Q. | Is that your signature? |
| | | |

16 Is the content of this statement true to the best of 17 your knowledge and belief?

18 A. Yes, it is.

A. Yes. it is.

15

5

6

7

8

9

10

11

12

14

15

16

17

18

19

20

21

22

23

24

25

19 Q. Thank you, Mr Sweetman. Your statement now stands as 20 evidence for the Inquiry. I want to start by asking you 21 a few questions about your professional background. You 22 qualified as a chartered accountant in 1973; is that 23 right?

24 A. That is correct.

25 Q. You joined the Post Office in 1982 --

93

1 that sort of thing. Then became assistant managing 2 director of Royal Mail and I was, amongst other things, 3 responsible for strategic direction of the Mail's 4 processes.

> And then I eventually was invited to become MD of Post Office Counters.

Q. When you became MD did you have any background in IT?

A. Yes, quite a lot as a project sponsor, one of my early roles in financial accounting. We, as a corporation, I think, at that stage, only had five accountants and no modern accounting systems. We just had the cash accounting system which was a laborious set of processes 13 from which we pulled out financial accounting information

> I was the project sponsor for introducing a complete billing and invoicing and debtor control system across the whole of the corporation. The payroll system was mine to develop as a sponsor. This is the purchasing and bought ledger activity we computerised and I was responsible for the centre of accounting systems.

So I was never a techie but I was a finance expert who wanted better systems and I oversaw the development, the implementation and the delivery of all those systems throughout the combined Post Office.

95

How did those systems or projects compare in scale and Q.

A. Correct. 1

-- becoming managing director of Post Office Counters on 14 May 1996?

4 A. Yes.

2

3

16

17

18

19

20

21

22

23

24

25

5 Q. In your witness statement you say that you held various 6 roles at the Post Office prior to your appointment as 7 managing director. What were they?

Initially I was director of financial accounting, which 8 9 was one of two finance positions underneath the board. 10 I was essentially chief bookkeeper. I kept the 11 accounting records of the whole of the then Post Office, 12 which was the combined operations of letters, parcels 13 and counters. I ran the large accounting function, 14 which was principally based in Chesterfield, where all 15 the cash accounting from branches came in and all the

information from the mails businesses came in.

It was my responsibility to produce monthly accounts, which went through to the management accounting team, to produce the annual accounts, which were then audited by the external auditors.

I then moved on to a number of posts in the Group. I was business centres director, where my role was to create and run -- I think it was about eight or nine business centres where we put all the overhead activities into profit centres, catering, engineering,

1 complexity to that of the Horizon project? Well, in that they were breaking new ground within the 2 A.

3 corporation, we were putting in new qualified 4 accountants at the head post offices, which I think were 5 about 120 at the time, and putting in commercial double 6 entry bookkeeping systems was quite radical. And I had, 7 I think, a development team, an implementation team of 8 several hundred and, yeah, it was quite a challenge but

9 we managed it. 10 **Q.** Turning then to the structure of the Post Office Group.

11 You were, as you say, MD of Post Office Counters, which 12 was one business within the Group, and the chief

executive of the Post Office Group was John Roberts. 13

14 Α. Yes

15 Q. We heard from John Roberts on 20 October. Did you 16 listen to his evidence?

17 A. I have seen some of it.

18 Q. He said that you, as managing director, were his direct 19 report; is that correct?

20 A. Yes, one of a number.

21 Q. In his evidence, he said that the Post Office board, the 22 Group board, was responsible for setting the strategy of 23 the business and once the board had set the strategy, it 24 was for managing directors, such as yourself, to deliver

25 it; would you agree with that?

2

3

4

5

6

7

8

9

10

11

12

13

14

A. Yes, I would. I would have proposed some of those strategies which the board would have discussed, considered, amended and then decided. They would then have been turned into personal objectives by John Roberts and then it was my job to lead my team to take that strategic direction, those objectives and deliver them

And that meant delivering what I would call business as usual, running the counters business, on a day-to-day basis, but also being responsible for change management, such as the Horizon project, where we get teams of people together to actually deliver on the changes required from one state to another state.

- 14 Q. Horizon was of significant strategy importance to Post
 15 Office Counters, we have heard that in evidence. What
 16 was your understanding of its importance to Post Office
 17 Counters when you became managing director?
- A. Well, thinking back and looking at the dates, around that April/May time, when I was appointed, Richard
 Dykes, who was the previous MD of Counters, and his team, and working with John Roberts, had evaluated
 "Tom", "Dick" and "Harry" and, initially, those three
- terms didn't mean anything to me. But, in that first few weeks after I was invited to take up the role,
- 25 I then got briefed on all the work that had been done to

1 **A.** Yes.

1

2

3

4

5

6

7

8

9

10

11

12

13

- 2 Q. I should have said, did you appoint him?
- 3 A. Yes, because he was part -- that role was a senior role 4 within the Post Office and we had a corporate personnel 5 function led by Jerry Cope, and was a small team, and 6 all significant senior appointments would have been done 7 under their auspices. They made sure the process was 8 fair, any interviewing that was done was done properly, 9 that it was all done as per the sort of rule, and so I, 10 ultimately, would have made that decision. Yes, I want Dave Miller to do that role. 11
- 12 Q. Can you recall if you had any other candidates before13 you or why you picked Mr Miller over anyone else?
- 13 14 A. I can't remember if there was a lot of choice. Dave 15 Miller was chosen because of his strengths. I had seen, 16 in my earlier jobs, computer systems run by techies and 17 they normally go wrong because there is no ownership by 18 line management. Dave had come out of -- I think, it 19 was the South West region of counties and was a very 20 well respected line manager of the business of running 21 Post Offices. He was also a pretty hard-nosed manager.
- He called a spade a spade and was quite driven and those attributes, to me, is what a programme director was all
- 24 about.
- 25 Q. You referenced programmes being run by "techies".

evaluate the various proposals.

And, at that stage, it became very, very clear that, unless counters developed a modern front end delivery system of services, it was not going to survive. The marketplace was eating our lunch. Technology would eat our lunch and, unless we got in there, we would not survive as a network.

When I took over, I think there was 19,000/20,000 outlets and all the modeling which had gone on showed that if we didn't keep our major clients, if we didn't computerise or offer new services, we would go belly up and have to shrink the network massively, lose a lot of employees and that is not a change of management that I was in any way interested in.

- 15 Q. Is it fair to say, when you came on as managing director
 and read these briefs, you took responsibility for
 delivering Horizon to keep the business running?
- A. Absolutely. I got briefed up and I think in the very
 first few days of my formally taking up the role, I had
 to sign and initial a document with Pathway or ICL,
 I can't remember which.
- Q. I will come to that in a moment. I want to just jump
 slightly ahead in the chronology. In 1998, you
 appointed a programme director, David Miller; is that
 right?

98

- 1 Mr Miller's evidence was that he was conscious that he 2 didn't have a technical background, which I think you 3 have alluded to. Where in Post Office Counters would 4 you go for IT expertise at this time?
- 5 A. We did recruit a number of our own IT specialists to
 6 fulfil particular roles, those roles which interfaced
 7 closely with Pathway. We did have a corporate IT
 8 function. I think that was run by Duncan Hine but
 9 various people changed. But we had a IT function who
 10 ran the central big systems of the Post Office, had the
- resources to advise line managers and so they were available to be called upon.
- 13 Q. You say Mr Miller reported directly to you?
- 14 A. Yes.
- Q. He was programme manager, you would have received
 information about the progress of the Horizon programme
 from him?
- 18 A. Yes, I would have.
- 19 Q. Did you listen to Mr Miller's evidence on 28 October?
- 20 A. Again, I have seen some of it.
- Q. His evidence was that you were his defined channel of
 communication to the Post Office Group board for any
 problems with the Horizon system; is that fair?
- 24 **A.** Yes, I think it is fair.
- 25 **Q.** He also said in evidence that he would meet with you to

23

24

25

1

2

3

4

5

6

7

8

9

10

11

12

21

22

23

24

25

- 1 discuss matters with Horizon on a regular basis; would 2 you accept that?
- 3 A. Yes, all my direct reports, we had at least monthly 4 meetings formally, where we went through objectives and
- 5 deliverables and what we promised each other the
- 6 previous month, and then a lot of ad hoc meetings. And
- 7 Horizon generated -- vague memory -- huge numbers of
- 8 ad hoc meetings.
- 9 Q. I would like to take you to a letter that was shown to 10 Mr Miller in evidence. The reference is POL00090839.
- 11 If we could turn to page 2, please.
- 12 A. That will come up on the screen, will it?
- 13 Q. It should do, yes.
- A. Nothing's coming up yet. Ah. Yeah, that's to Jeff 14
 - Triggs who was a very clever lawyer at Slaughters.
- 16 Q. On page 2, this is a letter from Ernst & Young to David 17 Miller on 23 August 1999. Ernst & Young were the
- 18 auditors of the Post Office at this point, weren't they?
- 19 A. Yes.

15

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

- 20 Q. The opening paragraph provides that this was:
 - "... to provide ... our views in respect of certain accounting integrity issues arising from tests performed by POCL on Horizon data in live trial."
 - Can you recall seeing this letter at the time?
- 25 A. I don't recall but I have read it.

101

outlet from daily Horizon polings. At present this control test is showing discrepancies in that certain transactions do not record the full set of attributes and this results in the whole transaction being lost from the daily polling."

So this is whole transactions being lost from the daily polling.

It goes on to say:

"We are informed that an incident has also occurred where transactional data committed at the counter has been lost by the Pathway system during the creation of the outlet cash account and has not therefore been passed to TIP [that is the Transaction Information Processing Services] in the weekly cash account sub

If we turn over the page to page 3, please. Second paragraph:

"It is a fundamental of any accounting system that it provides a complete and accurate record of all transactions. These discrepancies suggest that the ICL Pathway system is currently not supporting this fundamental."

Then below the impact the letter considers what these data integrity concerns had on the auditor's opinion. If you could go down to:

103

Q. David Miller said, in his evidence, that it may have 1 2 been you who requested this input from Ernst & Young. 3 Can you recall that?

A. I'm not surprised he says that because it could well

5 have been true. Because of my professional background, 6 having audited the Post Office, I kept quite close with 7 Ernst & Young and their partners and managers and 8 I trusted their input and their independence and I could 9 well have suggested to him -- because I think this was 10 the stage where it was getting very fraught and I think 11 we were having very hard nosed discussions with Pathway 12 and I think we probably would have wanted to demonstrate 13 to Pathway that they needed to really get their act 14 together. They needed to do the improvements that we 15 still wanted and to have a letter like this from our 16 auditors saying, "If you don't get your act together you

17 are in trouble" would have been, in our relationship 18 with Pathway, I think, useful, because it gave us a bit 19 of clout.

20 Q. If we could scroll down a bit, to the bottom, we see it 21 says "Incident 376", which is an Acceptance Incident 22 that we will come back to. But it says:

> "Incident 376. Data integrity -- In order to test the integrity of weekly polling of Horizon cash account transactions, POCL are reconstructing a weekly total by

"Given the above background, if these matters remained unresolved at the accounting year end, we would need to consider whether an unqualified opinion were appropriate. Under the present circumstances there appear to be a number of uncertainties whose financial impact cannot be quantified and which make an unqualified opinion unlikely to be available to us.

"Should this be the case, we would have to decide between including a fundamental uncertainty paragraph in our opinion or issuing a qualified audit opinion."

Now, Mr Miller's evidence says that this was a very significant issue. Would you agree with that?

- 13 A. Absolutely.
- 14 Q. Now, Mr Miller also said in his evidence that this is 15 something that should have been reported to the Post 16 Office Group board. Would you agree with that?
- 17 A. The consequences of not having an accounting system that 18 produced annual accounts which passed a true and fair view should have been reported. This was -- the proviso 19 20 here was: if these aren't corrected.

Now, the judgment, then, is: do we have plans in place to correct these errors? I think the judgment at the time was, remedial actions had been planned, they were being executed and they were being monitored for execution and as it turned out, the accounts weren't

- 1 qualified because sufficient work was done to overcome 2 the problems so we didn't have a true and fair view
- 3 problem. There wasn't, at the year end and presumably
- some time before, a fundamental uncertainty because they
 had been corrected.
- Q. Do you recall if you ever raised this letter with JohnRoberts or the board?
- 8 A. It wouldn't surprise me that I did. I have no
- 9 recollection of it and looking at papers I don't think
- 10 I can see evidence of it. Although when we took the
- 11 matter to the board, we did report that there were --
- 12 whether we used the word fundamental I'm not sure, you
- 13 will probably correct me -- there were issues of data
- 14 integrity and completeness of records still to be
- 15 resolved and we kept the board informed of that.
- 16 Q. Just so I am clear, is your evidence you can't rememberwhether or not you raised this with John Roberts?
- 18 A. I can't remember that particular action of mine. It
- 19 would be the sort of thing that I would have done with
- 20 him but I can't remember. We had a very open
- 21 relationship, we met formally, we ran through everything
- 22 and matters of this -- of this nature would get onto my
- agenda with him but I can't remember if we did and one
- 24 of the problems is, you've got hold of lots of records
- but none of the records of any of my meetings have been
 - says:

2

3

4

5

6

7

8

- "Work on EPOSS was continuing and Pathway had indicated that whilst it could provide a system which met the contract, its lack of robustness could generate high level of errors within POCL. This was being investigated although it was difficult to quantify how the system would work until after it had been installed and was operational."
- 9 **A.** Yes.
- 10 Q. At that point, what did you understand of the lack of11 robustness that was referred to?
- 12 A. This is the Electronic Point of Sale System, isn't it?
- 13 **Q**. Yes
- 14 A. To be honest, I recall none of the detail. I don't know15 what was cranky about it. Sorry.
- 16 Q. If we could then turn to a second document in
- 17 November 1998. It is POL00028672.
- This is a letter from David Miller to yourself and other members at the Post Office on 16 November 1998.
- 20 Do you recall receiving this letter?
- 21 **A.** I don't.
- 22 Q. If we could look --
- 23 $\,$ **A.** That's my writing in the top. That "In Strictest
- 24 Confidence" looks to be my writing.
- 25~ $\,$ $\,$ Q. $\,$ So it is addressed to you and it looks like it has your

107

- 1 preserved or made available to you. It is a shame but
- 2 I can't say yay or nay.
- 3 Q. I am going to jump back then. You have already referred4 to the MaPEC meeting, where the Tom, Dick and Harry
- 5 proposals were discussed. I don't need to take you to
- 6 that document and you have referred to the fact that
- 7 shortly thereafter you signed heads of agreement between
- 8 Pathway and the Benefits Agency.
- 9 **A.** Yes.
- 10 Q. I want to look at a few documents in May 1998, if I may.
- 11 Starting with POL00069096. If we could go to the second
- 12 page please. This was a meeting of the Counter
- 13 Automation Steering Group on 27 March 1998 which you
- 14 attended?
- 15 A. Yes.
- 16 **Q.** Do you remember the purpose of this group?
- 17 A. It was a corporate wide group. Because of the
- importance of counter automation, not to Counters but to
- the corporation, it was agreed that John Roberts as MD,
- 20 supported by the group finance director and group
- 21 strategy director, would have regular meetings
- 22 monitoring progress. So they could relate that back to
- 23 the non-executives on the board.
- 24 Q. Please could we turn to page 3 and look at paragraph 4.
- 25 This concerns a report provided by David Miller and it 106
- 1 writing on it, so you would have received it at the
- 3 **A.** Yes.

time?

2

- 4 Q. The second paragraph says:
- "We are due to start the Model Office Test proper
 and the final pass of End to End on 14 December 1998.
 My present assessment is that there are some significant
 problems with the way Horizon passes information through
- 9 to TIP [Transaction Information Processing]. These
- relate to the provision of balanced outlet cash accounts
 and the processing of the ensuing information via TIP."
- and the processing of the ensuing information via TIP."
- Transaction Information Processing, that was a Post
 Office Counters system to collect transaction records
 for all transactions at its branches; is that correct?
- 15 **A.** Yes, from memory, it was one of the big central systems
- in Chesterfield and, basically, everything was
- 17 aggregated by it. Various tests were done on the
- 18 quality of the information. Error reports were thrown
- out and then the information, when finally reconciled
- went, into the books of account.
- Q. But for Horizon and the EPOSS system to work, it was
 fundamental that it should be able to pass information
- 23 to the TIP accurately; is that fair?
 - 24 A. I think it sounds fair because, in the olden days before
 - 25 Horizon, big foolscap sized paper returns were sent from

. 108

every suboffice, together with all the supporting information, and that was processed in Chesterfield. The cash accounts were data captured in Chesterfield and a lot of testing routines were done then and a large number of errors were thrown out.

1

2

3

4

5

6

7

8

9

10

And then we had a team of people who took all the weekly errors and chased them down until there were really none left and that could take weeks after an accounting period ended. So TIP was part of that process

- Q. The purpose of Horizon, or one of its purposes, was to 11 12 partially automate that process?
- 13 Yes. The old cash accounting system was hugely Α. 14 cumbersome, very expensive to run, fraught with 15 difficulties and was very old-fashioned and, basically, 16 Horizon was meant to relieve everybody of the paperwork 17 and replace it with a reliable accounting system.
- 18 **Q.** Can you recall, even in broad terms, what your thoughts 19 were when you received this information about 20 Mr Miller's concerns as to Horizon's ability to pass

information via TIP?

21 22 A. I don't remember receiving a letter but, looking at that 23 letter and putting it into my present mind, I would have 24 been very concerned and I would have said, "What are we

doing about it?" You know, "What remedial action is 25 109

- 1 Q. Is it something you would have expected to have been 2 briefed on by David Miller?
- 3 A. If it was important, I would expect him to bring it to 4 my attention. I don't recall whether he did because 5 I don't remember the report at all. Sorry.
- 6 Q. If you could turn to page 11 of it to see if this may 7 jog your memory, and paragraph 1.3. The bottom 8 paragraph says:

"We have to date considered only the BPS system. Further work has recently started to perform a similar assessment of the approach adopted for other elements of the system, such as EPOSS. Nevertheless our findings are, in our view, sufficiently serious to bring into question the whole of Pathway's design process."

Then if we could turn to page 14, please.

- 16 A. Sorry, do you know what the BPS system is?
- 17 Q. Benefit Payment System?
- 18 Α. Right, sorry.

9

10

11

12

13

14

15

19 Page 14. If we could go to the last paragraph, please: Q.

20 "Of particular concern [it says] is the EPOSS 21 system. We are informed that at a relatively early 22 stage Pathway wanted the Authorities, principally POCL, 23 to be involved with the design of this element. The 24 plan was to use the Rapid Application Development or 25 ('RAD') methodology to design this system. This

1 being planned?" We were an organisation who was into 2 continuous improvement and when you come across problems 3 you then try and develop a management process which

4 actually sits down and says, "This is the problem, this

5 is the analysis, this is the remedial action, action

6 that, watch it come right", and that process of

7 improvement was at the heart of everything we did and so

8 this was another one of those challenges. That's how

9 I would have reacted.

10 Q. Can I turn to another document, the following month, 11 December 1998. The reference is POL00038829. If we 12 could turn up page 5, please. This is a letter from

13 Hamish Sandison at Bird & Bird to George McCorkell, Paul 14 Rich and Pat Kelsey on 18 December 1998, it enclosed

15 a Project Mentors report. Do you recall reading or

16 receiving this at the time?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

21

22

23

24

25

17 A. I have no memory of anything called a Project Mentors 18 report, no idea.

19 Q. Do you think it is a document you likely would have 20

21 A. I really don't know. Bird & Bird were the tame lawyers, 22 really sponsored by the Benefits Agency. George

23 McCorkell, I knew, he was one of the top techies in BA.

24 Paul Kelsey (sic), yeah, I remember the name. But what

25 the Project Mentors report was about I have no idea.

approach was started, but discontinued after some months, when the Pathway staff member involved left the project. The suggestion to use RAD leads us to believe that more traditional methods have not been used, and since the RAD experiment was abandoned, we have doubts whether any proper requirements analysis has been performed."

It goes on to say that:

"Our experience of systems where requirements have not been analysed satisfactorily is that the system fails to meet the users' needs. An effective acceptance test will identify many such failings necessitating considerable rework. The result is a significant extension of the time and cost required to complete the system and roll it out. The alternative is to allow unacceptable processing in the operational environment with unpredictable and potentially damaging results."

18 Having gone to those particular parts, do you recall 19 at all being briefed on those issues by David Miller or 20 anyone else?

I don't but I suppose I agree the sentiments within there, as a firm of consultants, they would have a way of working and this RAD process, I wasn't aware of, but what they are saying, if I say, it is all motherhood and apple pie. Those are nice generic phrases. If you

don't do it properly it won't work.

That's what it is really saying and my experience from other computer systems is, unless you actually sit down, the detailed requirements, when code starts being written, you will get it wrong. And so the analysis which they are talking about absolutely needs to have been done and I think under the PFI type arrangements that is what I would have thought would have been professionally done by Pathway. ICL must have had ways of working which took -- this is what we want as the client; this is how we interpret it from a technology point of view; this is the code we have to write and this is what we are going to deliver.

That process is very sequential, very logical and needs to be incredibly thorough and what they are saying is, if you pull any part of that out, it ain't gonna work. And I agree the sentiments, I don't know whether or not that was true because I never saw within ICL.

- 19 Q. In broad terms, can you remember in 1998, so whilst the
 20 Benefits Agency was still involved, what did you think,
 21 what was your view --
- A. I seem to remember that, as a team, we did have real
 concerns about -- I use the word "professionalism" yes, the professionalism of the Pathway team to actually
 get a grip of and deliver what we wanted as part of the

they were telling me that they'd got a handle on what ICL were doing, "There are these things are still outstanding, but we have an improvement plan to deliver them", to me that's what I wanted to hear as a MD: that they knew what the problems were, that there were documented improvement activities and they were confidence that those improvement activities would deliver a good result.

To me, that in place, I was happy. I then, on a regular basis, would say "How are you getting on with this, how are you getting on with that?" And the regular reporting that would have existed would have given me confidence or lack of confidence that things were being delivered.

Q. Let's move through the timeline a bit on that point. Obviously, throughout this time there are a number of negotiations concerning the future of the project and the dealings with the Benefits Agency, which we don't need to go to it but, in paragraphs 30 and 31 of your witness statement, you reflect that you were involved with meetings with ministers and strategic discussions on the continuation of the project itself.

This was eventually resolved such that the benefit card system was scrapped and on 24 May Post Office Counters and ICL Pathway agreed to enter or try to enter

1 set up.

Now, one of our early difficulties, I seem to remember, was that the PFI sort of put the boundary between the organisations too far near the user and not near enough the supplier because they were being paid by results. In theory, you transfer a lot of the risk to them and they get rewarded if they produce a good product.

Because of that, us as sponsors really aren't able to interfere a lot but I remember our technical people and our project team being worried about the quality of work being done by ICL. Now, that's a very nebulous memory and I can't think of specifics and I don't remember seeing this report but I agree with its sentiments.

- Q. If you can't remember just say, 1998, around this time,
 in your personal view, did you think that Pathway could
 deliver the EPOSS programme which Post Office Counters
 required?
- A. The honest answer is I don't remember the EPOS system.
 It is a blur to me, so I apologise for that. We set up
 under Dave Miller a group of -- I regarded them as very
 bright energetic motivated people who were trying to get
 to grips with all our requirements and proving to us
 that what was being delivered was of top quality. If

1 into a future codified agreement to deliver what is now 2 known as the Horizon system; do you agree with that?

- 3 A. Yes, I do. It was one of my most fraught periods in my4 management career.
- Q. From 24 May to the end of July, there was a period when
 the parties had to try to seek to agree terms for that
 codified agreement, correct?
- 8 A. Yes.
- 9 Q. I then want to look at June 1999. I want to turn to
 10 a meeting of the NFSP executive council. The reference
 11 is NFSP00000191.

This was a presentation on 11 June, which your name is on it.

- **A.** Yes.
- Q. Can we turn to page 12, please. This sets out what's
 described as the new vision involving Post Office
 Counters and focused on ambitions with banking,
 Government Gateway and mail and communications.

19 Whilst the Benefits Agency had withdrawn, it is 20 right that an automated platform, like Horizon, was 21 still essential to realise some of these commercial 22 ambitions; is that correct?

A. Yes, and the background to this was, in parallel with
 all the intense work on Horizon, it was clear that the
 government wanted -- and the board wanted confidence

that, strategically, we knew where we were going, and we set up a parallel project with Horizon to develop a new strategic direction for Counters and to make it convincing for the board and for government, as a shareholder

We employed the assistance of McKinseys, who were an incredible bunch of people, and they really did help us clarify the opportunities of an automated network. It was a pretty unique network of Post Offices in every community in the country and they went through and made us identify all of our strengths, how those strengths played in the marketplaces and we came up with a proposal that our future relied on our ability to provide banking services.

Not to be a bank but to be the front end of many banks because we already handled a third of the cash flow of the UK, billions of pounds, we were good at that, we would have a Horizon system which would be comparable to what they had in bank branches, and so, as banks clearly wanted to get out of communities, to cut their overheads, we could replace that banking role in providing banking services, access to bank accounts, and that's what happened. We delivered that strategy.

Government Gateway was more tentative because it was trying to pin many cats to many walls. We believed

117

1 **A.** Yes.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

2 Q. It says:

"Mr Butlin referred to the serious problems that the South West was having with the software, especially with the balance, and asked Mr Miller whether any changes were to be made in that respect. An assurance was sought by the Committee that the balance would become more user friendly, more logical and easier for subpostmasters to use. Would it be possible for subpostmasters to have more input into the way the balance was done."

It goes on to describe similar problems in the northeast. Then Mr Miller responds acknowledging:

- "... that there was a problem and said that there would be a software change to improve the situation. If there were serious problems that could not be overcome in the timescale, the rollout would be delayed."
- 18 **A.** Yes.
- 19 Q. Do you recall this meeting?
- A. Vaguely yes because we tried to keep close to thesubpostmasters.
- Q. The concerns raised there by Mr Miller and thesubpostmasters, do you consider those to be significant?
- A. Well, they would have been because of the experiences of
 the subpostmasters involved in the early days of

- 1 because --
- 2 Q. Mr Sweetman, sorry to cut over you but, just leaving
- 3 that there for the moment on the future of the
- Government Gateway. Can I just turn you to the actualmeeting itself.
- 6 A. Sorry, yes. I was going off on a tangent, sorry.
- 7 Q. No need to apologise. Could I please bring up
- 8 NFSP00000539. Now this report provides the minutes of
- 9 this meeting, 11 June 1999. At page 3 there is
- 10 an attendance list. You are not on this but as we will
- see shortly you are noted to have joined it and that
- 12 attendance list includes the general secretary Mr Baker
- 13 and also Mr Peberdy?
- 14 A. I knew Colin Baker very well. Mr Peberdy, I do not see15 the name on there.
- 16 Q. On the right column, three lines up. You remember17 Mr Peberdy?
- 18 **A.** Yes, I actually visited John Peberdy's office,
- 19 I remember.
- 20 Q. Could we turn then to page 10 of this document. We have
- 21 Mr Miller, who is David Miller, provided a brief on how
- 22 the rollout was going. Then a Mr Butlin states --
- 23 stopping there, Mr Miller gave evidence that Mr Butlin
- 24 was a subpostmaster and a leading person for the NFSP in
- 25 the southwest, does that sound right?

118

- 1 trial -- we were developing and improving the
- 2 installation process and they were clearly having
- 3 difficulties and it was our responsibility to pick up
- 4 all that input, take it away and say "how do we overcome
- 5 these problems" and coming up with solutions. It is
- 6 this continuous improvement process that I said earlier.
- 7 We would have taken that very seriously.
- 8 Q. The fact that Mr Miller is recorded to say here "there
- 9 would be a software change", at this point did you
- 10 understand this to be a system problem or a user
- 11 problem?
- 12 A. Software -- there are many words which could fit in
- there. You could say a system change, a software
- change, a process change, but they have chosen to use
- 15 "software". I don't know what language Mr Miller would
- 16 have used but if you take it as a whole, that things
- would improve because we have taken the input and we
- have improved things. It could be a system, it could be
- software, it could be a number of things. Again it
- 20 could well be training.
- 21 $\,$ **Q.** At this point, do you recall if you knew whether there
- 22 were software problems associated with Horizon and
- 23 balancing?
- 24 A. Yes. I think we were aware of it because of, you know,
- 25 everything from screen freezes through to information

120

not getting through to TIP. We knew there were some problems.

Q. Could we turn to page 11 please and the bottom of the page in particular. You were asked about what happens if there couldn't be an agreement. You go on to state:

"POCL had agreed with Government that if this breakdown was not the fault of Post Office Counters, Government would make money available to them. If it was decided it was Post Office Counters' fault then they would have to find the money themselves. There was, therefore, a great deal of pressure on Mr Sweetman not to break down for whim or convenience, but only if he believed it not be viable".

Does that fairly reflect your view at the time? **A.** The honest answer to that question is: I don't know but it looks reasonable. I think the final sentence there, where it says "The Board had decided that if the deal was not right or the best achievable, or was not in the best interest", then we would not move on.

- 20 Q. Could you expand on what, at this point, you thought
 21 "not viable" meant? What would the projects have to
 22 look like for you not to go ahead with it?
- A. If it didn't work, if it didn't deliver the service
 improvements, the cost improvements, didn't create the
 platform for our strategic ambitions. All those things

assessing whether we wanted to continue with it. Q. Can I move on to another meeting please, again of the NFSP. The reference is NFSP00000471, and page 23, please. If you could go down to where it says: "There was a general discussion." I should say, you weren't at this meeting, but for context what's being discussed here is, it says: "There was [a] general discussion on the severe

already running an automated system."

Then it refers to seven sheets of comments from the north east had been passed to Dave Miller:

difficulties being experienced by subpostmasters who are

would have been taken into account when we were

"The difficulties and trauma being experienced by some subpostmasters were giving rise to concerns for their health and emotional well being. It was felt by some that a tragedy was not far away if something was not altered soon."

Please can we go over the next page to the fourth paragraph. It says:

"The general secretary assured the meeting that Mr David Miller had been informed of the difficulties in no uncertain terms."

Then over the page, at page 25, if you could go down to where it says Mr Peberdy. Thank you:

"Mr Peberdy thanked the Council for their information."

The last paragraph:

"Referring to the Working Party, which is being set up to reorganise automation as a result of the withdrawal of the Benefits Agency payments, Mr Peberdy confirmed that the group is empowered to call in whoever they want to gather information to aid their decision on the way forward. There are three meetings before the end of July and the meeting scheduled for tomorrow may well be a prime opportunity to advise them in depth about the shortcomings of the system."

If you could go to the bottom of that page, now, please. There was a brief report given on this meeting by Mr Peberdy and you see at the bottom, he records that:

"Stuart Sweetman had attended the meeting."

Do you recall this meeting of the Horizon working party?

- A. I don't recall this specific meeting, no.
- Q. Over the page, if I may, and down slightly please,
 midway down the paragraph, in the middle, it says this refers to various points on the scrapping but it
 says:

"Despite this, Ian McCartney, Minister for Trade &

Industry was emphatic and rewriting the rollout programme would not be contemplated and Dave Miller confirmed that the intention of POCL/ICL was to adhere to the 2001 commitment. Automation is expected to take place within the timescale agreed and Mr McCartney was emphatic that he would not accept slippage. The Post Office delegates were told 'you will make it work'."

Does that ring any bells? Do you recollect that message at this meeting?

A. I mustn't be disrespectful to ministers. Ministers say this sort of thing because that's their role. They are running the country, they are running a broad agenda of activities and Ian McCartney, who was quite a hard-nosed individual from memory, would have been quite clear. You know, whether he would have thumped the table and said "You will deliver", I'm not sure. But it was clear, he was our corporate shareholder and normally when shareholders tell boards of directors and managers to do things, you go away and say "Hey, this is serious"

I would say, from his point of view, that was a totally reasonable thing to say because the government had gone through trauma in trying to get to a decision -- and we had all been watching this -- and he had then been landed with part of the solution within

the DTI. So Ian McCartney would have said "Oh, Christ, it's all landed on my Iap, I'm going to make sure everyone knows in the Post Office that this has got to work", and that's what he did. It is classic management devolution

I interpret now, looking back on it. At the time I don't remember any of these individual meetings. I'm just reading into these words.

9 Q. The next paragraph says that:

"The subject of systems faults were raised and the NFSP were given assurances that there would be software improvements to cure the present difficulties."

I'm going to stay with this meeting but I will bring up a comparison document. It may be an appropriate time at this point to pause.

16 A. Okay.

1

2

3

4

5

6

7

8

10

11

12

13

14

15

1

2

3

4

5

6

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

17 **SIR WYN WILLIAMS:** Just a second before you do. It is
18 only -- probably a typo but it caught my eye. In that
19 page that's on the screen, as I understand it, this
20 document actually dates from June 1999. But there is
21 reference to a 2001 commitment. Is that just a typo or
22 is there something I should know about a commitment
23 given?

A. I think what that might mean was, as part of the replan
 with the exit of Benefits Agency and us taking it all

Q. We were looking at NFSP00000471. If I could keep that on the screen and also bring up NFSP00000203 and, in the 203 document, if I could turn to page 2 and, for your memory, we are looking at the meeting of the Horizon Working Group on 22 June 1999. As we said, you were there in attendance marked as "Present"?

7 A. Yes.

Q. On the 203 document, if we could turn to page 3, please.
What you will see is, at the end, this is a report by
Mena Rego and at (c), she says:

"rollout; there were reservations about the ability of both sides to achieve the rollout plan, and this was being revised.

"Mr Baker said that it was extremely important for rollout to be absolutely right; with so many planned per week (300) there would be a risk of collapse, otherwise.

"Mr McCartney said that the rollout issue was crucial; he was emphatically not prepared to accept getting away from the commitment to 2001. Slippage would made the wider discussions of government usage of the network impossible. If there were problems with software, training etc then these should have been flagged up earlier, and must now be resolved in a way that enabled the 2001 timetable to be recovered."

That is taken from the DTI minute. So there is two

127

on, there was a broad timetable to say all this -- the rollout of Horizon would be finished by 2001.

3 SIR WYN WILLIAMS: I'm with you, sorry.

4 A. 2001 was the completion of the programme.

5 **SIR WYN WILLIAMS:** I follow. Thanks very much.

6 Yes, lets have our break. 10 minutes, Mr Stevens?

7 MR STEVENS: Yes, thank you, sir.

8 SIR WYN WILLIAMS: Okay fine.

9 (3.07 pm)

10 (A short break)

11 (3.17 pm)

12 MR STEVENS: Good afternoon, sir, can you see and hear me?

13 SIR WYN WILLIAMS: Yes, I can, Mr Stevens. Is it correct

14 that I disappeared from the screen for some time during

the last session?

16 MR STEVENS: I think so, sir, yes.

SIR WYN WILLIAMS: Obviously, I was actually listening to
 everything and I wasn't aware of it at the time but
 could you alert me if that happens, simply so that we

20 can try and fix it as soon as possible?

21 MR STEVENS: Of course, sir, yes.

22 SIR WYN WILLIAMS: Thank you.

23 MR STEVENS: Mr Sweetman, I should check can you see and

24 hear me?

25 A. Yes, I can.

126

points that arise from this. The first is, as I told
you before the break, in the NFSP report, it says that
the subject of system faults is raised and the NFSP were
given assurance that there would be software
improvements to cure present difficulties.

Can you recall if someone from the NFSP, either Mr Baker or Mr Peberdy, advised the Working Group of this at this meeting?

9 A. I don't recall the details of the meeting. I can only
 10 read the minutes and assume that they are a true record
 11 of what was said. It does not surprise me because Colin

12 Baker and John Peberdy were not slow in coming forward.

13 They would have put their pitch in on behalf of their

14 members.

6

7

8

15 Q. In any event, the issues which we -- before the break -- were looking at and what they were discussing, just the day before this meeting, you were already aware of those sorts of issues having attended the meeting on 11 June with the NFSP; is that right?

20 A. Yes. They, quite rightly and we encouraged them, got
 21 feedback from those people who had experienced rollout.

22 Getting that direct feedback was important so we could

23 improve the next round of rollout. And the issues that

24 they had with the system within their office, whether it

is the physical system, the software or how their staff

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

were coping with it and what all their difficulties were, all those had to be documented by the team because each of those were problems which had to be solved and if we were going to go through the whole network we would have to solve them, otherwise we would have an uncontrolled system.

So these early -- I hate to use the word "guinea pigs", but these early implementers were crucial so we learned what it was like to put Horizon into a live office, with real people in real communities. So it would have been an important source of evidence.

- 12 Q. So, in short, you were aware of those problems?
- 13 A. Yes.

1

2

3

4

5

6

7

8

9

10

11

17

- 14 Q. The second point on this is what Mr McCartney says. He
- says the point that software and training problems 15
- 16 needed to be resolved within the 2001 timetable. It is
 - recorded that he said that "If there were problems with
- 18 software [and training] then these should have been
- 19 flagged up earlier". Now, do you think that's a fair
- 20 point or do you recall him making it?
- 21 A. I do not recall him making it. It is a fair point and
- 22 I don't know what officials would have told him.
- 23 Q. If we could remove NFSP203, the one on the left, and
- 24 keep NFSP00000471 on the screen and can I turn to
- 25 page 28, please. The paragraph at the bottom there
- 1 issues at the front end with the rollout and they needed
- 2 to be addressed and they needed to be overcome. You can
- 3 see the sort of materiality we are talking about there,
- 4 the size and numbers involved, and that made it very
- 5 serious
- 6 Q. But at that point, the problems that were being reported
- 7 from the subpostmasters, they weren't sufficient to stop
- 8 the project and terminate it there and then?
- 9 A. I think -- I have explained earlier, when you rollout
- and test the rollout --10
- Q. Sorry, Mr Sweetman, I have just noticed we can't see the 11
- 12 Chair. My apologies.
- 13 A. I can see the Chair. I can see him smiling, yes.
- 14 SIR WYN WILLIAMS: Yes, I am chuckling at the fact that
- 15 Mr Sweetman and I can see each other, I can see the
- 16 document on the screen, I can't actually see you,
- 17 Mr Stevens, and you can't see me.
- MR STEVENS: No. I'm being told that you are being shown --18
- 19 MR WHITTAM: I hesitate to interrupt, but the Chair is on
- 20 the far screen on this side of the room.
- 21 MR STEVENS: So you are in the room, I can't see you unless
- 22 I turn my back, we can all see Mr Sweetman and I think
- 23 someone is moving the TV now. Are you content to
- 24 proceed on that basis?
- 25 SIR WYN WILLIAMS: Yes, I'm fine and I can see and hear

states, I will read it out:

"Roll would proceed as planned starting 23/25th August, reaching 300 per week by January 2000. There were some very serious issues still to confront, including training and systems difficulties which must be ironed out, but there is no question of postponement or delay which would cost approximately [8 million] per

Could we go to the next paragraph please:

"So far as termination of the automation project was concerned, the Post Office would not consider this an option. They could only exit the agreement if there are material issues which render the project totally impractical. If POCL pull out it will cost [150 million] and the Benefits Agency will start ACT anyway. Unless something very, very serious occurs the agreement will be signed ..."

Again, is that a fair recollection or fair recording of your views at the time?

- 20 A. They look reasonable. I don't recall all the detail but 21 certainly everyone was playing hard ball with each 22 other. The government were playing hard ball with us 23 because we had extracted quite a good deal from them, 24 although it cost us millions. ICL had been put on the 25 line to deliver and it was very serious. There were 130
- 1 everything. I just wouldn't like anybody to think 2 I wasn't present, so to speak, that's all.
- 3 MR STEVENS: I'm grateful, sir.
- 4 A. Where were we?
- 5 Q. Sorry, Mr Sweetman, I interrupted you. What I had asked
- 6 was or said was that the problems experienced by
- 7 subpostmasters at that stage, which we covered, that
- 8 wasn't seen as sufficient to stop the project with
- 9 ICL Pathway?

16

17

18

19

20

21

22

23

24

25

- A. I think you have got to understand that the nature of 10 project development that I have alluded to before. You 11
- 12 identify a problem -- a series of problems. You analyse
- 13 them. You come up with solutions. You develop a plan 14 to overcome them and then you action that plan and you
- 15 see the improvement happening.

So what we had here were a series of problems. From my point of view, the important thing was that the problems had been analysed, analysis to be done on cause. Remedial action had been planned. That remedial action seemed to fit in with the overall timescale and did I have confidence in the people who were doing remedial action?

Now, that is a management process and, for me, knowing that the problems have been identified, plans were in place to improve them, that was important for

2

3

4

5

6

7

8

q

10

11

12

13

14

15

16

17

18

19

20

21

1

3

4

5

6

7

8

9

10

1 me

2

3

4

5

6

7

8

9

10

14

15

16

17

18 19

20

21

22

23

24

25

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

If I hadn't seen that, then it would have potentially been at the board if I didn't have confidence that that would be corrected. And I think there were delays in rollout as we waited for more improvements to be made. But, ultimately, those improvements were made and we achieved national rollout because that improvement process was in place and worked by the team who were working incredibly hard to get it riaht.

Q. One thing I want to ask at this stage, I heard what you 11 12 say regarding confidence in remedial measures, 13 et cetera. It says here, in the minutes, that:

> "They could only exit the agreement if there are material issues that render the project totally impractical."

A. That is an incredibly high bar. "Totally impractical" means Pathway will run away with the code. That is a very, very high bar and it is almost unlikely ever to be achieved.

So it is almost a silly thing to put down in writing to be honest. "Material issues" would mean that you were going to install a less than perfect system, fine, but again what is "material"? If you are talking materiality as an accountant, I always looked at that,

been -- because they used this traffic light system of red, green, amber type of thing on severity. If there was a red problem -- assessed as a red problem, that was significant and it absolutely had to be overcome and it needed to have remedial action. Until it turned into something, "we are coping with this", and errors in cash accounts down and subpostmasters, we had national systems in Chesterfield, error correction processes, which, in my mind, were set up there, under the old system and the new system, to pick up these errors and correct them.

Sometimes it took weeks of investigation to identify the impact of that and to put corrections into the system. And I was comforted that we had those correction processes and that we would not have a books of account true and fair view problem.

The extent to which errors went uncorrected, which were not material to the national accounts but were material to a subpostmaster, I can imagine that being

- 21 Q. That issue, determining what is and isn't material from 22 your perspective, was that a matter that you discussed 23 with the board or with John Roberts?
- 24 Α. I don't recall but it is the sort of thing we would have 25 talked about because I know, when we reported up to the 135

when producing annual accounts for the Post Office, what size of error would there need to be for the accounts of the Post Office to be misstated? That's what an accountant thinks of materiality. Now that is probably measured at that time, "Is there a £10 million error"? If there is, that might be a problem.

If you are a subpostmaster, if you have got a £500 problem, that's material. Because I'm a small businessman in a rural Post Office. So I was looking at the -- one end of the telescope, which is the big picture, about materiality and size of things threatening the project, whereas unfortunately some of the subpostmasters that I have learnt about were at the other end where their materiality was totally different to the decisions that we were making in headquarters. And there is a separation there between parties.

And my mind was on the big picture. Unfortunately the subpostmasters -- who were recording losses, or the system was recording losses -- those were material items for them, they were at the other end of the telescope. I was looking at these big picture items.

- 22 Is what you are saying, I'm not trying to put words in 23 your mouth, but essentially from your perspective, there 24 was a level of materiality --
- 25 **A**. Yes. I think, at the time, my assessment would have 134

board, they expressed concerns about technical issues 2 that were still outstanding.

When we went back to, was this project fit for purpose, I know David Miller said -- he is quoted as saying it was robust but the board, in its detailed discussions, expressed concern over the outstanding technical issues, which is what the board should do and the nonexecutives on the board would have understood that and then they remitted that to John Roberts and the Chairman to manage and monitor?

11 Q. Let's turn to the board and can I ask, please, to bring 12 up POL00028491. This is a report titled "Implication on the Post Office of the 24 May 1999 Horizon Agreement" 13 14 which had been provided to the Post Office board for its 15 meeting on 20 July 1999. Now the front page appears to 16 be an executive summary. You are noted at the bottom as 17 sponsor with author, Tim Brown.

- 18 A. Tim was quite a senior finance man.
- 19 Q. Unless you would like to see it, we don't need to turn 20 there, but at the end of the substantive report your 21 name is on the bottom of the paper.
- 22 A. Yes.
- 23 Q. Would you have been responsible for its contents?
- 24 **A.** Yes, because I -- of the management process involved. 25

Tim, in bringing together all the facts, summarising it,

he would have brought the draft to me, talked me through it, I would have assessed it for completeness, accuracy, whether I had the confidence in it for it to go forward.

So yes, I would have had responsibility for it.

Q. On page 2, heading 2 describes the purpose of the paper.

Q. On page 2, heading 2 describes the purpose of the paper. It says:

"This paper outlines the impact of the new contract and seeks Board approval to the signing of the contract with ICL."

It is fair to say this was a significant paper for the board to consider when determining whether or not to go forward with the contract?

13 A. Yes, it would have been.

14 Q. Can we look at the bottom of the page please. It says:

"The key elements of the new deal are:

"Functionality consists of Electronic Point of Sale, automated payments, local feeder systems and the Order Book Control System ..."

Now, this report doesn't refer to problems such as balancing which had been experienced by subpostmasters. Why was that?

A. The honest answer is I don't know. The purpose of this
 was principally financial and impact on the business - this was after we had done the deal, where basically we
 had to write off £480 million of our reserves and this

software, et cetera.

So I would have had to have been satisfied that all the activities which were going on will overcome the problems which had been identified, that the reds had turned into ambers and the ambers had turned into greens and that activity going on to make sure those errors would have been overcome, and that's what I would have been satisfied in and that's why, probably, it didn't feature in here because everything was in place to deliver and overcome the technical problems.

Q. How did you satisfy yourself of that?

A. I think you have seen other reports. I certainly -I can't quote them, which ones they are -- but within
the programme, we adopted, I believe, the best programme
management processes where there were reports, nothing
was allowed to drop through the cracks until it had been
resolved, and so there were pages and pages and pages of
activity reports, broadcast timescales, et cetera.

And I would have reviewed those with Dave Miller.

Dave Miller would have brought probably high level versions of those on a few pages papers to me, and we would have gone through them and I would have understood them, although they would have got more detailed ones because we probably had three or four levels of management and, appropriate to each level of management,

was taking it forward to the next stage. It wouldn't have been a belt and braces report and I think it is principally finance and strategic.

MR STEVENS: Sorry, if we can stop there, we appear to have lost the Chair, again.

Sir, can you see and hear us?

7 SIR WYN WILLIAMS: I can, yes.

MR STEVENS: I'm grateful, thank you, sir.

At page 5, under heading 6, it says that:

"The Board is invited to note:

11 "the impacts of continuing or terminating Horizon;

12 "that continuing, while bad, is better than

13 termination."

The paper went on to recommend signing. Was it not important for the board to know about the programme issues we have been discussing that had been raised with Horizon to make an informed decision on whether or not to approve entry into the contract?

A. I suppose, in retrospect, it would have been helpful. But, again, looking at this document, the board -- the board through to John Roberts, through to me, me through to the programme, they -- if we had said "We are not in control", then they would not have allowed it to go to board. So, in my view, we had to have a project which had in place everything to deliver the required

issues would have been resolved.

And I would have had the -- this is me quoting in theory not from memory -- I would have had the two-page version, Dave would have had the five-page version, other people would have had the ten-page version, all of which were summarised up fairly by the process, and we got the appropriate level of information that we could act on. And what I would have seen would have been sufficient to persuade me that it was under control and, if it wasn't under control, I would have had a personal obligation to report it to the board.

Clearly, what was happening hadn't managed to make that threshold where I felt an obligation to report it.

Again, there is a lot of hindsight in this but I remember the way I worked and that's how I would have worked and that's how Dave Miller would have worked.

17 Q. Could we turn up the board meeting that this report was
 18 presented to. It is POL00000352. These are minutes of
 20 July. Both you and Mr Miller are in attendance.

A. Yes

Q. It was to discuss and determine whether to sign the
codified agreement. Could we turn to page 11, please.
(v), it says:

"System rollout was scheduled for 23 August ... with acceptance needed by 18 August. There were three

categories of acceptance each with a threshold which would determine whether or not rollout could proceed: high, medium and low.

"One incident within the high category, or more than 20 ... within the medium category, would result in the system not being accepted."

Stopping at that point. What was your understanding of an Acceptance Incident?

- 9 Something which wasn't right. Something which wasn't A. 10 working as per spec.
- Do you think the members of the board understood what 11 Q. 12 an Acceptance Incident was?
- 13 A. There would have been broad understanding because the 14 board was a mixture of the most senior executives in the 15 Post Office and non-execs with good commercial 16 experience and they, in their other business activities, 17 would have come across this sort of thing before. 18 I think it was a language everybody felt reasonably
- comfortable with. 20 Q. Moving on, (vi), it says that:

"Excluding concerns over training, David Miller considered the system robust and fit for service."

23 Do you recall whether David Miller said that? 24 A. I have no recollection. But I have, actually -- it's 25 the one bit of his evidence that I have seen and I saw

141

1 accept that?

1

2

3

4

5

6

7

8

19

21

22

14

15

16

17

18

19

20

21

22

23

24

2 A. It was probably both. Again, my broader experience of 3 implementing new systems, yes, you have got the hardware 4 problems, you have got the software problems, you have 5 got -- and then you have got the people challenge. 6 I had learned that, unless you get the training right, 7 people will not have the confidence in themselves to 8 operate the system and, therefore, people are very 9 nervous at handling things new, and training has got to 10 give them the confidence -- not only the techniques and 11 the processes, but the confidence that they can do it 12 and, unless you get that right, you are going to have 13 problems.

> And I think some of the feedback and some of the analysis of the issues indicated to us that the subpostmasters hadn't been trained well enough and, therefore, what we need to do is feedback into the trainers "You improve your training process", and I think that's what we want ICL to do, because it was part of the contract. "Unless you train these people well, we are going to get problems", and that's what one of the bits of analysis that was done, came up with the conclusion, as well as system freezes which has nothing to do with subpostmasters.

25 Q. I want to stay with this theme but pick up another 143

1 he was uncomfortable with having said that. I observe 2 that

- 3 Q. It is not consistent with --
- 4 It is not consistent with the rest of the minutes.
- Q. It is not consistent with the complaints that you were 5 hearing from subpostmasters at the NFSP meetings, was 6 7
- 8 A. Those are two different things. They were reporting 9 what was happening at individual post offices. We were 10 looking at the overall system and did it overall work? 11 If you scroll down the minutes, I have actually looked 12 at this. On the next page (xii), at the board meeting, 13 we had clearly gone in and described the technical 14 difficulties which were being explained and "Members 15 were concerned that a number of technical issues 16 remained unresolved", and the BA -- there were two 17 critical issues that needed to be progressed.

Now, we had put up that there were technical difficulties and, I think, in the meeting we would have said "And we have remedial plans". That is what I think happened. I don't recall it happening but I think that's what we would have said.

23 Q. Mr Roberts, when he gave evidence said that had the 24 project team considered this more a human nature and 25 training issue rather than a system issue. Do you 142

1 document, if it can be put on the screen at the same time. It is POL00028479. These are minutes of the 2 3 "Counters Executive Committee Meeting", on Thursday, 4 22 July?

5 A. Yes.

18

19

20

21

22

6 **SIR WYN WILLIAMS:** Could they be enlarged on my screen, 7 please, they are in a small box at the moment.

8 MR STEVENS: Of course, sir. In fact, if we could just have 9 the left ones on. So it is the 22 July, so two days 10 after that board meeting, and paragraph 2.5, this notes 11 that the board had empowered Neville Bain and John 12 Roberts to make the final decision on whether to sign the final decision with ICL Pathway. 13

Turning to 2.6:

"Stuart Sweetman advised that there were two remaining areas of concern:

17 "The level of incidents occurring in trial offices 18 was still too high for technical acceptance, although 19 improvements should be confirmed over the next few days 20 to allow acceptance to take place."

21 A.

14

15

16

22 Q. That knowledge of the incidents being too high in trial 23 offices hadn't come to your attention the days following 24 the board meeting on 20 July, had it?

25 **A**. Reading that, this is me telling my top team what my

- 1 areas of concern were and I think that would have been
- 2 in my mind and probably said at the main board meeting.
- These were technical issues of concern that were still
- 4 being handled, still being managed to elimination.
- 5 Q. Is your evidence that you did say to the board on
- 6 20 July, you said that the level of incidents in trial
- 7 offices was still too high?
- 8 A. I didn't say that and I don't recall saying it. But
- 9 I probably would have said it because it was in my mind,
- 10 clearly, when I came back to my team and the board
- 11 minutes, I think, did refer to errors still being
- 12 managed and this is what I would have referred to and
- that's what the main board heard.
- 14 Q. Mr Roberts' evidence that he, at this point, considered
- 15 this to be more of a training issue, do you think you
- 16 could have done more to set out to the board that there
- were still a high level of technical issues with the
- 18 system itself?
- 19 A. I think in hindsight, yes. What I don't know -- if John
- 20 remembers it just as training, it wasn't solely
- 21 training. There were technical issues with the system
- 22 and there were training improvements needed. I think it
- 23 was the two together, in my mind.
- ${\bf 24}~{\bf Q}.~{\bf During}$ these discussions with the board, just so we have
- 25 it clear in our minds as to timings, when we discussed 145
- place. And that's what the team were working on andeventually delivered.
- 3 Q. At this board meeting you were also considering the
- 4 codified agreement, and do you remember that the
- 5 codified agreement had a clause that required Pathway to
- 6 provide data to the Post Office, that would be suitable
- 7 for submission as evidence in support of prosecutions?
- 8 A. I don't remember that bit, no.
- 9 $\,$ Q. Did that form any part of your thinking when you were
- 10 considering the level of robustness of the system that
- 11 you would be prepared to accept?
- 12 A. No. I would have read the agreements, all of it, before
- 13 approving, signing or whatever. If I saw that para --
- 14 there would have been paragraphs in that agreement that
- were written by lawyers. We had our own in-house
- 16 lawyers, about a hundred of them I think, and they would
- 17 have helped us draft agreements.

19

20

21

25

- We were using Slaughter and May as a renowned firm of solicitors to help us draft these things.
- And they would have inserted lots of, if I say, non-system paragraphs in there because that's what
- 22 lawyers do. They paper over all the potential cracks
- and that's why you pay them.
 If I saw that I would have said
 - If I saw that I would have said "that's one of those paragraphs put in by a lawyer" but I don't remember it.

- 1 earlier the material errors and you talked about your
- 2 perspective on what's material and the subpostmasters'
- 3 perspective to what was -- for acceptance, would you
- 4 have considered that at the board meeting on 20 July?
- 5 A. It would have been in my mind, yes.
- 6 Q. Would you have raised with the board or discussed with
- 7 the board the level of errors you would be prepared to
- 8 accept in the system?

10

21

22

23

24

25

1

- 9 A. That is very hard to quantify to a main board. I was
 - using my professional knowledge and experience,
- 11 I suppose, were these errors threatening the
- 12 viability -- I think, we've used before -- of the
- 13 system? Were they fundamental -- I think is another
- 14 word which is being used. They were clearly concerning
- 15 because they were causing a lot of aggravation within my
- 16 business. The postmasters were having a very troubled
- 17 implementation and that is not what you want. In the
- 18 first few hundred implementations, if that then happens
- over the next 18,000, you have got a business out of
- 20 control.

Personally, I would have wanted to know that, as we rolled out at 300 offices a week, which I do not think many systems would ever have contemplated in the UK, that needed to be much slicker, much more error free, much better training and that's what I wanted to see in

146

- Q. Was it not the case that the Post Office -- is your
- 2 evidence, sorry, that you think the clause where Pathway
- 3 is to provide evidence for use in prosecutions was put
- 4 in by a lawyer rather than be a requirement of the Post
- 5 Office itself.
- 6 A. They are one and the same. They could have been our own
- 7 lawyers from our solicitor's department or they could
- 8 have been Jeff Triggs and his team in Slaughter's. But
- 9 that is probably -- I doubt if my project team would
- 10 have dreamt that up themselves. It would have been,
- 11 "you need one of these in there" because I was aware
- that there was -- and dealt with by the regional
- managers and retail network managers -- there were
- 14 isolated instances where we had legal problems with
- subpostmasters. Unfortunately, a very few of them did
- 16 steal money in the past -- and that was our history --
- and there had to be investigation and prosecutions and
- 18 recovery of money. That was before Horizon and that,
- 19 I knew, happened within the depths of the business.
- 20 Q. Who was responsible for that?
- 21 **A.** This is just continuing that process.
- Q. Who was responsible for the prosecutions within the PostOffice?
- 24 A. I think our solicitor departments had, under some
- 25 legislation, the powers of prosecution because the

| 1 | police and th | e prosecution | ı authorities, | , if I say, | didn't |
|---|---------------|---------------|----------------|-------------|--------|
|---|---------------|---------------|----------------|-------------|--------|

- 2 want to be bothered with us, they were relieved when we
- 3 had the in-house capacity to investigate crime, be it on
- 4 the mail side or the Counters side and to carry out the
- 5 prosecutions. I think we had in-house solicitors who
- 6 would have done that. I knew broadly what they did but
- 7 I never got involved.
- 8 Q. Just to clarify, did anyone on the board, the Group
- 9 board, ask you any questions about prosecutions and the
- 10 use of data from Horizon in support of --
- 11 **A.** I have no recollection of it and I would be amazingly
- 12 surprised if they did.
- 13 Q. Why would you be surprised?
- 14 A. Their eyes were on the far horizon -- with a little
- 15 "h" -- rather than down in the depths of my business.
- So I very, very much doubt -- because there weren't any
- 17 lawyers on the main board and they wouldn't have seen
- 18 that clause. I would not have brought it to their
- 19 attention. So the board would not in any way have
- 20 considered it.

5

- 21 Q. It is a matter where we know that there were
- 22 prosecutions pursued in 2001 and so investigations in
- 23 2000 using Horizon data. So do you accept that Horizon
- 24 was used to support prosecutions --
- 25 A. If you are telling me that, I accept it. I have no
 - 149
- 1 the rollout programme? We said "Hold on, let's get it
 - right before we move on". I think we slowed down things
- 3 or stopped things for a period.
- 4 MR STEVENS: Sir, I can move on to this now. I'm aware -
 - unfortunately I think we are going to run into tomorrow.
- 6 Mr Sweetman has been warned. I'm happy to continue now
- 7 or if you prefer, a short break and carry on?
- 8 SIR WYN WILLIAMS: Well, I don't think we should take
- 9 a short break. Perhaps we should continue until, say,
- 4.15 pm and then call a complete halt at that point.
- 11 Are you happy with that, Mr Sweetman?
- 12 **A.** I would prefer to get it done today.
- 13 SIR WYN WILLIAMS: How far away are you from completing your
- 14 questions, Mr Stevens?
- 15 MR STEVENS: I have probably got 20 minutes to, well,
- half an hour I would say and then we have got questions
- 17 from some recognised legal representatives.
- 18 SIR WYN WILLIAMS: Well, anyway, you continue for the moment
- and we will see where we get to.
- 20 MR STEVENS: I'm grateful.
- 21 I want to look in August now and I have already
- 22 taken you to a document, the Ernst & Young document that
- 23 referred to Acceptance Incident 376.
- 24 Before considering that in more detail, what I'm
- 25 interested to know is, in August and September -- so

- 1 knowledge of it. I think, by then I was again one
- 2 removed from the detail of running the business.
- 3 Q. Is it right -- I will ask one last time -- that you
 - simply cannot tell us who, in Post Office, was thinking
- 5 about how Horizon data could be used in prosecutions in
- 6 1999?

4

- 7 A. Again, I just reiterate what I have said. When you
- 8 hand -- when you have the task of producing
- 9 an agreement, you have all the people who are interested
- in what it delivers and then you have the lawyers and
- 11 the lawyers insert paragraphs and you have to trust
- their judgement. Well, normally you do.
- 13 Q. It is right that you subsequently signed the codified
- 14 agreement on 28 July 1999; do you remember that?
- 15 A. If there's evidence of that, yes, I would. I don't
- 16 recall doing it.
- 17 $\,$ **Q**. Following the signing of the agreement there was
- 18 continued operational testing, yes?
- 19 **A.** That would have continued yes. The whole continuous
- 20 improvement process would have continued.
- 21 Q. Do you recall being aware of a number of Acceptance
- 22 Incidents that Post Office had raised as preventing
- 23 acceptance?
- 24 A. I think it got to the stage where there were errors and
- 25 that -- I think we didn't -- didn't we put a halt on
 - 15
- 1 before the rollout -- do you recall at all a series of
- 2 acceptance workshops to resolve the various incidents
- 3 that had been raised as Acceptance Incidents?
- 4 A. I don't recall them but I can understand they would have
- 5 happened because that was part of the management process
- 6 of having problems, analysing them, resolving them and
- 7 actioning them. So I would imagine that those workshops
- 8 would have taken place.
- 9 Q. Could we please bring up POL00028465, and over the page,
- 10 please. This is from David Miller and it is addressed
- 11 to you on 8 September 1999, concerning Horizon
- 12 acceptance and review of progress.
 - Do you remember receiving this letter?
- 14 $\,$ A. I don't remember receiving it but I can see it now.
- 15 **Q.** If we can move the screen down please. 1.1 is
- 16 "Training", it refers to:
- 17 "Bruce McNiven and Ruth Holleran have done excellent
- 18 work squeezing a better training deal out of ICL
- 19 Pathway."

13

20

- The second is "system lock-ups and screen freezing
- 21 requiring reboots".
- 22 I think in your evidence earlier you referred to
- 23 this. Do you recall that as an issue needing to be
- 24 resolved?
- 25 A. Yes, that was part of the feedback from the

2

3

4

5

subpostmasters, wasn't it? Yes. That was happening and clearly, if the system isn't operating, that would not only affect the subpostmaster, but affect our service to our customers who are queuing up in their branch. So that was a serious issue.

Q. If I can go to 1.3, it says "Derived cash account not [it should be 'equalling'] electronic cash account":

"Ruth Holleran has again done sterling work here and the understanding of the problem and fixes and controls are largely in hand. However the major controls cannot be implemented until Christmas with a patch available from early October.

"Ruth see this incident as being downgradable to medium with an agreed rectification plan but there are still too many important loose ends and she has doubts whether this will improve sufficiently for us to accept ... by the end of September."

Do you recall this issue?

19 A. I don't recall it but I have read it.

1

2

3

4

5

6

7

8

9

10

11 12

13

14

15

16

17

18

22

23

24

25

1

2

3

4

5

6

7

8

9

10

11 12

13

14

15

16

17

18

21

22

23

24

25

20 Q. If you can go down a bit further to the summary, please. 21 At this point it says:

> "Of our six key players (Keith Baines, Ruth Holleran, John Meagher, Bruce McNiven, David Smith, Andy Radka) the first 4 would opt (somewhat reluctantly) for conditional acceptance towards the end of September.

joint workshops with ICL Pathway but as of today there were still 2 high incidents (Data integrity across the TIP interface and system stability around screen freezes) which would, in the Post Office view, make it difficult to accept on 24 September.

"The two incidents have rectification plans parts of which will take up until Christmas to complete, eg the data integrity control necessary to satisfactory the auditors won't be ready until early December and we will have to continue our checking until then."

We discussed earlier the issue of data integrity going to the heart of the function of Horizon on which you had received advice from Ernst & Young on how it would affect your statutory accounts.

When you received this letter, do you recall what you did or would have done or what would you have done to satisfy yourself that the rectification plans were satisfactory?

19 A. I don't recall but I can speculate what I would have 20 done, based on the way I react to this sort of memo.

> I would have sat down with Dave Miller and discussed it with him. Just to sort of tease out a bit of flesh on the bones of this, "What does it really mean? Are we picking up the errors in Chesterfield? Are we correcting the accounts? Are we making adjustments?"

Andy Radka and David Smith would not accept and seek to use the full period until 15 November to force improved performance from ICL Pathway."

Do you have any recollection of this debate concerning conditional acceptance?

- 6 A. No, I don't recall the internal debate but those were 7 all people who were immersed in the system and they 8 would have had their own individual views and we 9 welcome -- and we used to welcome that sort of debate 10 within teams -- as a way forward.
- 11 Q. Would you have been involved in the decision?
- 12 A. Not directly, no.
- 13 Q. Your evidence is you would not have been directly 14 involved in the decision whether or not to conditionally 15 accept --
- 16 A. At that level, yes. I would not have been involved in 17 classifying individual things, whether red or green or 18 whatever. But, certainly, Dave Miller would have 19 involved me, so there were no surprises. We had 20 a no-surprises way of working together.
- 21 Q. Could we bring up POL00028462, again, on the second 22 page, please. This is a memo, again, from David Miller 23 to yourself two days later on 10 September. At point 1, 24 it says:

"Very considerable progress has been made in the 154

1 Because if he couldn't have reassured me that all that 2 was happening and there weren't improvement plans in 3 place, I would have been worried.

- 4 Q. That's all hypothetical.
- 5 A. It is hypothetical. I'm afraid, I don't remember this 6 level of detail now but I'm just saying how I would 7 react to this type of memo. It is just the way 8 I worked.
- Q. Please could we bring up POL00000353. This is another 9 meeting of the Post Office board, which you attended on 14 September, and can we turn to page 3. Number (iii) says:

"When the board last met in July ... POCL's Horizon Programme Director had been confident that system acceptance would occur as planned on 18 August. Unfortunately, three high priority Acceptance Incidents around training, stability of the system (lockups and screen freezes) and quality of accounting data, remained unresolved and whilst ICL did not accept the categorisation of these incidents, they nevertheless resulted in acceptance being deferred until 24 September."

Now --

24 A. I think that's good evidence that we kept the board 25 informed of the detail. We told the board there were 156

15

16

17

18

19

20

21

22

23

25

- problems. We told the board what we were doing about it, that we had deferred acceptance because of the problems, so the board were fully aware of it. So you have got an example of their problems, action and then what we then did about it.
- Q. John Roberts' evidence was that these issues to the
 board were considered to be small enough to be handled
 and rectified by December; do you accept that?
- 9 A. I accept that because probably John has a better memory 10 than me. I, probably -- in looking at these things and 11 looking at the rectification plans, there would have 12 been an acceptable timetable. Whether that was December 13 or not I don't know. But, certainly, probably at the 14 board, we would have been questioned, "Have you got 15 a grip on this? Are you handling it? Is your programme 16 of change in place?" And we would have said "Yes", 17 because that was our belief and our judgement.

Here I think we were reporting upwards, washing our dirty linen in the board. So I'm quite happy with that note. That's exactly what we would have been doing.

- Q. I have taken you already to the Ernst & Young advicethat they could not make an unqualified opinion.
- A. No, they said "If these things weren't rectified, that
 would give us a problem", and they didn't qualify the
 accounts. So the problem was overcome.

157

So it is how you read something, it is different from where you sit. If you are on the main board, you are looking at big issues; if you are a subpostmaster you are looking at your cash. And those are two different perspectives on the same thing and you can make two different decisions, as I have explained.

MR STEVENS: Sir, I'm happy to continue. I note it is 4.15 pm. It is at this point, I would go to a new document.

SIR WYN WILLIAMS: Who wants to ask questions, apart from
 you, Mr Stevens? In my list either Mr Moloney or
 Ms Patrick, I think, is down to ask questions. Is there
 anybody else?

14 MR HENRY: Sir, I have been permitted one question or onetopic. Edward Henry, sir.

16 SIR WYN WILLIAMS: I can hear your voice.

17 **MR HENRY:** Thank you.

18

19

20

7

8

9

18 **SIR WYN WILLIAMS:** And Mr Moloney, Ms Patrick, what about 19 you?

20 **MR MOLONEY:** Sir, as you will be aware from the Rule 10 submission, there were questions that we proposed that counsel for the Inquiry said that they would ask. They have now, as it were, passed them to us and so we

24 anticipate that we probably would be about 15 to

25 20 minutes and Ms Patrick will ask the questions.

159

Q. But, at that point, Ernst & Young had said "If the 1 2 problems remained, it was unlikely they would be able to 3 make an unqualified opinion". As I say, John Roberts' 4 evidence was these issues were presented to the board 5 and small enough to be handled and rectified in 6 September. Realistically, do you think the data integrity issue could be described as a small one? 7 8 Small probably isn't the word I would use, because we 9 had put it as red. There were data integrity problems

10 and they needed to be fixed and, if we didn't fix them 11 by the year end, Ernst & Young wouldn't qualify the 12 accounts. They were fixed, to the extent material to 13 a true and fair view of the accounts. Whether they were 14 fixed sufficiently to overcome the problems, if you were 15 at the other end of the telescope as subpostmaster, 16 where you had a £500 problem, that £500 problem doesn't 17 threaten the true and fair view of the Post Office 18 accounts, but I recognise it is very significant when it 19 comes to being a subpostmaster.

In these discussions, we were primarily looking at the big picture, the Post Office as a whole. That's not to say the Horizon programme wasn't looking at the interest of subpostmasters but, in this sort of discussion, it was the big picture looking forward with the materiality of the corporation.

158

1 MR WHITTAM: Sir, I have raised one matter that's arisen out 2 of the evidence -- Richard Whittam for Fujitsu --

3 I would be less than five minutes.

4 A. Mr Chairman, I also have something I would like to read,
 a final statement, which will take five minutes to read.

SIR WYN WILLIAMS: All right. At the end of the day, I have

to make a judgement about whether carrying on is fair to you. I think I understand that you would prefer to finish but I also have to make a judgement about what's

10 fair to my levels of concentration.

11 A. I have the same trouble sometimes.

12 SIR WYN WILLIAMS: I think on balance we had better stop.

13 It looks as if you will be no longer than about 30 to

45 minutes tomorrow morning, and I will do my best to
 keep them to that but I think we will stop now.

16 A. Okay.

20

21

22

23

24

25

6

17 MR STEVENS: Thank you, sir.

18 **SIR WYN WILLIAMS:** So 10 o'clock tomorrow morning.

19 MR STEVENS: Thank you, sir.

20 Mr Sweetman, just so you know, you are still giving 21 evidence, so please don't discuss your evidence with 22 anyone else between now and tomorrow.

23 A. Okay. Can I just ask a question?

24 SIR WYN WILLIAMS: Yes, please do.

25 A. The 12 inches of paper that I have surrounding me that

| 1 | | I have been sent, what ultimately do I do with those? | |
|----|------|---|------|
| 2 | CID | WYN WILLIAMS: Don't worry, someone from the Inqu | ıi m |
| 3 | SIR | • | шу |
| | | secretariat or legal team will contact you and you will | |
| 4 | | have a discussion with them and resolve it with them. | |
| 5 | Α. | Thank you. | |
| 6 | SIR | WYN WILLIAMS: That's fine. 10 o'clock tomorrow | |
| 7 | | everybody. | |
| 8 | (4.1 | 8 pm) | |
| 9 | | (The Inquiry adjourned until 10.00 am on Wednesday, | |
| 10 | | 2 November 2022) | |
| 11 | MIC | CHAEL COOMBS (affirmed) | 1 |
| 12 | IVII | Questioned by MS HODGE | 1 |
| 13 | | Questioned by SIR WYN WILLIAMS | 90 |
| 14 | ST | UART SWEETMAN (affirmed) | 93 |
| 15 | 01 | Questioned by MR STEVENS | 93 |
| 16 | | Questioned by WITCOTEVENO | 30 |
| 17 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |
| 21 | | | |
| 22 | | | |
| 23 | | | |
| 24 | | | |
| 25 | | | |

1.3 [2] 111/7 153/6 71/19 71/24 74/9 136/15 12/13 MR HENRY: [2] **18 [1]** 42/23 20 minutes [2] **10 [3]** 74/10 118/20 29 September 1998 159/14 159/17 159/20 **18 August [2]** 140/25 151/15 159/25 [2] 22/22 25/14 MR MOLONEY: [1] 10 August 1999 [2] 156/15 **20 October [1]** 96/15 159/20 39/23 43/19 18 December 1998 **20 years [2]** 49/7 MR STEVENS: [19] 3 May [2] 77/8 77/9 **10 May [3]** 73/24 **[1]** 110/14 88/11 92/23 93/5 126/7 3 November [1] 12/7 18 October [1] 52/4 **20,000 [1]** 98/8 78/1 85/24 126/12 126/16 126/21 **3.07 pm [1]** 126/9 10 May 1999 [1] 18 September 1998 20-odd [1] 83/13 126/23 131/18 131/21 **3.1 [2]** 42/22 43/25 200 [3] 12/16 28/20 83/22 **[1]** 21/12 132/3 138/4 138/8 3.17 pm [1] 126/11 10 May 2000 [2] 84/7 **18,000 [1]** 146/19 48/6 144/8 151/4 151/15 **30 [2]** 115/19 160/13 **2000 [7]** 73/20 84/4 87/21 **19 [1]** 51/9 151/20 159/7 160/17 84/7 85/6 87/21 130/3 **300 [3]** 127/16 130/3 **10 million [1]** 134/5 19,000/20,000 [1] 160/19 146/22 **10 minutes [3]** 30/18 149/23 98/8 MR WHITTAM: [2] **31 [1]** 115/19 61/22 126/6 **19.15 [1]** 85/7 **2001 [13]** 20/16 131/19 160/1 **376 [4]** 48/17 102/21 **10 o'clock [2]** 160/18 **1969 [1]** 3/6 20/23 25/12 32/5 **MS HODGE: [15]** 1/3 102/23 151/23 65/12 124/4 125/21 161/6 **1973** [1] 93/22 1/11 1/14 30/20 30/24 10 September [1] **1982** [1] 93/25 126/2 126/4 127/19 58/7 58/21 61/20 62/1 154/23 **1996 [2]** 5/20 94/3 127/24 129/16 149/22 62/3 62/7 62/9 90/21 **4.15 pm [2]** 151/10 **10.00 [2]** 1/2 161/9 1997 [8] 6/3 7/22 2022 [3] 1/1 93/11 92/9 92/16 159/8 **10.51 [1]** 30/21 8/11 9/18 10/5 10/13 161/10 SIR WYN WILLIAMS: **4.18 pm [1]** 161/8 16/17 33/19 100 [1] 86/22 203 document [2] **[44]** 1/5 30/19 57/15 **4.2.1 [2]** 51/7 72/20 **100 per cent [1]** 7/6 1998 [20] 21/12 127/3 127/8 57/19 58/2 58/6 58/19 45 minutes [1] **102 offices [1]** 43/1 22/22 25/14 29/11 **21 [1]** 2/1 61/25 62/2 62/8 90/25 31/6 32/4 52/20 53/22 21 September 2022 160/14 **11 [4]** 93/12 111/6 91/4 91/6 91/9 91/12 480 million [1] 54/3 69/18 98/23 121/3 140/22 **[1]** 93/11 91/17 92/5 92/10 106/10 106/13 107/17 **218 [1]** 39/25 137/25 11 August 1999 [1] 92/17 92/21 93/2 107/19 108/6 110/11 46/5 **22 July [2]** 144/4 125/17 126/3 126/5 **11 June [2]** 116/12 110/14 113/19 114/16 144/9 126/8 126/13 126/17 **50 [1]** 28/20 1999 [42] 21/20 22/8 | 22 June 1999 [1] 128/18 126/22 131/14 131/25 **50 minutes [1]** 30/16 11 June 1999 [1] 23/14 32/10 32/11 127/5 138/7 144/6 151/8 **500 [2]** 158/16 118/9 32/14 33/12 34/2 **22 November 1999** 151/13 151/18 159/10 158/16 11 pages [1] 93/8 37/20 39/23 43/19 **[2]** 67/13 67/20 159/16 159/18 160/6 500 problem [1] **11.03** [1] 30/23 43/23 46/5 46/14 **23 [1]** 122/4 160/12 160/18 160/24 134/8 11th August 1999 [1] 47/10 50/14 52/3 52/6 **23 August [1]** 140/24 161/2 161/6 **550 [1]** 52/25 52/22 54/9 54/22 55/2 **23 August 1999 [1]** 43/23 THE WITNESS: [1] **12 [3]** 8/4 8/5 116/15 55/9 56/8 56/16 56/23 101/17 6 92/22 12 August [4] 34/2 67/7 67/13 67/20 **23 pages [1]** 2/12 6.28 pm [1] 84/7 71/24 80/20 83/22 34/9 39/15 49/24 23 September 1997 **12 inches [1]** 160/25 101/17 116/9 118/9 **[2]** 10/5 10/13 **'98 [2]** 21/18 52/21 **12.01 pm [1]** 62/4 125/20 127/5 136/13 23/25th August [1] **'99 [1]** 52/21 **7 April [1]** 76/23 **12.10** [1] 62/2 136/15 150/6 150/14 130/3 'affecting' [1] 28/13 **7.1.2 [1]** 64/5 12.11 pm [1] 62/6 152/11 **24 [1]** 116/5 'equalling' [1] 153/7 **7.2 [1]** 27/20 **120 [1]** 96/5 1c [3] 12/3 13/5 **24 May [1]** 115/24 'presents' [1] 28/9 **7.3 [2]** 25/21 29/5 **14 [2]** 111/15 111/19 24 May 1999 [1] 14/12 'Product [1] 53/2 **14 December 1998** 1st October 1998 [1] 136/13 **'RAD' [1]** 111/25 **[1]** 108/6 24 September [2] 53/22 'S' [1] 28/10 8 December [4] **14 May 1996 [1]** 94/3 155/5 156/22 'you [1] 124/7 74/20 75/7 75/21 14 May 2001 [4] **25 [1]** 122/24 76/19 20/16 20/23 25/12 2 November 2022 [1] 25 November [4] 8 million [1] 130/7 161/10 65/12 72/3 72/23 74/10 ...' [1] 53/2 8 September 1999 [1] 14 September [1] **2.0 [1]** 73/22 74/14 152/11 **2.1 [1]** 11/22 156/11 **26 October [1]** 12/6 **80 [1]** 73/3 **2.1.1 [3]** 12/8 14/2 **15** [1] 159/24 **27 [1]** 85/6 **0.1 [3]** 21/10 67/12 14/13 67/20 **15 minutes [1]** 1/9 **27 April [2]** 85/4 85/8 **2.10 [1]** 92/17 15 November [1] 27 March 1998 [1] **0.3 [1]** 22/19 9 September [3] 1/23 **2.10 pm [2]** 92/14 154/2 106/13 2/18 2/19 92/20 150 million [1] **28 [1]** 129/25 **996 [1]** 53/2 **2.2 [1]** 13/17 28 July 1999 [1] 1 November 2022 [1] 130/15 **2.5 [1]** 144/10 **16 [1]** 64/6 150/14 1/1 **2.6 [1]** 144/14 **1.0 [3]** 20/22 25/11 **16 November 1998 28 October [2]** 52/6 abandoned [1] 112/5 **20 [1]** 141/5 **[1]** 107/19 55/4 100/19 **ability [5]** 40/23 41/3 **17 [2]** 25/5 51/4 **20 July [4]** 140/19 **1.06 pm [1]** 92/18 28 October 1999 [3] 109/20 117/13 127/11 144/24 145/6 146/4 **1.1 [1]** 152/15 17 November [6] 21/20 22/8 55/2 able [10] 4/23 37/12

67/23 68/3 70/22

20 July 1999 [1]

29 September [1]

1.2.4 [1] 10/19

(42) MR HENRY: - able

74/7 75/15 105/18 affect [5] 28/12 61/14 Al376 [2] 35/7 36/23 accepted [3] 78/7 80/4 141/6 109/25 110/5 110/5 153/3 153/3 155/14 aid [1] 123/8 able... [8] 49/10 50/3 access [1] 117/22 ain't [1] 113/16 132/14 132/19 132/20 affected [1] 53/16 51/10 52/5 74/4 accompanied [2] 132/22 135/5 157/4 affirmed [4] 1/12 air [1] 80/11 108/22 114/9 158/2 23/8 58/9 **Action/Commentary** 93/3 161/11 161/14 Als [1] 36/20 about [90] 1/8 2/25 **according [1]** 51/22 [2] 70/20 72/11 afraid [1] 156/5 albeit [2] 42/16 72/3 3/2 4/24 7/18 7/25 9/8 after [11] 32/21 33/22 alert [1] 126/19 actioning [1] 152/7 accordingly [1] 9/10 9/19 13/7 18/25 65/14 89/24 91/19 75/14 actions [14] 58/9 alive [7] 31/13 31/14 20/15 24/10 24/12 97/24 107/7 109/8 account [24] 7/19 67/1 67/5 67/10 68/2 31/24 38/10 38/11 24/14 24/19 25/18 19/23 19/24 19/25 68/23 70/5 72/15 112/1 137/24 144/10 83/18 88/3 27/3 28/2 29/16 29/18 35/11 36/15 36/16 72/17 74/1 78/18 81/8 afternoon [7] 33/7 all [81] 1/9 4/24 9/15 31/16 32/23 37/13 40/24 41/10 41/21 89/17 104/23 33/10 62/7 92/15 14/7 14/8 19/14 20/2 41/12 41/20 44/15 45/5 46/21 47/14 activities [7] 20/17 92/21 92/22 126/12 20/6 20/8 20/12 25/17 45/13 46/17 47/23 48/24 85/14 90/8 94/25 115/6 115/7 again [26] 6/2 29/8 26/15 31/24 38/1 38/5 48/3 48/4 49/15 50/25 102/24 103/12 103/14 124/13 139/3 141/16 42/7 47/5 47/21 52/2 40/20 41/11 44/17 51/1 55/19 57/16 108/20 122/1 135/16 activity [5] 66/18 53/25 55/20 60/13 49/1 49/3 54/9 61/7 57/16 57/20 58/20 85/19 95/19 139/6 71/20 76/8 91/18 61/16 64/14 66/12 153/6 153/7 61/21 62/12 62/18 accountant [3] 93/22 139/18 100/20 120/19 122/3 71/16 72/20 72/23 63/19 64/13 73/12 133/25 134/4 actual [3] 2/8 38/13 130/18 133/24 138/5 73/9 74/12 78/22 73/13 74/13 76/8 76/8 138/20 140/14 143/2 79/23 84/20 87/7 accountants [2] 118/4 78/21 79/24 83/6 150/1 150/7 153/8 89/24 90/17 90/20 95/10 96/4 actually [38] 4/22 88/21 88/24 88/25 accounted [1] 37/1 12/21 13/12 15/23 154/21 154/22 91/17 92/5 94/14 91/24 93/21 94/23 accounting [23] 17/25 18/10 20/4 against [8] 40/4 94/15 94/24 95/23 96/5 99/24 100/16 12/11 13/25 19/5 41/1 26/21 29/19 31/23 42/19 54/22 71/19 97/25 98/9 99/6 99/9 107/15 109/19 109/25 48/25 94/8 94/11 31/24 33/7 33/8 35/23 72/17 85/20 89/19 99/23 101/3 103/19 110/25 113/6 113/23 108/14 109/1 109/6 94/13 94/15 94/19 36/13 39/5 44/2 48/2 90/14 114/11 121/4 123/12 111/5 112/19 112/24 95/9 95/11 95/12 56/3 57/8 63/4 65/11 **Agency [12]** 4/7 10/3 125/22 127/11 131/3 114/24 116/24 117/11 95/13 95/20 101/22 81/1 82/10 82/13 83/9 10/23 32/14 106/8 134/11 134/13 135/25 103/18 104/2 104/17 83/14 88/20 97/12 110/22 113/20 115/18 120/4 121/25 124/24 136/1 138/15 146/1 109/9 109/13 109/17 110/4 113/3 113/24 116/19 123/6 125/25 125/2 125/25 126/1 147/16 149/9 150/5 118/18 125/20 126/17 130/15 156/18 129/1 129/2 130/20 157/1 157/5 159/18 131/16 141/24 142/11 agenda [2] 105/23 accounts [21] 45/4 131/22 132/2 136/25 159/24 160/7 160/9 46/20 47/13 47/25 ad [2] 101/6 101/8 124/12 139/2 140/5 147/12 160/13 94/18 94/19 104/18 ad hoc [1] 101/8 aggravation [1] 147/22 150/9 152/1 above [5] 53/19 104/25 108/10 109/3 add [3] 27/10 84/24 146/15 154/7 156/1 156/4 54/14 77/11 91/20 117/22 134/1 134/2 88/23 160/6 aggregated [1] 104/1 135/7 135/18 155/14 addition [2] 9/8 12/2 108/17 allow [2] 112/15 absolute [1] 87/1 155/25 157/25 158/12 additional [2] 28/11 **ago [5]** 1/9 11/16 144/20 **absolutely [5]** 98/18 158/13 158/18 74/1 33/4 64/10 74/5 allowed [3] 19/5 104/13 113/6 127/15 agree [10] 9/3 23/14 accuracy [1] 137/2 address [4] 53/15 138/23 139/16 135/4 accurate [6] 14/20 55/12 69/22 84/23 96/25 104/12 104/16 **alluded [2]** 100/3 accept [16] 71/12 14/25 16/3 29/23 addressed [6] 7/18 112/21 113/17 114/14 132/11 101/2 124/6 127/18 40/25 103/19 33/16 39/23 107/25 116/2 116/6 almost [3] 90/9 143/1 146/8 147/11 accurately [2] 48/25 131/2 152/10 agreed [15] 11/9 133/19 133/21 149/23 149/25 153/16 addressing [1] 80/19 29/24 36/3 50/21 108/23 along [3] 69/3 70/8 154/1 154/15 155/5 70/20 72/11 72/17 achievable [1] adequacy [1] 41/22 90/5 156/19 157/8 157/9 adequately [1] 41/9 74/1 74/7 78/18 already [13] 1/8 5/10 121/18 acceptable [1] 106/19 115/25 121/6 achieve [2] 38/7 adhere [1] 124/3 21/1 27/23 28/8 32/4 157/12 adjourned [1] 161/9 127/12 124/5 153/14 64/4 106/3 117/16 acceptably [1] 10/1 122/11 128/17 151/21 achieved [3] 51/23 adjournment [1] agreement [20] 6/25 acceptance [40] 133/7 133/20 92/19 38/23 75/9 75/16 79/8 157/21 32/21 32/23 34/10 acknowledging [1] 106/7 116/1 116/7 also [30] 3/22 4/12 adjustments [1] 34/13 37/19 37/25 121/5 130/12 130/17 9/4 14/14 16/10 19/20 119/13 155/25 38/7 38/25 39/25 40/5 133/14 136/13 140/22 27/7 35/13 39/2 42/17 acquaintanceship [1] adopted [3] 57/14 48/13 48/17 49/12 1/7 111/11 139/14 147/4 147/5 147/14 45/7 51/23 53/12 66/1 50/17 56/12 60/7 66/9 across [5] 49/7 95/16 adversely [2] 28/12 150/9 150/14 150/17 75/7 75/8 80/10 85/15 72/6 73/1 102/21 110/2 141/17 155/2 87/4 90/7 97/10 99/21 40/24 agreements [2] 112/11 140/25 141/1 act [5] 19/6 102/13 advice [3] 4/5 155/13 147/12 147/17 100/25 103/9 104/14 141/8 141/12 144/18 102/16 130/15 140/8 Ah [2] 7/1 101/14 118/13 127/2 147/3 157/21 144/20 146/3 150/21 acting [1] 21/16 ahead [2] 98/23 160/4 160/9 advise [2] 100/11 150/23 151/23 152/2 action [24] 11/5 68/8 123/11 121/22 altered [1] 122/18 152/3 152/12 153/25 68/15 68/21 69/4 69/7 Al218 [2] 35/13 36/24 alternative [1] advised [2] 128/7 154/5 156/15 156/16 **AI298 [5]** 35/15 36/25 70/9 70/20 70/23 144/15 112/15 156/21 157/2 71/15 71/23 72/11 affair [1] 18/2 49/13 72/5 72/25 although [7] 26/4

approving [1] 147/13 | 11/18 14/7 23/22 30/5 | 118/10 118/12 127/6 125/7 128/15 147/9 149/9 149/16 149/19 approximately [4] 32/11 52/4 63/15 140/19 although... [6] 42/23 154/4 53/1 73/3 77/17 130/7 71/24 97/18 114/16 **attended [9]** 10/3 105/10 107/6 130/24 anybody [4] 31/22 April [5] 76/23 85/4 155/3 156/17 33/12 34/1 39/15 139/23 144/18 90/5 132/1 159/13 85/6 85/8 97/19 arrangements [1] 49/20 106/14 123/17 always [8] 15/4 16/14 anyone [5] 92/8 April/May [1] 97/19 113/7 128/18 156/10 16/14 44/10 80/15 99/13 112/20 149/8 architecture [5] 9/11 arrives [1] 79/7 attendees [2] 10/15 88/12 90/1 133/25 160/22 9/14 9/19 9/21 9/24 as [195] 34/3 **am [20]** 1/2 16/21 anything [17] 12/17 are [134] 2/23 10/12 attention [12] 23/13 ascertain [2] 5/4 19/8 28/23 30/12 47/11 58/24 59/5 26/23 29/21 33/5 42/9 10/15 12/21 12/21 76/21 30/21 30/23 31/19 ascribed [3] 35/3 48/10 49/15 50/25 16/13 16/14 21/3 23/2 59/12 60/5 60/21 36/3 51/3 56/20 57/6 56/2 61/14 62/12 23/9 24/14 26/4 26/5 35/6 36/23 62/14 87/24 111/4 61/16 65/15 73/13 65/13 81/17 83/15 27/1 28/2 29/18 30/2 ask [18] 2/1 20/15 144/23 149/19 85/13 105/16 106/3 88/10 97/23 110/17 30/13 32/23 34/22 22/25 29/14 47/4 attitudes [1] 43/2 131/14 161/9 anyway [2] 130/16 36/2 43/2 48/3 48/3 57/15 58/10 93/8 attributable [3] 46/21 amazingly [1] 149/11 49/8 52/11 53/19 93/11 133/11 136/11 47/18 47/25 151/18 **amber [1]** 135/2 54/16 54/17 54/24 149/9 150/3 159/10 anywhere [2] 60/25 attributed [1] 35/1 ambers [2] 139/5 78/22 56/13 60/10 62/21 159/12 159/22 159/25 attributes [2] 99/23 139/5 **AP [1]** 11/4 62/24 63/19 64/21 160/23 103/3 **ambitions [3]** 116/17 67/24 67/25 68/7 asked [9] 17/11 33/3 audit [26] 17/19 **AP/5 [1]** 11/4 116/22 121/25 36/9 44/3 65/3 77/4 apart [3] 37/9 48/9 68/23 70/17 71/5 18/13 21/21 22/23 amended [2] 78/24 159/10 72/10 72/17 72/20 119/5 121/4 132/5 50/13 51/1 51/18 97/3 apologies [3] 23/6 76/8 78/18 80/3 81/1 asking [5] 2/24 63/5 54/10 56/6 58/23 59/1 amongst [4] 79/16 74/3 131/12 81/15 83/8 84/24 85/3 77/5 91/24 93/20 59/1 59/2 59/24 60/13 79/17 90/6 95/2 apologise [4] 65/19 86/1 86/6 86/25 87/8 60/23 60/23 62/13 aspect [1] 4/15 amount [5] 6/20 8/25 87/10 88/19 88/20 66/25 67/7 69/16 70/3 89/14 114/21 118/7 aspects [5] 18/18 13/15 39/4 40/10 appear [7] 14/12 34/3 90/9 90/22 91/10 70/7 81/7 82/20 19/11 33/7 34/7 53/11 **amounts [1]** 38/13 91/19 92/7 92/23 56/17 82/5 86/2 104/5 assertion [1] 65/20 104/10 analyse [1] 132/12 138/4 102/17 102/25 103/9 assessed [2] 135/3 audited [2] 94/20 analysed [2] 112/10 108/5 108/7 109/24 137/2 appeared [2] 46/11 102/6 132/18 87/24 111/13 111/21 112/24 assessing [1] 122/2 auditor's [1] 103/24 analysing [1] 152/6 auditors [5] 53/6 appears [20] 13/3 112/25 113/6 113/13 assessment [3] analysis [8] 40/2 113/15 115/2 115/2 30/14 41/6 42/16 108/7 111/11 134/25 94/20 101/18 102/16 67/22 110/5 112/6 115/10 115/11 115/16 assigned [1] 17/2 43/19 45/2 48/21 53/5 155/9 113/5 132/18 143/15 118/10 118/11 120/12 56/6 68/14 71/22 assist [4] 8/16 24/22 audits [3] 17/13 18/2 143/22 75/14 76/9 76/19 77/2 122/10 123/9 124/11 49/3 74/15 18/6 Andrew [1] 33/14 77/20 79/1 79/14 124/12 127/4 128/10 **assistance** [2] 25/25 August [18] 33/12 **Andy [2]** 153/23 87/20 136/15 130/13 131/3 131/18 117/6 34/2 34/9 39/15 39/23 154/1 131/21 131/23 133/14 assistant [1] 95/1 43/19 43/23 46/5 apple [1] 112/25 annual [4] 18/2 94/19 133/24 134/7 134/22 46/14 47/10 49/24 application [12] assisted [1] 33/11 104/18 134/1 24/17 31/10 47/20 135/6 136/16 137/15 **assisting** [1] 4/16 101/17 130/3 140/24 another [16] 2/7 48/1 53/13 66/3 81/9 138/22 139/13 140/18 assists [3] 25/17 140/25 151/21 151/25 21/19 23/25 27/17 82/21 82/22 83/19 140/19 142/8 143/8 55/6 61/7 156/15 28/13 50/9 59/20 87/25 111/24 143/12 143/21 144/2 associated [6] 22/19 August 1999 [3] 61/21 90/5 97/13 applied [1] 28/7 144/7 148/6 149/25 22/23 23/3 23/7 52/9 33/12 46/14 47/10 110/8 110/10 122/3 applying [2] 80/8 150/9 151/5 151/11 auspices [1] 99/7 120/22 143/25 146/13 156/9 Austin [16] 21/5 21/6 151/13 153/4 153/10 assume [3] 75/1 80/21 answer [9] 19/8 appoint [1] 99/2 153/14 155/23 155/24 77/11 128/10 64/21 64/23 70/10 39/10 49/10 50/4 appointed [4] 16/18 155/25 157/15 159/2 assumed [1] 8/19 70/11 71/23 73/10 60/19 83/5 114/20 159/3 159/3 159/4 74/16 75/8 75/11 18/5 97/19 98/24 assuming [1] 28/8 121/15 137/22 appointment [2] 159/4 160/20 76/24 77/11 79/18 assumption [1] anticipate [1] 159/24 16/21 94/6 area [3] 20/2 27/17 84/8 85/8 62/20 anticipated [1] 12/6 34/14 **assurance** [2] 119/6 Austin's [1] 85/23 appointments [1] any [45] 3/15 4/19 99/6 areas [9] 12/11 14/6 128/4 author [3] 68/2 78/5 5/2 5/3 5/14 5/16 10/5 approach [4] 30/6 15/17 34/16 36/10 assurances [1] 136/17 10/7 11/13 15/3 17/18 57/14 111/11 112/1 76/16 86/2 144/16 125/11 authorise [1] 86/10 31/16 32/20 34/12 approaches [1] 42/2 145/1 assured [1] 122/21 authorities [2] 37/9 37/11 39/9 55/17 appropriate [4] 104/4 aren't [3] 76/8 104/20 at [272] 111/22 149/1 57/15 59/19 76/4 80/1 125/14 139/25 140/7 114/9 attached [1] 23/16 **Authority [2]** 10/4 83/12 84/14 84/19 attachment [1] 33/25 | 11/23 appropriately [2] arise [1] 128/1 90/19 92/7 95/7 98/14 16/3 87/9 arisen [1] 160/1 **attempting [2]** 47/24 authors [4] 25/1 99/8 99/12 100/22 arising [1] 101/22 **approval [1]** 137/8 86/4 27/17 30/3 82/20 103/18 105/25 112/6 **approve [2]** 76/11 arose [1] 54/19 attempts [1] 53/15 automate [1] 109/12 113/16 119/5 124/8 138/18 around [13] 7/11 attendance [4] automated [6] 10/24

130/22 157/17 158/8 128/15 128/17 132/11 79/13 79/18 bank [3] 117/15 become [4] 28/9 141/17 146/12 147/12 Bennett's [1] 79/10 automated... [5] best [10] 2/20 82/10 117/19 117/22 66/12 95/5 119/7 148/18 151/2 151/24 86/24 116/20 117/8 banking [4] 116/17 becoming [2] 29/12 152/1 83/24 83/25 89/25 122/11 137/17 117/14 117/21 117/22 94/2 begin [1] 3/1 93/16 121/18 121/19 automatically [1] banks [2] 117/16 bed [1] 65/13 **beginning** [1] 25/9 139/14 160/14 61/11 been [150] 7/7 7/10 behalf [1] 128/13 better [14] 1/17 1/19 117/20 automation [6] 4/8 bar [2] 133/17 133/19 9/4 11/8 13/4 14/3 **behind [2]** 7/13 45/16 11/12 37/6 39/13 43/2 106/13 106/18 123/5 being [82] 4/23 5/23 barometer [4] 14/20 14/10 16/17 17/24 49/8 49/10 95/22 124/4 130/10 19/3 20/16 23/1 25/25 7/2 7/16 9/6 9/20 138/12 146/25 152/18 14/25 15/4 15/5 available [7] 4/24 26/14 28/7 30/14 14/24 15/16 16/11 157/9 160/12 **Barton [1]** 1/21 24/4 100/12 104/7 18/5 18/14 20/4 20/10 between [13] 15/19 30/16 31/17 33/17 based [5] 29/19 106/1 121/8 153/11 20/12 20/24 23/20 78/12 79/20 94/14 34/11 35/1 35/5 38/6 32/3 35/22 37/2 39/16 avenues [1] 60/18 38/10 38/11 38/16 23/23 24/2 26/21 27/8 48/22 50/15 85/15 155/20 awarded [1] 5/20 baseline [1] 63/20 38/21 40/3 42/15 31/17 31/18 34/16 104/9 106/7 114/4 aware [26] 9/17 **baselining [2]** 6/15 42/17 42/20 45/8 35/19 36/6 36/8 41/8 134/16 160/22 29/12 38/6 41/19 bid [7] 4/15 4/21 4/22 46/16 48/5 49/17 42/3 44/3 45/9 45/11 7/15 41/24 46/24 47/7 basically [4] 59/24 51/21 53/2 53/14 46/25 47/10 48/16 5/2 5/5 5/6 5/24 49/17 49/18 50/5 108/16 109/15 137/24 53/15 57/6 57/12 48/24 49/1 49/20 bidding [1] 4/6 62/19 65/22 83/23 basis [9] 7/13 28/17 57/19 57/23 57/25 51/22 54/22 58/12 big [11] 30/9 55/20 86/9 90/11 91/10 100/10 108/15 108/25 62/20 66/6 82/11 58/4 59/12 59/14 59/15 62/14 69/19 112/23 120/24 126/18 97/10 101/1 115/10 60/19 60/20 60/24 81/12 82/1 82/1 97/10 134/10 134/17 134/21 128/17 129/12 148/11 131/24 61/2 61/9 61/15 62/19 99/25 103/4 103/6 158/21 158/24 159/3 150/21 151/4 157/3 BD [2] 71/2 71/15 63/23 63/25 65/22 104/24 104/24 107/5 biggest [1] 4/23 159/20 70/13 72/12 73/4 73/6 110/1 112/19 113/4 be [238] billing [1] 95/16 awareness [1] 63/2 bear [1] 43/24 74/5 76/16 77/10 114/5 114/11 114/12 billions [1] 117/17 away [8] 36/17 63/21 77/21 79/4 79/8 79/9 114/25 115/14 122/8 **Bearing [4]** 29/7 **binder [1]** 2/8 120/4 122/17 124/19 122/10 122/14 122/16 Bird [4] 110/13 79/15 80/25 81/20 46/17 68/21 89/16 127/19 133/18 151/13 bears [2] 25/22 40/17 83/9 86/9 86/17 89/3 123/4 127/13 131/6 110/13 110/21 110/21 89/8 89/24 97/4 97/25 131/18 131/18 135/19 bit [20] 1/16 7/25 В beat [1] 4/25 141/6 142/14 144/22 24/14 24/25 24/25 became [7] 6/2 17/20 99/6 102/2 102/5 **BA [3]** 4/13 110/23 18/1 95/1 95/7 97/17 102/17 103/11 103/12 145/4 145/4 145/11 47/21 57/3 75/4 75/5 142/16 78/20 84/16 85/5 98/2 104/15 104/19 104/23 146/14 150/21 153/13 back [22] 6/25 10/1 because [99] 5/8 105/5 105/25 107/7 156/21 158/19 89/10 102/18 102/20 20/9 22/6 27/6 27/18 9/20 12/16 13/13 109/24 111/1 112/4 belief [3] 2/21 93/17 115/15 141/25 147/8 36/20 42/10 52/4 13/14 13/21 14/7 15/5 112/6 112/10 113/7 157/17 153/20 155/22 52/17 64/12 72/8 16/13 17/23 20/9 113/8 119/24 122/1 believe [27] 2/12 bits [2] 48/10 143/22 73/16 88/6 97/18 24/18 26/21 27/5 122/13 122/22 124/14 5/16 5/17 8/1 10/21 blitz [1] 52/25 102/22 106/3 106/22 29/17 31/18 33/5 36/6 124/24 124/25 127/22 11/16 19/22 21/6 21/7 blocker [1] 66/12 125/6 131/22 136/3 37/8 37/12 37/13 129/11 129/18 130/24 22/10 22/17 23/11 blown [1] 75/4 145/10 38/11 38/14 45/17 132/18 132/19 132/24 25/2 36/1 43/4 47/16 blur [1] 114/21 backfill [2] 85/16 46/6 48/12 50/5 55/1 133/3 135/1 136/14 50/21 52/4 75/24 79/5 board [65] 10/4 87/4 57/7 57/24 59/7 59/8 136/23 137/13 137/20 82/13 84/8 84/15 10/12 94/9 96/21 background [7] 3/2 60/10 63/18 63/25 138/2 138/16 138/16 84/17 89/22 112/3 96/22 96/23 97/2 93/21 95/7 100/2 65/11 71/5 71/12 79/5 138/19 139/2 139/4 139/14 100/22 104/16 105/7 102/5 104/1 116/23 139/7 139/8 139/16 105/11 105/15 106/23 79/8 79/11 79/12 believed [3] 36/9 backwards [1] 36/4 80/25 81/1 82/15 140/1 140/8 141/13 116/25 117/4 121/17 117/25 121/13 bad [3] 26/6 29/3 86/23 88/23 89/11 143/16 145/1 146/5 **bell [1]** 76/13 133/3 135/23 136/1 138/12 bells [2] 84/19 124/8 90/1 90/9 91/18 99/3 147/14 148/6 148/8 136/5 136/7 136/8 Bain [1] 144/11 99/15 99/17 102/4 136/11 136/14 137/8 148/10 151/6 152/3 belly [1] 98/11 Baines [2] 33/22 102/5 102/9 102/18 154/11 154/13 154/16 below [4] 27/14 54/2 137/11 138/10 138/15 153/22 105/1 105/4 106/17 154/25 156/3 156/14 85/11 103/23 138/20 138/21 138/24 Baker [5] 118/12 108/24 111/4 113/18 157/12 157/14 157/20 belt [1] 138/2 140/11 140/17 141/11 118/14 127/14 128/7 114/5 114/9 117/16 159/14 161/1 141/14 142/12 144/10 benefit [3] 85/17 128/12 144/11 144/24 145/2 117/24 118/1 119/20 before [42] 2/24 3/1 111/17 115/23 balance [7] 45/4 119/24 120/17 120/24 13/1 13/16 31/4 31/6 benefits [13] 4/7 10/3 145/5 145/10 145/13 46/20 47/24 119/5 124/11 124/22 128/11 32/5 36/21 39/14 10/23 11/2 32/14 145/16 145/24 146/4 119/7 119/11 160/12 129/2 130/23 133/8 44/24 47/3 49/12 50/9 106/8 110/22 113/20 146/6 146/7 146/9 balanced [1] 108/10 134/8 135/1 135/25 50/19 55/21 58/10 115/18 116/19 123/6 147/3 149/8 149/9 balancing [9] 19/20 136/24 139/9 139/24 61/4 61/22 62/11 125/25 130/15 149/17 149/19 156/10 40/24 41/10 41/23 141/13 143/19 145/9 65/14 70/1 74/11 75/9 Bennett [14] 6/5 156/13 156/24 156/25 47/13 86/12 89/18 146/15 147/21 148/11 81/13 85/24 90/22 17/15 17/17 21/6 21/6 157/1 157/3 157/7 120/23 137/20 148/25 149/16 152/5 99/12 105/4 108/24 64/22 65/5 70/15 157/14 157/19 158/4 ball [2] 130/21 156/1 157/2 157/9 123/9 125/17 128/2 70/16 71/17 79/5 79/7 159/2

42/4 48/10 56/3 57/8 В **broadcast** [1] 139/18 certain [8] 6/23 13/15| 104/4 broader [2] 66/13 58/2 66/19 67/3 98/21 26/11 61/10 68/7 79/4 cited [1] 29/5 **boards [1]** 124/18 143/2 99/14 105/16 105/18 101/21 103/2 civil [1] 90/14 **body [2]** 53/16 84/21 broadly [3] 27/22 105/20 105/23 106/2 certainly [15] 5/6 clarification [1] **bold [1]** 69/1 76/12 149/6 114/13 114/16 131/11 15/17 18/24 26/18 59/17 **bolder [1]** 91/21 **brought [17]** 4/5 131/16 131/17 131/21 29/18 30/19 42/3 42/4 clarified [1] 80/16 bones [1] 155/23 23/12 47/10 58/24 139/13 63/8 80/10 83/4 **clarify [2]** 117/8 **Book [1]** 137/18 59/5 59/12 59/14 candidates [1] 99/12 130/21 139/12 154/18 149/8 bookkeeper [1] cannot [13] 24/20 59/23 60/4 60/21 61/3 157/13 clash [1] 44/2 94/10 27/5 31/15 37/5 49/20 cetera [7] 10/25 61/15 62/14 87/23 class [1] 35/24 bookkeeping [1] 137/1 139/20 149/18 51/3 55/23 63/10 15/22 19/6 27/5 **classic [1]** 125/4 96/6 **Brown [1]** 136/17 84/14 86/22 104/6 133/13 139/1 139/18 classifying [1] books [2] 108/20 154/17 **Bruce [3]** 39/17 150/4 153/10 chain [3] 84/6 90/25 135/15 91/18 clause [3] 147/5 152/17 153/23 **capacity** [1] 149/3 **Boston [1]** 28/5 bug [4] 13/13 15/10 captured [1] 109/3 **chair [6]** 1/3 90/22 148/2 149/18 both [6] 37/7 50/2 26/6 26/9 card [1] 115/24 131/12 131/13 131/19 clean [1] 24/5 65/25 127/12 140/19 bug-fixing [1] 26/9 career [1] 116/4 138/5 **cleaned [1]** 81/5 **bugs [11]** 12/21 13/3 carried [11] 5/15 Chairman [2] 136/10 clear [12] 27/12 28/1 bothered [1] 149/2 13/19 15/15 46/21 5/23 8/11 18/7 19/14 30/12 34/8 45/24 72/4 160/4 bottom [11] 21/5 47/20 47/25 62/25 28/5 29/1 40/3 66/25 98/2 105/16 116/24 **challenge** [2] 96/8 41/15 102/20 111/7 124/14 124/17 145/25 63/2 66/1 80/8 67/7 81/22 143/5 121/3 123/13 123/15 bullet [1] 44/25 carries [1] 21/5 challenges [2] 4/19 cleared [2] 15/7 129/25 136/16 136/21 bumped [1] 36/11 carry [7] 41/9 54/8 110/8 76/16 137/14 bunch [1] 117/7 69/9 74/10 75/20 change [19] 7/15 9/5 **clearing [1]** 16/15 bought [1] 95/19 Burdett [1] 33/23 149/4 151/7 19/4 46/12 53/11 clearly [8] 65/20 boundary [1] 114/3 carrying [1] 160/7 business [26] 16/2 57/22 57/23 59/16 117/20 120/2 140/12 box [4] 25/23 40/21 142/13 145/10 146/14 40/4 40/17 40/21 41/3 case [5] 58/4 73/6 63/19 66/10 80/11 55/6 144/7 46/13 71/3 71/4 71/7 75/12 104/8 148/1 97/10 98/13 119/15 153/2 BPS [2] 111/9 111/16 71/9 71/10 94/22 cash [28] 19/23 120/9 120/13 120/14 clever [1] 101/15 braces [1] 138/2 94/24 96/12 96/23 19/24 19/25 20/3 120/14 157/16 client [1] 113/11 brackets [1] 67/23 97/8 97/9 98/17 99/20 35/10 36/15 36/16 changed [2] 83/3 **clients [1]** 98/10 brain [1] 37/21 137/23 141/16 146/16 40/24 41/10 41/21 100/9 close [7] 75/15 76/17 branch [5] 19/15 76/22 77/7 87/22 146/19 148/19 149/15 45/4 46/20 47/14 changes [6] 53/14 20/7 48/23 49/2 153/4 150/2 48/24 85/14 94/15 78/10 80/14 87/7 102/6 119/20 branches [5] 4/17 **businesses** [1] 94/16 95/11 102/24 103/12 97/12 119/5 closed [7] 36/24 75/9 5/3 94/15 108/14 103/14 108/10 109/3 channel [1] 100/21 75/14 76/2 78/6 78/18 businessman [1] 117/19 134/9 109/13 117/16 135/6 characterisation [1] 83/15 break [19] 30/15 153/6 153/7 159/4 12/20 closely [1] 100/7 but [183] 30/17 30/22 31/4 50/9 **Butlin [3]** 118/22 categories [1] 141/1 **chartered** [1] 93/22 **closing [1]** 76/7 61/21 61/24 62/5 118/23 119/3 categorisation [1] **chased [3]** 77/15 **closure [1]** 76/11 62/11 79/1 90/10 156/20 77/16 109/7 **clout [1]** 102/19 92/14 121/12 126/6 categorised [1] **check [2]** 15/23 co [1] 11/10 126/10 128/2 128/15 C13 [1] 85/15 35/14 126/23 co-operation [1] 151/7 151/9 **C14 [8]** 78/14 84/11 category [5] 12/9 checking [1] 155/10 11/10 breakdown [1] 121/7 84/13 84/16 85/11 13/10 27/4 141/4 checkpoint [1] 12/4 code [45] 23/20 breaking [1] 96/2 85/15 86/10 86/23 141/5 24/11 24/16 25/7 Chesterfield [6] brief [3] 49/2 118/21 call [3] 97/8 123/7 category 1 [1] 13/10 94/14 108/16 109/2 25/19 25/22 26/4 123/14 151/10 catering [1] 94/25 109/3 135/8 155/24 26/14 26/17 27/15 briefed [4] 97/25 called [6] 14/13 70/5 cats [1] 117/25 chief [2] 94/10 96/12 27/19 28/2 28/3 28/7 98/18 111/2 112/19 91/2 99/22 100/12 28/7 29/2 29/3 31/10 caught [1] 125/18 **choice [2]** 57/17 briefly [6] 8/9 19/11 110/17 cause [10] 15/9 99/14 31/12 45/16 46/18 35/15 40/16 62/20 calling [1] 84/25 24/12 28/8 29/22 chosen [2] 99/15 47/7 52/24 53/16 74/9 came [13] 4/2 6/25 31/23 81/10 83/20 62/24 73/5 75/13 120/14 **briefs** [1] 98/16 32/5 35/23 80/16 82/4 88/4 88/8 132/19 78/10 78/11 80/20 Christ [1] 125/1 **bright [1]** 114/23 84/2 94/15 94/16 81/11 82/7 82/23 caused [1] 45/5 **Christmas [2]** 153/11 bring [11] 8/16 88/6 98/15 117/12 143/22 causing [2] 31/10 83/21 85/15 86/1 155/7 111/3 111/13 118/7 145/10 chronological [1] 86/22 87/11 87/12 146/15 125/13 127/2 136/11 can [167] ceased [1] 21/1 40/14 87/24 88/2 88/18 152/9 154/21 156/9 can't [41] 10/25 14/6 113/4 113/12 133/18 cent [1] 7/6 chronology [2] 56/5 bringing [2] 90/14 23/18 24/7 24/8 24/20 central [2] 100/10 codeset [1] 78/14 98/23 136/25 26/21 26/22 29/20 108/15 **chuckling [1]** 131/14 codified [6] 116/1 broad [6] 52/11 29/20 30/7 30/8 33/4 **circulation [2]** 60/12 116/7 140/22 147/4 centre [1] 95/20 109/18 113/19 124/12 34/19 36/18 37/8 37/8 centres [3] 94/22 64/11 147/5 150/13 126/1 141/13 37/11 37/16 37/18 94/24 94/25 circumstances [1] coding [2] 26/18

C 122/15 136/1 141/21 **considers** [1] 103/23 | **convenient** [3] 30/15 communication [2] 65/15 100/22 concluded [3] 8/24 consistency [1] 50/8 61/24 **coding...** [1] 53/13 communications [2] 16/16 26/22 27/25 conversation [1] Colin [2] 118/14 60/11 116/18 conclusion [6] 9/3 **consistent [5]** 13/7 78/5 128/11 communities [2] 28/21 46/8 82/4 83/11 19/17 142/3 142/4 **convincing [1]** 117/4 collapse [1] 127/16 117/20 129/10 143/23 142/5 Coombs [52] 1/4 1/7 **collect [1]** 108/13 **conclusions [4]** 8/12 **consists [1]** 137/16 1/12 1/14 1/21 3/3 community [1] collective [1] 79/2 10/20 11/7 11/9 21/14 117/10 8/18 26/20 29/8 consultant [1] 33/14 column [20] 22/13 company [1] 3/22 conditional [4] 56/12 consultants [1] 30/13 30/24 36/21 34/25 35/2 40/17 60/7 153/25 154/5 112/22 39/10 49/12 50/7 comparable [1] 42/11 42/14 54/3 117/19 consulted [4] 57/16 51/10 56/4 57/15 58/7 conditionally [1] 68/12 68/25 69/3 69/6 57/20 57/21 58/3 154/14 58/21 60/3 60/16 compare [1] 95/25 70/8 70/12 70/19 compared [2] 15/21 **conduct** [1] 6/7 Consulting [7] 7/21 61/20 62/9 62/11 64/7 70/20 72/11 73/21 43/5 **conducted** [2] 33/18 8/12 8/18 8/24 9/9 65/7 65/10 65/18 74/7 74/8 118/16 comparison [2] 50/14 16/16 33/17 66/23 67/8 69/11 columns [2] 54/5 42/25 125/14 **conducting [1]** 17/19 contact [1] 161/3 73/18 74/3 75/19 72/14 **complaints** [1] 142/5 77/25 79/1 80/18 confidence [13] contained [1] 33/25 combination [2] 26/5 contemplated [2] 82/17 84/5 86/5 86/19 **complete [5]** 95/15 51/22 107/24 115/7 50/2 103/19 112/14 151/10 115/13 115/13 116/25 124/2 146/23 87/20 89/13 90/9 combined [3] 26/1 155/7 132/21 133/4 133/12 90/21 90/25 91/25 content [6] 2/20 94/12 95/24 137/3 143/7 143/10 30/17 60/22 78/4 92/7 92/11 161/11 completed [2] 11/8 come [23] 27/6 30/13 12/5 143/11 93/16 131/23 Cope [1] 99/5 36/20 40/12 40/16 **completely [2]** 76/18 confident [2] 28/24 contents [2] 61/13 copied [5] 33/21 54/25 60/11 61/11 156/14 136/23 39/15 41/14 54/23 79/24 65/2 72/20 82/1 83/11 context [1] 122/8 91/23 completeness [2] confidential [1] 8/6 89/17 90/6 98/22 105/14 137/2 confirm [2] 22/7 continuation [1] coping [2] 129/1 99/18 101/12 102/22 completes [1] 92/10 23/19 115/22 135/6 110/2 110/6 132/13 completing [1] confirmation [3] 77/4 continue [16] 14/17 Copping [1] 33/16 141/17 144/23 151/13 77/5 77/20 26/7 49/11 50/11 copy [8] 1/22 2/7 8/5 comes [2] 65/14 **confirmed [7]** 8/15 76/17 77/24 78/11 8/15 20/24 22/15 **completion [4]** 16/24 158/19 27/7 47/6 75/23 123/7 79/24 80/21 88/7 21/12 32/21 126/4 33/13 67/5 comfortable [1] complexity [1] 96/1 124/3 144/19 122/2 151/6 151/9 core [5] 22/2 27/13 141/19 component [1] 27/9 confirming [1] 42/14 151/18 155/10 159/7 50/13 52/10 84/18 comforted [1] 135/14 components [1] confirms [1] 52/22 **continued** [7] 55/14 corner [1] 67/12 coming [9] 44/5 18/22 confront [1] 130/4 65/16 69/23 82/21 **corporate [4]** 99/4 58/15 76/15 79/21 comprised [1] 43/1 confused [1] 47/4 150/18 150/19 150/20 100/7 106/17 124/17 88/17 88/20 101/14 connected [1] 66/19 computer [2] 99/16 **continues** [3] 26/8 corporation [5] 95/9 120/5 128/12 52/8 69/16 95/17 96/3 106/19 113/3 connection [2] 8/1 comment [4] 30/11 67/6 **continuing [5]** 82/10 158/25 computerise [1] 31/23 37/8 43/25 107/2 138/11 138/12 98/11 **conscious** [1] 100/1 correct [42] 1/24 commentaries [1] computerised [1] consequence [1] 148/21 1/25 2/13 2/14 3/7 3/8 72/17 95/19 13/14 continuous [3] 110/2 4/4 4/9 4/18 5/21 6/4 commentary [6] 120/6 150/19 6/10 7/6 7/22 7/23 8/8 **Computers** [1] 3/5 consequences [1] 51/17 69/14 70/20 8/22 8/23 14/10 16/20 computing [1] 6/1 104/17 contract [14] 5/20 72/11 74/1 74/8 consider [22] 11/11 35/23 35/23 36/12 18/20 19/16 21/1 25/3 concentration [1] comments [2] 81/15 32/12 47/8 48/19 12/19 12/22 12/23 36/14 44/3 44/12 160/10 122/12 45/22 107/4 137/7 concern [12] 9/10 14/19 14/23 46/18 48/20 52/22 65/23 commercial [9] 7/17 9/12 27/17 28/15 46/23 55/10 56/7 137/8 137/12 138/18 65/24 79/3 93/24 94/1 36/10 38/11 44/2 54/16 81/12 88/2 56/18 56/19 57/5 143/20 96/19 104/22 105/13 44/18 79/11 96/5 111/20 136/6 144/16 59/11 60/18 60/19 108/14 116/7 116/22 contracted [1] 36/5 116/21 141/15 145/1 145/3 60/22 69/21 104/3 contractual [4] 36/5 126/13 135/11 commercially [1] concerned [7] 28/2 119/23 130/11 137/11 36/9 38/7 40/9 **corrected** [4] 84/9 44/14 46/11 71/11 85/13 104/20 105/5 133/4 considerable [2] contradicted [1] commitment [4] 109/24 130/11 142/15 112/13 154/25 correcting [1] 155/25 75/24 124/4 125/21 125/22 **concerning [5]** 8/13 consideration [2] contrast [1] 36/23 **correction [2]** 135/8 127/19 115/17 146/14 152/11 56/21 76/9 control [11] 21/9 135/15 committed [1] 57/22 57/24 95/16 corrections [1] 154/5 **considered** [13] 3/24 103/10 concerns [24] 9/18 43/10 44/1 56/20 78/9 103/2 137/18 138/23 135/13 Committee [2] 119/7 15/18 20/17 25/6 27/2 97/3 111/9 141/22 140/9 140/10 146/20 **corrective [15]** 58/9 144/3 41/20 47/23 52/17 142/24 145/14 146/4 155/8 67/1 67/5 67/9 68/2 communicate [1] 84/23 85/2 85/25 88/4 149/20 157/7 controls [2] 153/9 68/8 68/15 68/21 59/25 88/8 88/16 88/21 considering [6] 60/7 153/10 68/23 69/4 69/7 70/5 communicated [1] 91/21 103/24 106/25 90/16 90/18 147/3 convenience [1] 72/15 81/8 89/17 60/24 109/20 113/23 119/22 147/10 151/24 121/12 correctly [6] 18/4

(47) coding... - correctly

51/11 56/10 58/13 110/11 C D **department** [1] 148/7 58/24 59/5 59/13 60/5 decide [1] 104/8 departments [1] **D McDonnell [1]** 21/7 correctly... [5] 18/11 60/6 62/15 62/17 64/8 decided [5] 24/9 148/24 36/8 71/5 80/14 84/6 daily [7] 40/23 41/10 65/22 86/14 86/16 80/20 97/3 121/9 dependence [1] 48/23 73/4 103/1 correspondence [2] 86/17 90/12 94/2 121/17 85/16 103/5 103/7 39/16 39/19 94/13 95/6 96/11 97/9 decision [32] 12/12 depends [4] 15/25 cost [13] 78/7 78/8 damaging [1] 112/17 97/15 97/17 97/20 24/3 24/8 56/3 56/25 59/9 59/14 59/15 80/5 80/5 80/7 80/8 data [18] 48/16 90/13 98/3 100/3 106/18 79/2 79/14 79/15 depth [2] 26/19 89/18 89/19 112/14 101/23 102/23 103/10 108/13 114/18 115/25 79/23 79/24 81/4 82/9 123/11 103/24 105/13 109/3 121/24 130/7 130/14 116/17 117/3 121/7 82/25 83/6 83/16 depths [2] 148/19 130/24 147/6 149/10 149/23 144/3 149/4 83/18 84/3 87/21 88/8 149/15 150/5 155/2 155/8 costs [1] 84/1 89/3 89/4 89/16 89/21 derived [4] 35/10 Counters' [3] 41/2 could [109] 2/9 7/18 155/11 156/18 158/6 41/20 121/9 89/23 99/10 123/8 36/15 36/16 153/6 8/19 10/18 11/19 13/2 158/9 124/24 138/17 144/12 describe [1] 119/12 counties [1] 99/19 13/16 14/22 16/1 databases [1] 10/25 **country [2]** 117/10 144/13 154/11 154/14 described [9] 12/18 17/22 20/19 21/19 date [8] 12/6 21/1 decision-maker [1] 124/12 20/5 35/10 35/15 40/2 22/6 22/18 27/18 25/8 52/1 55/2 67/22 course [15] 14/23 68/6 116/16 142/13 79/15 29/19 33/13 39/7 71/19 111/9 25/11 30/13 43/10 158/7 decision-making [1] 39/12 39/22 42/20 dated [25] 1/23 2/18 44/1 44/21 47/6 47/22 describes [2] 53/24 89/16 20/16 20/22 21/20 43/23 45/7 47/4 47/21 decisions [3] 80/25 57/11 58/18 58/19 137/5 51/4 54/8 54/11 55/6 22/7 22/22 25/12 60/15 72/10 126/21 134/15 159/6 description [1] 35/1 56/24 58/14 59/18 39/23 43/23 46/4 144/8 deemed [2] 36/24 design [6] 7/15 26/6 67/13 67/20 70/21 59/23 60/11 64/5 covered [6] 9/22 16/3 88/17 38/8 111/14 111/23 70/22 72/3 73/19 66/11 66/19 67/8 27/23 33/7 78/16 defects [5] 47/20 111/25 68/22 69/9 71/14 74/2 74/14 74/20 75/7 77/8 48/1 66/1 78/12 80/8 designed [1] 86/25 132/7 76/2 80/15 81/16 78/1 84/7 85/4 93/11 cracks [2] 139/16 **deferred [2]** 156/21 designing [2] 3/15 dates [3] 75/6 97/18 83/20 84/4 92/2 92/25 147/22 157/2 38/20 93/5 93/8 93/11 125/20 Crahan [5] 10/21 **deferring [1]** 36/13 **Desktop [2]** 53/22 Dave [15] 26/1 86/13 101/11 102/4 102/8 10/21 10/23 11/6 12/3 deficiencies [1] 54/6 102/20 103/25 106/11 86/14 99/11 99/14 cranky [1] 107/15 **Despite** [1] 123/25 37/24 106/22 106/24 107/3 99/18 114/22 122/13 **create [2]** 94/23 deficient [1] 18/12 detail [14] 9/7 14/7 107/4 107/16 107/22 124/2 139/19 139/20 121/24 defined [4] 6/25 68/7 22/4 27/6 30/11 40/20 109/8 110/12 111/6 140/4 140/16 154/18 creation [1] 103/11 68/20 100/21 63/10 78/25 107/14 111/15 111/19 114/17 155/21 creep [2] 6/24 90/4 definitive [1] 20/6 130/20 150/2 151/24 117/21 118/7 118/20 David [20] 21/8 25/4 **creeping** [1] 7/1 degeneration [2] 156/6 156/25 119/16 120/12 120/13 33/16 64/22 98/24 82/7 82/23 crime [1] 149/3 detailed [5] 14/8 120/18 120/18 120/19 101/16 102/1 106/25 criminal [1] 90/14 degradation [2] 18/18 113/4 136/5 120/20 121/3 121/20 107/18 111/2 112/19 criteria [8] 42/11 83/20 86/3 139/23 122/5 122/24 123/13 118/21 122/22 136/4 42/12 42/15 42/19 degraded [1] 85/14 details [3] 7/4 76/24 126/19 127/1 127/3 141/21 141/23 152/10 53/3 53/5 53/24 54/6 **degree** [1] 3/6 128/9 127/8 128/22 129/23 153/23 154/1 154/22 critical [1] 142/17 delay [1] 130/7 deterioration [2] day [7] 77/15 77/16 130/9 130/12 133/14 crucial [2] 127/18 delayed [1] 119/17 31/12 81/10 140/7 140/17 140/22 87/21 97/9 97/9 129/8 determinative [1] delays [1] 133/5 141/2 144/6 144/8 128/17 160/6 CS [2] 70/24 86/10 delegates [1] 124/7 89/20 145/16 148/6 148/7 days [9] 17/12 33/4 CSR [14] 21/22 21/24 deliver [16] 8/20 9/2 determine [2] 140/21 150/5 152/9 154/21 98/19 108/24 119/25 22/23 23/7 51/20 52/9 96/24 97/6 97/12 141/2 144/9 144/19 144/23 156/9 157/22 158/7 52/11 53/4 53/4 53/14 113/13 113/25 114/18 determining [2] couldn't [4] 27/4 33/2 154/23 67/6 70/3 70/7 81/7 115/3 115/8 116/1 135/21 137/11 deal [8] 50/9 61/22 121/5 156/1 121/23 124/16 130/25 develop [4] 95/18 culture [1] 26/8 council [2] 116/10 121/11 121/17 130/23 138/25 139/10 cumbersome [1] 110/3 117/2 132/13 137/15 137/24 152/18 123/1 109/14 deliverables [1] developed [2] 81/5 counsel [1] 159/22 dealing [2] 52/9 63/4 cure [2] 125/12 128/5 101/5 98/3 counter [17] 35/15 dealings [1] 115/18 current [3] 28/17 delivered [8] 12/14 developing [6] 3/15 dealt [1] 148/12 36/15 36/18 37/14 6/18 38/20 57/10 34/20 84/10 28/24 46/9 74/22 48/23 49/2 49/14 debate [3] 154/4 114/25 115/14 117/23 currently [1] 103/21 81/21 120/1 49/25 72/6 73/2 85/14 154/6 154/9 **customer [9]** 6/23 147/2 development [46] 85/25 87/7 87/11 debtor [1] 95/16 17/4 39/17 49/21 3/11 3/19 5/25 6/20 delivering [3] 4/25 103/10 106/12 106/18 decay [4] 28/8 31/11 54/18 60/24 66/21 97/8 98/17 9/1 17/14 18/13 21/22 counters [52] 4/7 31/16 31/23 70/25 71/1 22/23 23/7 23/25 24/2 delivers [1] 150/10 10/4 33/15 35/4 35/6 **December [10]** 74/20 **customers** [3] 3/23 delivery [6] 6/13 10/4 24/5 24/6 29/2 30/1 75/7 75/21 76/19 35/14 36/22 37/2 19/15 153/4 11/22 28/18 95/23 38/9 49/6 51/20 59/21 40/15 41/1 42/13 108/6 110/11 110/14 cut [2] 117/20 118/2 98/3 59/23 60/13 60/22 155/9 157/8 157/12 44/21 46/10 46/12 60/23 64/24 66/15 cycles [1] 78/16 demonstrate [1] 48/14 50/16 51/8 **December 1998 [1]** 102/12 66/21 67/7 70/3 70/23

47/23 109/15 114/2 158/24 161/4 23/3 23/5 23/5 25/8 D 120/3 122/10 122/14 discussions [15] 25/9 25/13 31/25 33/6 development... [16] 122/22 125/12 128/5 31/21 44/8 44/18 33/9 34/24 40/8 46/15 71/3 71/4 71/7 71/9 129/1 130/5 142/14 55/18 66/13 71/23 50/20 51/3 52/1 54/23 71/10 73/14 81/7 83/9 142/19 73/10 73/12 78/22 55/2 55/8 59/1 63/9 90/7 91/11 91/12 difficulty [1] 6/22 102/11 115/21 127/20 63/12 64/2 64/9 64/15 done [40] 4/12 23/17 91/14 95/22 96/7 136/6 145/24 158/20 65/6 65/9 67/9 67/13 dimensional [1] 15/6 111/24 132/11 diminished [1] 54/15 disputed [2] 29/24 67/19 73/19 88/5 developments [1] direct [4] 71/20 96/18 34/21 98/20 106/6 107/16 110/10 110/19 118/20 101/3 128/22 disrespectful [1] devolution [1] 125/5 direction [3] 95/3 124/10 125/14 125/20 127/3 dialogue [1] 63/24 97/6 117/3 127/8 131/16 138/20 distinctly [1] 24/7 diarised [1] 18/8 directly [8] 17/8 distributed [2] 22/23 144/1 151/22 151/22 **Dick [2]** 97/22 106/4 17/10 17/24 28/19 50/23 159/9 Dicks [5] 34/5 39/16 36/3 100/13 154/12 distribution [8] 21/4 documentation [2] 39/24 46/3 46/8 154/13 22/5 22/12 25/5 54/24 32/3 56/2 Dicks' [1] 63/23 director [29] 6/6 6/7 61/5 64/18 67/16 documented [3] 20/2 did [63] 3/14 5/2 5/19 16/18 16/22 17/2 division [1] 66/15 115/6 129/2 6/11 9/3 9/22 14/19 17/20 18/5 18/16 do [138] 2/4 3/1 3/25 documents [13] 7/7 14/23 17/8 17/12 18/6 21/17 25/16 30/1 34/6 4/19 4/23 9/20 9/25 20/6 22/19 22/20 23/7 double [1] 96/5 18/25 20/13 24/11 38/23 39/16 39/18 10/5 10/16 10/17 23/8 23/9 37/22 48/21 doubt [3] 53/11 148/9 37/14 42/5 42/5 46/18 90/11 94/2 94/7 94/8 10/21 11/13 12/19 55/25 58/8 72/9 54/25 63/17 64/25 94/22 95/2 96/18 17/16 17/18 19/24 106/10 80/7 81/19 82/24 97/17 98/15 98/24 21/24 23/19 26/14 does [20] 13/18 16/4 87/11 88/4 88/8 89/13 99/23 106/20 106/21 29/8 29/18 29/20 30/4 20/8 20/9 20/14 25/19 down [40] 6/22 11/19 89/17 91/4 91/5 95/7 156/14 32/20 34/12 34/17 37/25 41/10 47/1 49/2 95/25 96/15 99/2 73/9 75/16 76/12 77/7 36/2 36/21 37/1 37/10 directorate [2] 59/18 100/5 100/7 100/19 37/19 38/10 40/10 84/19 118/25 121/14 64/24 105/8 105/11 105/23 directors [3] 38/12 42/2 44/3 44/4 44/8 124/8 128/11 155/23 107/10 110/7 111/4 96/24 124/18 44/9 44/10 44/11 doesn't [12] 27/6 113/20 113/22 114/17 directorship [1] 45/10 45/17 46/25 36/17 38/2 38/4 41/13 117/7 120/9 125/4 63/24 49/14 50/25 52/14 49/4 60/1 61/8 74/15 132/21 139/11 142/10 dirty [1] 157/19 54/20 55/17 57/13 87/18 137/19 158/16 145/5 145/11 147/9 doing [14] 3/17 10/24 disagree [2] 29/20 57/15 57/24 58/10 148/15 149/6 149/8 45/25 58/19 59/9 59/11 17/25 19/8 30/6 57/10 149/12 155/16 156/19 60/10 60/19 61/12 81/22 83/1 109/25 disagreement [2] 157/5 35/21 35/24 61/14 62/16 63/11 115/2 132/21 150/16 didn't [32] 5/6 9/13 66/11 71/11 71/13 157/1 157/20 disappeared [2] 17/8 22/17 38/3 42/3 57/13 126/14 73/3 74/11 74/24 76/4 domain [1] 63/8 42/4 42/5 46/23 49/5 disappears [1] 47/2 78/18 78/20 81/11 don't [93] 5/17 7/3 50/5 60/10 78/21 discontinued [1] 82/7 82/12 84/13 9/21 10/7 19/2 20/13 78/22 82/17 90/16 112/1 84/16 86/5 86/19 87/3 20/24 22/4 23/16 97/23 98/10 98/10 discovered [1] 26/14 87/13 88/25 89/5 26/20 26/22 29/16 100/2 105/2 121/23 29/17 30/8 35/7 37/15 147/19 discrepancies [3] 91/13 91/25 99/11 121/23 121/24 133/3 48/22 103/2 103/20 101/13 102/14 103/3 39/9 40/20 42/6 44/15 draw [2] 14/15 45/10 139/8 145/8 149/1 45/25 45/25 46/5 48/9 dreamt [1] 148/10 104/21 105/6 106/16 discrepancy [1] 150/25 150/25 157/24 107/20 110/15 110/19 48/18 50/3 50/4 55/8 37/17 158/10 discuss [5] 11/6 111/16 112/18 113/1 55/22 56/20 57/3 57/8 driven [1] 99/22 difference [2] 15/19 34/10 101/1 140/21 116/2 116/3 118/14 57/14 57/18 60/9 37/1 63/20 65/3 66/14 160/21 119/19 119/23 120/4 different [14] 29/18 discussed [21] 11/9 120/21 123/18 124/8 66/17 75/1 79/9 80/1 36/1 36/12 40/10 46/1 31/18 39/3 46/3 48/10 124/19 125/17 129/19 80/2 83/14 86/20 59/24 81/24 81/25 50/18 52/18 72/25 129/20 129/21 136/7 88/13 88/22 92/1 92/3 **DT [1]** 54/6 83/17 134/14 142/8 74/9 74/16 78/6 79/15 141/11 141/23 142/25 92/4 92/24 101/25 159/1 159/5 159/6 143/11 143/17 143/19 102/16 105/9 106/5 79/17 97/2 106/5 differently [1] 45/12 122/8 135/22 145/25 143/24 145/15 146/22 107/14 107/21 109/22 26/10 30/13 84/18 differs [1] 84/14 146/6 155/11 155/21 147/4 147/22 149/23 110/21 111/4 111/5 difficult [11] 7/16 discussing [5] 31/4 150/12 150/14 150/21 112/21 113/1 113/17 27/14 27/15 30/10 114/13 114/20 115/18 during [16] 4/2 5/5 62/12 86/13 128/16 152/1 152/13 152/23 32/7 65/11 73/6 73/16 138/16 153/18 154/4 155/15 120/15 121/15 123/20 82/15 107/6 155/5 157/8 158/6 160/14 125/7 128/9 129/22 discussion [14] 30/5 difficulties [20] 6/14 31/16 31/17 46/8 66/4 160/24 161/1 161/1 130/20 135/24 136/19 12/10 12/19 12/23 66/5 68/1 76/5 79/20 137/22 142/21 145/8 document [51] 7/23 12/24 47/13 47/18 88/15 122/6 122/9 20/19 21/10 22/25 145/19 147/8 147/25 145/24

150/15 151/8 152/4 152/14 153/19 154/6 155/19 156/5 157/13 160/21 161/2 donate [1] 68/14 23/21 23/23 24/9 45/23 59/21 60/9 61/9 80/12 82/2 82/16 83/9 88/15 89/6 89/24 97/25 99/6 99/8 99/8 99/9 105/1 105/19 108/17 109/4 113/7 113/9 114/12 119/11 132/18 137/24 143/22 145/16 149/6 151/12 152/17 153/8 155/16 155/16 155/20 door [1] 58/15 149/16 doubts [2] 112/5 153/15 21/9 22/5 22/18 24/25 34/20 40/1 53/17 54/11 64/6 67/15 74/2 76/22 79/1 83/4 84/21 85/3 85/4 89/18 91/20 102/20 103/25 109/7 110/4 113/4 121/12 122/5 122/24 123/21 123/22 133/21 135/7 142/11 149/15 151/2 152/15 153/20 155/21 159/12 downgradable [1] 153/13 downgrading [1] 38/17 draft [6] 21/11 25/13 67/21 137/1 147/17 drive [1] 70/24 drop [1] 139/16 drops [2] 51/21 51/23 **DSS [1]** 4/13 **DTI [2]** 125/1 127/25 due [6] 12/5 26/9 108/5 **Duncan [1]** 100/8 5/6 13/5 20/25 28/18 34/11 45/9 48/15 54/14 79/6 86/12 90/11 103/11 126/14

27/16 27/19 28/3 28/3 evaluation [2] 40/3 124/6 25/22 26/18 30/5 duties [1] 32/10 emphatically [1] 28/17 28/19 29/19 42/14 31/19 79/25 **Dykes [1]** 97/20 127/18 30/5 30/6 30/6 31/5 even [3] 27/15 57/10 exit [3] 125/25 Ε **employed** [2] 33/14 31/12 46/18 46/22 109/18 130/12 133/14 47/2 47/7 47/14 47/20 event [1] 128/15 117/6 expand [1] 121/20 each [13] 1/9 34/18 48/1 48/5 48/8 51/2 **employee [1]** 86/14 eventually [4] 82/4 **expansive** [1] 44/20 35/3 36/20 36/22 51/18 51/21 52/8 **employees [2]** 33/17 95/5 115/23 147/2 expect [5] 17/22 66/24 73/16 101/5 52/18 52/23 52/24 ever [5] 26/21 58/12 28/25 45/20 86/10 98/13 129/3 130/21 131/15 53/4 53/7 53/22 54/2 105/6 133/19 146/23 empowered [2] 111/3 139/25 141/1 123/7 144/11 54/6 54/7 54/14 54/16 every [2] 109/1 117/9 expectation [4] 28/4 earlier [20] 3/18 4/10 everybody [3] 109/16 66/7 66/20 71/6 54/22 55/7 55/11 enabled [2] 42/1 25/4 28/3 33/18 40/2 55/19 55/21 56/8 127/24 141/18 161/7 **expected [12]** 44/13 44/7 47/6 50/20 52/18 56/19 56/24 57/1 everyone [3] 92/17 57/19 57/22 62/18 enclosed [1] 110/14 72/25 75/11 99/16 encouraged [1] 57/14 58/12 59/3 125/3 130/21 65/8 65/17 65/21 66/4 120/6 127/23 129/19 128/20 62/18 62/21 63/6 64/3 everything [11] 66/13 67/3 111/1 131/9 146/1 152/22 end [35] 2/4 2/6 8/6 64/25 65/23 65/25 20/10 20/11 47/2 124/4 155/11 9/6 29/5 36/3 36/13 69/16 69/20 69/22 105/21 108/16 110/7 expensive [1] 109/14 early [13] 4/21 4/22 45/3 46/19 47/3 47/11 71/5 71/8 72/19 75/13 120/25 126/18 132/1 **experience** [12] 3/10 17/12 77/14 77/17 49/1 86/1 86/25 86/25 76/8 76/25 77/20 138/25 139/9 3/15 3/17 4/11 26/2 95/8 111/21 114/2 92/3 98/3 104/2 105/3 78/22 80/20 81/11 43/5 85/17 112/9 evidence [44] 2/24 119/25 129/7 129/8 108/6 108/6 116/5 82/23 83/21 84/11 18/4 47/6 52/19 55/14 113/2 141/16 143/2 153/12 155/9 117/15 123/10 127/9 84/13 84/14 84/18 61/23 69/17 69/23 146/10 easier [1] 119/8 131/1 134/10 134/14 87/23 87/25 88/9 73/1 92/10 92/12 93/1 experienced [5] easily [1] 36/13 134/20 136/20 153/17 88/21 89/19 107/2 93/20 96/16 96/21 122/10 122/14 128/21 east [1] 122/13 153/25 158/11 158/15 108/21 111/12 111/20 97/15 100/1 100/19 132/6 137/20 easy [1] 15/4 100/21 100/25 101/10 experiences [1] 160/6 114/18 eat [1] 98/5 102/1 104/11 104/14 ended [2] 89/22 **EPOSSes [1]** 31/18 119/24 eating [1] 98/5 105/10 105/16 118/23 experiencing [5] 109/9 equipping [1] 41/9 **Edward [1]** 159/15 129/11 141/25 142/23 45/3 46/19 47/12 ends [1] 153/15 **equivalent** [1] 86/16 effect [3] 12/16 25/23 Ernst [9] 101/16 energetic [1] 114/23 145/5 145/14 147/7 47/24 86/3 59/3 engineering [2] 3/6 101/17 102/2 102/7 148/2 148/3 150/15 **experiment** [1] 112/5 effective [1] 112/11 152/22 154/13 156/24 expert [2] 81/19 94/25 151/22 155/13 157/21 effectively [4] 19/4 enlarged [1] 144/6 158/1 158/11 157/6 158/4 160/2 95/21 78/6 80/3 89/22 enough [6] 4/23 50/3 error [8] 47/19 73/3 160/21 160/21 expertise [1] 100/4 effects [1] 38/25 114/5 143/16 157/7 73/4 108/18 134/2 exactly [4] 17/22 explain [4] 6/15 7/9 efficacy [1] 83/6 37/5 46/7 158/5 134/6 135/8 146/24 72/14 86/6 157/20 effort [2] 24/1 80/1 ensuing [1] 108/11 errors [21] 16/15 **explained** [10] 3/9 example [1] 157/4 eg [1] 155/7 46/21 47/20 48/1 66/1 7/3 18/15 20/23 32/8 ensure [2] 1/16 87/8 **examples** [1] 29/4 eg the [1] 155/7 **ensuring [2]** 18/6 76/14 80/8 104/22 **exceed [1]** 36/9 37/4 81/18 131/9 eight [1] 94/23 52/10 107/5 109/5 109/7 **excellent** [1] 152/17 142/14 159/6 either [8] 13/4 13/13 enter [3] 71/17 135/6 135/10 135/17 **exchange [2]** 84/4 explanation [2] 42/16 36/18 49/21 66/21 115/25 115/25 139/6 145/11 146/1 49/2 87/10 87/22 128/6 159/11 146/7 146/11 150/24 entered [1] 59/15 **exchanges** [1] 61/10 **explore [5]** 8/9 19/11 electronic [6] 2/6 **Excluding [1]** 141/21 entering [1] 32/23 155/24 60/17 62/19 65/18 19/1 51/14 107/12 entirely [2] 45/5 72/4 Escher [2] 28/4 30/7 **Excuse [1]** 47/4 **expressed** [3] 9/10 137/16 153/7 entitled [1] 72/11 execs [1] 141/15 **especially [2]** 90/2 136/1 136/6 elegant [1] 19/18 entries [3] 70/21 74/9 119/4 **executed [1]** 104/24 **extension** [2] 39/5 **element [3]** 19/7 execution [1] 104/25 74/20 essential [1] 116/21 112/14 54/18 111/23 entrusted [1] 81/20 **essentially [7]** 42/12 **executive [4]** 96/13 extent [4] 8/10 16/7 elements [2] 111/11 entry [16] 71/19 72/3 46/7 48/25 51/17 74/4 116/10 136/16 144/3 135/17 158/12 137/15 72/4 72/23 73/9 74/14 94/10 134/23 external [1] 94/20 executives [2] elimination [1] 145/4 75/7 75/19 75/21 106/23 141/14 establish [4] 25/16 extra [1] 86/12 else [6] 48/11 88/22 76/23 77/8 78/1 78/3 49/25 66/6 86/4 **exercise** [2] 24/5 **extracted** [1] 130/23 99/13 112/20 159/13 78/19 96/6 138/18 established [3] 18/1 57/10 **extremely [2]** 28/2 160/22 environment [2] 90/3 25/13 67/15 exhibits [3] 2/15 2/16 127/14 email [14] 33/13 et [7] 10/25 15/22 112/16 2/23 eye [1] 125/18 33/25 76/23 77/3 19/6 27/5 133/13 **EPOS [1]** 114/20 exist [2] 15/6 71/11 eyes [1] 149/14 77/10 78/4 84/6 84/6 139/1 139/18 **EPOSS [103]** 19/13 **existed [5]** 17/18 84/10 84/21 85/3 20/17 20/21 22/21 30/12 49/9 71/12 et cetera [5] 10/25 90/25 91/17 91/22 facing [4] 29/11 23/12 23/20 23/21 19/6 27/5 133/13 115/12 emails [1] 84/4 54/14 54/18 90/3 existence [2] 37/23 23/24 24/2 24/11 139/1 emerge [1] 43/6 fact [16] 7/11 14/14 24/24 25/7 25/11 62/25 etc [2] 42/2 127/22 **emotional [1]** 122/16 evaluate [1] 98/1 20/13 30/4 31/14 32/2 25/19 26/4 26/17 **existing [9]** 6/19

26/24 27/9 27/11

emphatic [2] 124/1

D

23/23 24/5 24/19

evaluated [1] 97/21

| F | 50/7 50/9 58/7 61/22 | 9 | freezes [11] 35/16 | gave [3] 102/18 |
|--|---|--|--|---|
| fact [10] 46/21 | 70/19 78/13 78/18 | 26/25 | 36/16 36/19 49/14 50/1 72/7 73/2 120/25 | 118/23 142/23 |
| 47/25 57/4 60/17 82/1 | 108/6 121/16 144/12 144/13 160/5 | flagged [2] 127/23 129/19 | 50/1 72/7 73/2 120/25 143/23 155/4 156/18 | general [6] 16/22 26/15 118/12 122/6 |
| 88/24 106/6 120/8 | finally [4] 43/16 78/1 | | freezing [1] 152/20 | 122/9 122/21 |
| 131/14 144/8 | 90/9 108/19 | | French [1] 33/14 | generally [2] 2/25 |
| factors [1] 26/7 | finance [5] 94/9 | | friendly [1] 119/8 | 62/24 |
| facts [1] 136/25 | 95/21 106/20 136/18 | | front [8] 1/22 2/10 | generate [1] 107/4 |
| failing [1] 37/25 | 138/3 | focused [2] 41/20 | | |
| failings [1] 112/12 | financial [5] 94/8 | 116/17 | 131/1 136/15 | 101/7 |
| fails [1] 112/11 failure [3] 13/14 38/6 | 95/9 95/13 104/5 | focusing [2] 71/13 | froze [1] 37/14 | generic [1] 112/25 |
| 40/25 | 137/23 | 86/2 | FUJ00079159 [1] | George [3] 4/13 |
| faintest [1] 90/16 | find [5] 16/2 30/10 | folders [1] 63/14 | 46/5 | 110/13 110/22 |
| fair [34] 3/12 12/19 | 57/13 87/15 121/10 | | FUJ00079333 [1] | get [30] 9/13 10/1 |
| 14/1 14/3 14/15 14/16 | findings [17] 7/4 8/10 | | 84/5 | 15/6 15/7 17/11 29/19 |
| 14/16 22/15 38/15 | 11/6 31/4 42/24 50/25 | | FUJ00079782 [2] | 39/5 41/25 44/9 57/4 |
| 44/22 44/23 45/10 | 51/18 58/11 58/22 58/23 59/2 59/11 60/4 | 51/14 55/24 following [15] 12/8 | 21/21 50/20 FUJ00079783 [1] | 71/16 83/4 91/20 97/11 102/13 102/16 |
| 46/13 68/3 68/4 87/25 | 60/20 62/13 70/2 | 20/19 21/12 28/21 | 67/8 | 105/22 113/5 113/25 |
| 98/15 99/8 100/23 | 111/12 | 51/5 52/25 54/8 67/21 | | 114/7 114/23 117/20 |
| 100/24 104/18 105/2 | fine [7] 92/5 92/17 | 72/3 74/19 78/2 78/3 | 20/19 24/23 64/4 | 124/23 133/9 143/6 |
| 108/23 108/24 129/19 | 93/2 126/8 131/25 | 110/10 144/23 150/17 | | 143/12 143/21 151/1 |
| 129/21 130/18 130/18 135/16 137/10 158/13 | 133/23 161/6 | | fulfil [1] 100/6 | 151/12 151/19 |
| 158/17 160/7 160/10 | finish [4] 54/11 74/11 | 72/1 72/24 | full [6] 1/20 1/21 | gets [3] 52/16 66/12 |
| fairly [5] 18/21 21/3 | 90/10 160/9 | foolscap [1] 108/25 | 89/18 93/5 103/3 | 82/16 |
| 36/13 121/14 140/6 | finished [4] 5/24 | force [24] 20/18 | 154/2 | getting [9] 4/24 18/1 |
| faith [1] 87/4 | 82/19 89/15 126/2 | | fully [3] 28/25 86/24 | 47/4 102/10 115/10 |
| falls [1] 70/23 | firm [2] 112/22 | 23/1 23/12 24/25 | 157/3 | 115/11 121/1 127/19 |
| familiar [4] 9/12 | 147/18 | | function [9] 17/11 | 128/22 |
| 41/18 42/6 56/13 | first [30] 1/4 4/2 11/16 17/25 27/22 | 28/18 28/22 28/24 29/13 29/16 31/5 | 18/23 19/1 47/14 94/13 99/5 100/8 | GI [2] 91/23 92/4 give [8] 1/20 26/12 |
| far [13] 17/21 19/18 | 34/23 40/21 41/16 | 31/20 52/18 52/23 | 100/9 155/12 | 86/22 92/12 92/15 |
| 36/17 46/11 48/10 | 42/16 43/8 43/25 | 54/15 64/3 65/4 69/18 | | 92/25 143/10 157/24 |
| 71/10 91/10 114/4 | 51/19 53/19 54/25 | | | given [12] 9/4 17/6 |
| 122/17 130/10 131/20 149/14 151/13 | 56/8 56/16 60/15 | forgive [8] 22/6 41/15 | 7 | |
| fashioned [1] 109/15 | 64/18 69/14 70/14 | 52/3 52/5 64/18 68/11 | | 104/1 115/13 123/14 |
| fault [2] 121/7 121/9 | 70/21 74/20 75/7 84/5 | | functions [1] 41/4 | 125/11 125/23 128/4 |
| faults [11] 27/8 37/23 | 90/4 97/23 98/19 | | | |
| 43/17 45/2 45/9 45/14 | 128/1 146/18 153/24 | | fundamental [9] 11/2 | 160/20 |
| 45/15 46/22 81/2 | fit [11] 12/13 14/14 15/18 15/23 15/25 | form [1] 147/9 | 88/21 103/18 103/22 104/9 105/4 105/12 | go [38] 11/19 22/6 |
| 125/10 128/3 | 16/1 16/5 120/12 | formal [2] 17/18 18/14 | 108/22 146/13 | 27/18 37/10 42/10 51/4 52/4 53/17 57/22 |
| faults/problems [1] | 132/20 136/3 141/22 | | further [26] 15/12 | 61/10 64/12 73/18 |
| 45/15 | fitness [6] 14/21 15/1 | | 16/6 18/6 18/7 24/2 | 75/4 81/16 83/3 85/4 |
| fear [1] 28/7 | 15/14 15/15 15/20 | formed [1] 16/22 | 29/1 31/7 31/11 43/12 | l . |
| feature [1] 139/9 feedback [5] 128/21 | 16/9 | forum [1] 11/17 | 43/14 45/23 46/9 53/1 | 103/25 106/11 111/19 |
| 128/22 143/14 143/17 | fits [1] 56/15 | forward [17] 7/2 9/25 | | 115/19 121/5 121/22 |
| 152/25 | fitted [1] 45/21 | 11/12 13/1 13/2 16/14 | | 122/5 122/19 122/24 |
| feeder [2] 86/21 | five [4] 95/10 140/4 | 52/11 71/7 83/25 | 80/16 81/10 83/12 | 123/13 124/19 129/4 |
| 137/17 | 160/3 160/5 | 83/25 123/9 128/12 | 85/5 90/21 111/10 | 130/9 137/3 137/12 |
| feel [2] 19/3 57/3 | five minutes [2] | 137/3 137/12 138/1 | 153/20 | 138/23 153/6 153/20 |
| felt [5] 18/11 88/13 | 160/3 160/5 five-page [1] 140/4 | 154/10 158/24 forwards [2] 36/4 | future [8] 11/10 51/23 80/1 89/12 | 159/8 goes [8] 26/3 26/12 |
| 122/16 140/13 141/18 | fix [4] 28/11 29/2 | 61/15 | 115/17 116/1 117/13 | 28/14 53/9 55/13 |
| few [9] 3/2 93/21 | 126/20 158/10 | found [2] 42/25 88/25 | | 103/8 112/8 119/12 |
| 97/24 98/19 106/10 | fixed [4] 15/10 | four [3] 29/4 43/8 | | going [37] 5/1 9/6 |
| 139/21 144/19 146/18 | 158/10 158/12 158/14 | 139/24 | G | 9/24 27/13 27/14 |
| 148/15 | fixes [20] 26/6 27/2 | | gap [1] 32/3 | 30/16 32/1 34/15 |
| field [1] 3/10 figures [2] 54/13 | 27/3 28/6 28/24 31/10 | | Gareth [6] 91/2 91/14 | |
| 80/23 | 52/10 74/22 76/10 | frames [1] 23/22 | 91/15 91/18 91/23 | 55/25 57/5 57/5 58/16 |
| files [1] 103/15 | 76/21 76/25 77/20 | fraud [1] 90/15 | 92/1 | 66/14 73/14 73/15 |
| final [17] 20/1 42/14 | 80/8 80/21 81/9 82/21 | | Gateway [3] 116/18 | 79/22 88/10 88/24 |
| 42/21 44/25 49/12 | 82/22 83/20 89/20 | 109/14 116/3 | 117/24 118/4 gather [1] 123/8 | 98/4 106/3 113/13 |
| | 153/9 | free [1] 146/24 | yatıler [1] 123/0 | 117/1 118/6 118/22 |
| | | | | |

G Н going... [10] 125/2 had [167] 125/13 129/4 133/23 hadn't [6] 7/12 77/21 139/3 139/6 143/12 133/2 140/12 143/16 143/21 151/5 155/12 144/23 gone [6] 83/11 98/9 half [1] 151/16 112/18 124/23 139/22 **Halfway [1]** 11/19 142/13 halt [2] 150/25 gonna [1] 113/16 151/10 good [15] 1/3 1/6 Hamish [1] 110/13 1/14 28/6 62/7 73/6 hand [12] 22/13 92/21 92/22 114/7 34/25 37/3 40/17 54/3 115/8 117/17 126/12 67/12 68/12 73/21 130/23 141/15 156/24 75/5 93/9 150/8 goods [1] 19/6 153/10 **qot [33]** 2/7 2/8 10/8 handing [1] 59/20 19/9 33/5 39/4 55/21 handle [1] 115/1 58/14 87/16 90/4 handled [4] 117/16 145/4 157/7 158/5 97/25 98/6 98/18 105/24 115/1 125/3 handling [3] 73/4 128/20 132/10 134/7 143/9 157/15 139/23 140/7 143/3 happened [17] 6/17 143/4 143/5 143/5 6/17 20/12 26/24 32/6 143/9 146/19 149/7 33/2 55/22 57/8 59/18 150/24 151/15 151/16 63/5 75/18 83/7 83/14 157/4 157/14 117/23 142/21 148/19 152/5 government [10] 116/18 116/25 117/4 happening [9] 7/14 117/24 118/4 121/6 19/4 26/23 132/15 121/8 124/22 127/20 140/12 142/9 142/21 130/22 153/1 156/2 happens [4] 88/18 graded [2] 36/22 121/4 126/19 146/18 49/13 happy [8] 50/11 graduating [1] 3/6 75/17 88/24 115/9 granting [1] 56/11 grateful [4] 92/11 151/6 151/11 157/19 132/3 138/8 151/20 159/7 hard [8] 44/7 99/21 great [1] 121/11 102/11 124/13 130/21 greater [1] 54/15 130/22 133/9 146/9 green [2] 135/2 154/17 hard-nosed [1] 99/21 greens [1] 139/5 hardware [2] 50/1 143/3 grip [2] 113/25 157/15 Harry [2] 97/22 106/4 grips [1] 114/24 has [34] 2/8 2/10 7/10 19/3 25/25 29/3 ground [1] 96/2 group [32] 6/7 8/12 36/22 36/23 36/24 9/9 16/16 17/7 17/9 44/12 51/21 70/13 70/24 72/4 72/12 33/17 54/16 59/21 81/4 84/23 89/8 91/11 77/10 79/11 83/9 86/17 89/3 103/9 91/12 91/14 94/21 96/10 96/12 96/13 103/10 103/12 107/25 96/22 100/22 104/16 111/10 112/6 125/3 106/13 106/16 106/17 143/9 143/23 151/6 106/20 106/20 114/22 153/8 153/15 154/25 123/7 127/5 128/7 157/9 149/8 hasn't [1] 28/8 groups [1] 43/14 hate [1] 129/7 guarantee [2] 28/11 have [409] haven't [2] 33/8 39/8 86/22 having [15] 23/24 **guessing** [1] 57/2 guinea [1] 129/7 30/10 37/5 55/20

80/23 102/6 102/11

104/17 112/18 119/4 35/14 36/23 37/23 120/2 128/18 142/1 146/16 152/6 he [40] 1/8 64/24 64/24 64/25 82/15 86/16 91/11 91/12 91/14 92/2 92/25 96/18 96/21 99/3 99/21 99/22 100/1 100/1 100/15 100/25 100/25 102/4 110/23 111/4 121/12 123/15 124/6 124/15 124/17 124/25 125/4 127/18 129/14 129/17 136/4 137/1 142/1 142/23 145/14 156/1 head [4] 38/2 63/6 78/21 96/4 heading [16] 10/11 10/15 11/20 21/10 22/19 27/19 34/3 34/20 40/17 42/21 51/7 51/11 67/19 69/13 137/5 138/9 heading 2 [1] 137/5 headings [1] 14/4 headquarters [1] 134/15 heads [1] 106/7 health [1] 122/16 hear [13] 1/3 1/14 30/24 31/2 58/16 62/7 62/9 115/4 126/12 126/24 131/25 138/6 159/16 heard [4] 96/15 97/15 77/24 105/24 151/1 133/11 145/13 hearing [1] 142/6 heart [3] 83/24 110/7 155/12 heavily [1] 34/14 held [1] 94/5 **hello [1]** 1/9 help [5] 60/14 73/18 87/5 117/7 147/19 Helpdesk [1] 85/20 helped [1] 147/17 helpful [2] 61/13 138/19 helps [1] 59/8 hence [1] 82/10 Henry [1] 159/15 here [21] 2/8 10/11 10/20 14/2 14/7 23/6 29/9 47/4 59/1 64/7 68/23 72/1 92/3 104/20 120/8 122/8 132/16 133/13 139/9 153/8 157/18 hesitate [1] 131/19 **Hey [1]** 124/19 high [29] 18/21 19/12 27/8 28/5 29/7 35/6

38/12 38/17 39/6 41/2 48/13 49/13 50/17 54/21 107/5 133/17 133/19 139/20 141/3 141/4 144/18 144/22 145/7 145/17 155/2 156/16 higher [1] 70/24 highest [1] 13/23 **highlight** [2] 55/6 68/11 highlighted [4] 8/21 35/8 35/12 55/19 **him [13]** 91/19 92/3 99/2 100/17 102/9 105/20 105/23 111/3 129/20 129/21 129/22 131/13 155/22 hindsight [3] 88/10 140/14 145/19 Hine [1] 100/8 his [19] 10/22 11/1 22/4 71/17 91/6 91/9 92/25 96/16 96/18 96/21 97/20 99/15 100/21 100/21 102/1 104/14 124/21 141/25 huge [1] 101/7 148/8 historic [1] 83/13 history [3] 21/10 67/19 148/16 hoc [2] 101/6 101/8 **HODGE [3]** 1/13 91/1 161/12 hold [5] 27/13 77/9 Holleran [3] 152/17 153/8 153/23 Holmes [2] 25/1 25/2 | I accept [2] 149/25 honest [5] 107/14 114/20 121/15 133/22 | I actually [2] 82/13 137/22 hope [3] 67/8 68/12 92/24 horizon [61] 3/1 4/2 6/2 6/15 8/20 16/18 18/19 32/17 32/21 34/12 37/20 37/24 38/7 38/20 39/18 41/23 43/2 48/16 48/24 48/25 56/12 90/13 96/1 97/11 97/14 98/17 100/16 100/23 101/1 101/7 101/23 102/24 103/1 108/8 108/21 108/25 109/11 109/16 116/2 116/20 116/24 117/2 117/18 120/22 123/18 I believe [24] 2/12 126/2 127/4 129/9 136/13 138/11 138/17 148/18 149/10 149/14 149/23 149/23 150/5

152/11 155/12 156/13 158/22 **Horizon's [1]** 109/20 hospital [1] 65/13 Hot [1] 34/21 hour [1] 151/16 house [3] 147/15 149/3 149/5 how [46] 5/17 6/23 7/9 7/18 12/14 13/10 15/10 17/23 27/4 31/21 34/17 35/22 37/13 37/14 41/7 46/12 50/4 57/13 59/15 66/11 66/19 71/23 79/9 81/16 83/14 84/14 87/5 89/1 95/25 107/6 110/8 113/11 115/10 115/11 117/11 118/21 120/4 128/25 139/11 140/15 140/16 150/5 151/13 155/13 156/6 159/1 however [5] 21/9 28/15 42/20 86/25 153/10 **HSH [1]** 85/20 hugely [1] 109/13 human [1] 142/24 hundred [3] 96/8 146/18 147/16 **hundreds** [1] 28/6 hungry [1] 52/8 hurdles [1] 66/9 hypothetical [2] 156/4 156/5

157/9 118/18 I agree [3] 112/21 113/17 114/14 I also [3] 87/4 160/4 160/9 I always [1] 133/25 lam [14] 19/8 28/23 31/19 36/3 51/3 56/20 57/6 61/16 65/15 73/13 85/13 105/16 106/3 131/14 I apologise [3] 65/19 89/14 114/21 lask [5] 2/1 22/25 57/15 93/11 136/11 I assume [1] 77/11 I attended [1] 49/20 5/16 5/17 8/1 10/21 11/16 19/22 21/6 21/7 22/10 23/11 25/2 36/1 43/4 47/16 50/21 52/4

I believe... [7] 75/24 79/5 84/8 84/15 84/17 89/22 139/14 I came [1] 145/10 I can [49] 1/5 1/14 11/18 17/21 17/25 19/10 21/15 26/25 30/25 31/2 33/5 33/24 35/12 37/17 38/24 44/5 49/21 52/1 54/4 59/22 60/13 62/8 62/10 67/11 69/2 72/12 83/5 83/12 83/14 87/5 88/5 88/23 90/10 105/10 126/13 126/25 128/9 131/13 131/13 131/15 131/15 135/19 138/7 151/4 152/4 152/14 153/6 155/19 159/16 I can't [34] 10/25 14/6 23/18 24/7 24/8 24/20 26/21 29/20 29/20 30/7 33/4 34/19 36/18 37/8 37/8 37/11 37/16 37/18 42/4 48/10 56/3 57/8 66/19 67/3 98/21 99/14 105/18 105/20 105/23 106/2 114/13 131/16 131/21 139/13 I cannot [10] 24/20 27/5 31/15 37/5 49/20 51/3 55/23 63/10 84/14 86/22 I certainly [5] 5/6 18/24 42/3 42/4 139/12 I copied [1] 41/14 I could [4] 17/22 102/8 127/1 127/3 I couldn't [2] 27/4 33/2 I deal [1] 50/9 I did [6] 9/22 42/5 42/5 64/25 91/5 105/8 I didn't [12] 9/13 22/17 38/3 42/5 46/23 49/5 50/5 78/21 82/17 90/16 133/3 145/8 I disappeared [1] 126/14 **I do [17]** 3/1 9/20 10/17 30/4 36/21 58/10 59/9 61/12 66/11 84/16 87/13 89/5 116/3 118/14 129/21 146/22 161/1 I don't [78] 5/17 9/21 10/7 19/2 20/13 22/4 23/16 26/22 29/16 39/8 29/17 30/8 35/7 37/15 I heard [1] 133/11

39/9 40/20 42/6 44/15 I hesitate [1] 131/19 45/25 45/25 48/9 48/18 50/3 50/4 55/22 I hope [3] 67/8 68/12 56/20 57/3 57/8 57/18 60/9 65/3 66/14 66/17 I interpret [1] 125/6 75/1 79/9 80/1 80/2 83/14 86/20 88/13 88/22 92/1 92/3 92/4 101/25 105/9 106/5 107/14 107/21 109/22 111/4 111/5 112/21 120/15 121/15 123/20|I knew [4] 110/23 125/7 128/9 129/22 130/20 135/24 137/22 | I know [13] 19/2 142/21 145/8 145/19 147/8 147/25 150/15 151/8 152/4 152/14 153/19 154/6 155/19 156/5 157/13 I doubt [1] 148/9 I eventually [1] 95/5 I feel [2] 19/3 57/3 I felt [3] 18/11 88/13 140/13 I find [1] 30/10 I finished [1] 89/15 I first [1] 90/4 I follow [1] 126/5 I fully [1] 28/25 I get [1] 57/4 I got [2] 33/5 98/18 I had [19] 3/21 4/12 7/7 21/1 24/18 32/4 47/1 50/5 76/18 79/23 | I please [1] 118/7 89/6 90/17 90/19 96/6 I probably [1] 145/9 98/19 99/15 132/5 137/3 143/6 I hadn't [2] 7/12 133/2 I hate [1] 129/7 I have [63] 1/7 2/7 2/10 7/8 18/4 19/9 22/17 24/20 26/24 31/22 31/25 32/1 32/5 33/1 33/8 34/23 50/7 55/18 55/21 58/14 60/1 63/8 63/24 65/9 65/19 76/5 82/11 82/19 86/9 86/11 87/2 88/5 90/21 93/10 96/17 100/20 101/25 105/8 110/17 110/25 131/9 131/11 132/11 132/21 134/13 141/24 | I return [1] 84/25 141/24 141/25 142/11 I right [1] 16/21 149/11 149/25 150/7 151/15 151/21 153/19 120/6 157/21 159/6 159/14 160/1 160/6 160/11 160/25 161/1 I haven't [2] 33/8

I hold [1] 27/13 92/24 I interrupt [1] 58/14 I interrupted [1] 132/5 l just [9] 57/13 57/14 58/2 74/11 93/8 118/4 I started [2] 9/7 132/1 150/7 160/23 113/17 114/13 114/20 | **I kept [2]** 94/10 102/6 | **I still [1]** 47/3 118/14 148/19 149/6 24/18 33/1 38/2 46/6 63/5 65/9 66/17 82/15 115/9 116/9 86/6 92/1 135/25 136/4 I look [1] 55/24 I making [1] 30/12 I may [4] 2/9 57/25 106/10 123/21 I mean [1] 15/24 I might [5] 23/17 46/24 57/23 89/6 91/15 I move [1] 122/3 I mustn't [1] 124/10 I never [2] 113/18 149/7 I note [1] 159/7 I observe [1] 142/1 I oversaw [1] 95/22 I propose [3] 36/20 58/8 61/21 I quite [1] 15/9 I ran [1] 94/13 I react [1] 155/20 I really [1] 110/21 I recall [1] 107/14 I recognise [4] 34/18 34/23 55/20 158/18 I refer [1] 2/9 I referred [1] 44/6 I refuse [1] 71/12 I regarded [1] 114/22 | I thought [2] 91/11 I remember [14] 17/6 92/2 18/11 24/6 30/7 31/25 I told [1] 128/1 33/2 35/17 36/8 46/25|I took [2] 92/24 98/8 80/14 110/24 114/10 118/19 140/15 I said [3] 40/9 55/21 I saw [5] 7/23 41/17 141/25 147/13 147/24 I say [6] 29/15 88/10 112/24 147/20 149/1 I scanned [1] 55/5

I see [2] 45/14 88/19 I use [1] 113/23 I seem [2] 113/22 114/2 I seen [1] 56/2 I shall [1] 2/24 I share [2] 85/25 91/21 I should [5] 55/1 99/2 146/25 122/7 125/22 126/23 81/13 **I stop [1]** 1/5 I suppose [3] 112/21 138/19 146/11 I then [4] 94/21 97/25 I think [98] 4/10 5/22 8/15 8/17 13/23 16/5 18/4 21/3 22/2 24/22 27/12 27/16 28/9 28/12 29/12 30/2 34/21 35/21 36/12 39/13 40/12 41/17 43/22 44/3 44/17 46/2 132/2 49/24 51/8 59/7 60/19 I went [2] 5/24 10/8 61/4 61/18 63/16 64/7 | I were [1] 1/8 72/1 73/18 74/14 82/12 85/2 85/18 86/15 86/21 89/10 90/10 92/10 94/23 95/10 96/4 96/7 98/8 98/18 99/18 100/2 100/8 100/24 102/9 102/10 102/12 102/18 I worked [2] 140/15 104/22 108/24 113/7 120/24 121/16 125/24 I would [85] 3/1 8/9 126/16 131/9 131/22 132/10 133/4 134/25 138/2 141/18 142/19 142/20 142/21 143/14 143/19 145/1 145/11 145/19 145/22 146/12 147/16 148/24 149/5 150/1 150/24 150/25 151/2 151/5 152/22 156/24 157/18 159/12 160/8 160/12 160/15 I trusted [2] 81/22 102/8 I turn [3] 110/10 129/24 131/22 I understand [17] 4/5 9/16 11/4 14/9 19/3 19/13 27/7 31/11 42/13 48/5 53/25 65/25 66/24 68/16 88/22 125/19 160/8 I understood [2] 19/2 87/13

I very [1] 149/16 I want [8] 93/20 98/22 99/10 106/10 116/9 133/11 143/25 151/21 I wanted [2] 115/4 I was [43] 4/13 5/16 6/1 8/3 9/23 11/24 17/6 17/11 19/18 31/14 31/24 34/14 41/14 41/17 41/24 54/23 63/7 65/11 65/13 66/5 71/12 83/23 89/4 94/8 94/10 94/22 95/2 95/15 95/19 95/21 95/21 97/19 97/24 98/14 115/9 118/6 126/17 134/9 134/21 135/14 146/9 148/11 150/1 I wasn't [6] 9/6 17/10 75/17 112/23 126/18 I will [12] 27/25 49/11 58/15 58/16 59/7 77/24 88/12 98/22 125/13 130/1 150/3 160/14 I wonder [3] 1/15 10/10 21/19 156/8 17/23 19/11 20/15 25/16 26/19 31/7 33/4 38/4 38/11 45/12 45/18 45/20 45/22 46/1 49/17 49/24 50/7 50/13 55/25 57/2 57/21 58/10 59/19 60/22 62/19 63/25 65/4 65/8 65/14 65/16 66/4 66/13 66/20 67/3 75/1 78/24 87/14 88/12 88/15 88/23 88/25 97/1 97/1 97/8 100/18 101/9 105/19 109/23 109/24 110/9 111/3 113/8 124/21 137/2 137/4 139/2 139/7 139/19 139/22 140/2 140/3 140/8 140/10 140/15 145/12 146/21 147/12 147/24 149/11 149/18 150/15 151/12 151/16 152/7 154/16 155/19 155/21 156/3 156/6 158/8 159/8 160/3 160/4 I wouldn't [3] 36/16 (53) I believe... - I wouldn't

121/24 121/24 125/12 37/11 61/18 63/11 if [176] interested [4] 9/23 iii [1] 156/11 128/5 133/6 133/7 77/1 78/20 82/3 83/12 98/14 150/9 151/25 I wouldn't... [2] 49/18 ill [1] 26/6 144/19 145/22 83/13 90/17 94/16 interests [1] 82/9 63/15 **illustrated** [1] 69/17 improving [1] 120/1 95/14 100/16 103/13 **interface [2]** 81/3 **I'm [63]** 11/15 19/25 illustrations [1] **Inability [1]** 6/13 108/8 108/9 108/11 155/3 23/17 24/14 25/9 25/9 108/12 108/18 108/19 interfaced [1] 100/6 26/13 inadequate [1] 19/8 26/18 30/9 39/9 41/13 inches [1] 160/25 108/22 109/2 109/19 imagine [2] 135/19 **interfaces** [1] 59/22 46/24 47/4 49/6 49/17 109/21 120/25 123/2 152/7 incident [24] 35/1 interfere [1] 114/10 49/18 50/5 50/11 51/6 35/2 35/3 35/10 39/25 immediately [2] 123/8 140/7 internal [8] 6/7 11/6 54/11 55/1 55/22 40/5 40/22 42/18 17/19 20/5 49/21 28/21 65/14 informed [11] 8/11 58/16 59/7 60/9 64/20 9/15 62/17 75/8 87/8 immersed [1] 154/7 48/17 48/19 48/22 64/14 66/25 154/6 65/18 66/6 68/10 49/3 49/13 72/6 73/1 103/9 105/15 111/21 impact [17] 12/25 International [1] 3/5 69/11 71/4 71/10 102/21 102/21 102/23 122/22 138/17 156/25 interpret [2] 113/11 13/21 26/7 31/22 72/22 75/5 75/17 76/7 37/15 39/2 40/18 103/9 141/4 141/8 125/6 Infrastructure [2] 79/4 81/23 87/5 88/11 40/21 41/2 63/4 79/11 141/12 151/23 153/13 51/8 51/12 interrupt [4] 58/14 91/13 91/24 92/11 79/12 103/23 104/6 Incident 376 [1] initial [5] 17/8 21/11 58/14 82/17 131/19 102/4 105/12 124/16 135/13 137/7 137/23 25/13 67/21 98/20 151/23 interrupted [1] 132/5 125/2 125/7 125/13 impacted [2] 28/19 incidents [17] 34/10 **initially [6]** 6/19 interrupting [1] 126/3 131/18 131/25 34/13 35/5 36/22 17/24 18/12 75/17 89/14 40/25 132/3 134/8 134/22 38/18 48/14 50/17 impacts [2] 40/4 94/8 97/22 interviewed [1] 8/1 138/8 151/4 151/6 144/17 144/22 145/6 138/11 initials [5] 67/24 interviewing [1] 99/8 151/20 151/24 156/5 impaired [1] 85/21 150/22 152/2 152/3 70/14 70/17 71/20 into [32] 14/13 15/9 156/6 157/19 159/7 **imperative [2]** 38/16 155/2 155/6 156/16 75/21 15/21 21/22 23/25 I've [3] 37/4 63/13 38/21 156/20 **Inland [1]** 4/11 32/17 36/4 36/11 78/23 input [5] 102/2 102/8 39/15 41/25 52/11 **implement** [1] 5/14 include [1] 63/18 lan [3] 123/25 124/13 119/10 120/4 120/17 66/19 78/14 90/8 implementation [6] included [3] 14/6 125/1 5/4 60/8 85/12 95/23 94/25 97/4 108/20 inquiries [2] 39/17 66/16 91/1 ICL [48] 3/20 5/23 6/6 96/7 146/17 includes [2] 73/25 76/20 109/23 110/1 111/13 6/7 6/8 8/14 8/19 8/25 implementations [1] 118/12 inquiry [11] 2/24 15/9 116/1 119/10 122/1 9/10 9/18 12/9 12/18 including [5] 18/22 146/18 15/12 33/6 37/22 125/8 129/9 135/5 12/23 12/24 17/19 implemented [2] 33/21 76/16 104/9 48/21 92/12 93/20 135/13 138/18 139/5 23/13 34/4 35/3 37/3 84/18 153/11 130/5 159/22 161/2 161/9 139/5 143/17 151/5 37/7 38/17 39/17 insert [1] 150/11 introduce [2] 78/10 implementers [1] incorporated [1] 44/21 44/24 46/9 129/8 52/11 inserted [1] 147/20 81/2 50/15 56/11 60/3 implementing [2] increase [3] 6/21 inside [1] 3/22 **introduced** [1] 86/17 64/14 66/25 91/6 4/20 143/3 6/21 29/1 introducing [1] 95/15 insignificant [1] 98/20 103/20 113/9 Implication [1] increased [1] 85/19 38/14 introduction [1] 113/18 114/12 115/2 install [1] 133/23 78/13 136/12 incredible [1] 117/7 115/25 124/3 130/24 implications [1] 87/6 **incredibly [3]** 113/15 installation [1] 120/2 investigate [1] 149/3 132/9 137/9 143/19 **implied [2]** 13/15 133/9 133/17 installed [1] 107/7 investigated [1] 144/13 152/18 154/3 89/7 indeed [3] 10/10 70/2 instances [2] 53/12 107/6 155/1 156/19 imply [1] 89/10 82/6 148/14 investigation [2] ICL Pathway [5] 8/25 importance [3] 97/14 independence [1] instigated [1] 73/5 135/12 148/17 9/10 38/17 46/9 132/9 97/16 106/18 102/8 instigation [1] 6/12 investigations [1] ICL's [3] 5/24 16/23 **important [8]** 111/3 insufficient [1] 37/13 indicate [2] 15/12 | 149/22 38/8 127/14 128/22 129/11 54/14 **Insurance [1]** 10/24 **investment** [1] 38/19 idea [6] 63/24 90/6 132/17 132/25 138/15 indicated [2] 107/3 integration [2] 6/19 invited [5] 6/5 57/23 90/16 90/17 110/18 153/15 143/15 8/20 95/5 97/24 138/10 110/25 indication [1] 45/23 impossible [1] integrity [11] 48/16 invoicing [1] 95/16 identification [1] 127/21 individual [9] 34/18 101/22 102/23 102/24 involved [23] 5/16 45/19 impractical [3] 61/16 68/16 70/13 103/24 105/14 155/2 6/2 9/13 9/21 10/23 identified [15] 4/19 130/14 133/16 133/17 124/14 125/7 142/9 155/8 155/11 158/7 17/11 17/24 25/15 4/22 31/9 35/17 40/4 154/8 154/17 158/9 33/18 34/14 66/5 improve [7] 89/25 53/12 68/8 68/15 119/15 120/17 128/23 individuals [1] 26/11 111/23 112/2 113/20 intended [2] 28/22 69/16 70/13 72/7 73/2 132/25 143/18 153/16 Industry [1] 124/1 63/21 115/20 119/25 131/4 80/9 132/24 139/4 improved [2] 120/18 | infer [4] 22/15 38/15 136/24 149/7 154/11 **intending [2]** 5/14 identifies [2] 40/21 57/3 80/18 154/14 154/16 154/19 154/2 90/12 inference [7] 14/1 intense [1] 116/24 involvement [4] 2/25 improvement [10] identify [6] 53/6 54/1 110/2 110/7 115/3 14/3 14/15 14/16 intensive [2] 43/11 4/2 32/20 64/8 112/12 117/11 132/12 115/6 115/7 120/6 45/10 57/2 77/23 44/1 involving [1] 116/16 135/12 132/15 133/8 150/20 inferences [1] 14/10 intention [2] 66/11 **IR [1]** 53/4 ie [2] 6/19 66/18 156/2 inferred [1] 56/25 IR-CSR [1] 53/4 124/3 ie not [1] 66/18 interest [4] 30/1 61/2 improvements [11] inform [1] 15/15 Ireland [2] 5/8 5/10 ie taking [1] 6/19 42/25 89/7 102/14 information [27] 121/19 158/23 ironed [1] 130/6

is [486] isn't [9] 23/2 47/8 60/16 65/23 73/17 107/12 135/21 153/2 158/8 isolated [2] 66/18 148/14 issue [35] 15/6 23/21 24/4 29/7 29/13 38/10 39/12 39/25 40/9 40/11 44/2 44/5 44/5 44/11 48/8 50/1 50/1 57/9 63/17 65/2 68/18 **jobs [1]** 99/16 84/10 86/12 104/12 127/17 135/20 135/21 142/25 142/25 145/15 152/23 153/5 153/18 155/11 158/7 issues [49] 7/12 7/17 11/13 14/11 18/14 18/17 24/1 24/20 27/11 27/16 29/14 36/11 41/6 41/12 43/6 43/8 43/19 45/6 46/11 62/18 62/21 65/22 65/25 81/3 86/11 101/22 105/13 112/19 128/15 128/18 128/23 **joint [1]** 155/1 130/4 130/13 131/1 133/15 133/22 136/1 136/7 138/16 140/1 142/15 142/17 143/15 145/3 145/17 145/21 157/6 158/4 159/3 issuing [1] 104/10 it [619] it's [5] 26/19 44/13 61/18 125/2 141/24 italics [1] 55/7 items [2] 134/19 134/21 its [23] 15/25 16/6 16/16 16/18 25/15 28/17 39/24 41/3 46/13 60/8 63/21 64/17 68/2 82/23 86/23 97/16 107/4 108/14 109/11 114/14 136/5 136/14 136/23 itself [9] 24/15 45/16 60/13 60/23 81/10 115/22 118/5 145/18 148/5

J Holmes [1] 25/1 jacket [1] 92/25 Jan [1] 25/2 January [1] 130/3 January 2000 [1] 130/3 Jeff [2] 101/14 148/8

Jenkins [7] 91/2 91/4 K 91/14 91/16 91/18 91/23 92/1 jeopardy [1] 38/9 Jeram [8] 75/25 76/24 77/12 79/19 80/23 82/3 82/14 89/8 Jeram's [2] 77/6 77/21 Jerry [1] 99/5 **JH [1]** 74/22 **JHB [1]** 70/14 job [1] 97/5 jog [1] 111/7 John [32] 1/21 6/5 17/15 34/5 39/16 39/23 46/3 63/23 70/15 70/16 79/5 79/6 79/10 93/6 96/13 96/15 97/4 97/21 105/6 105/17 106/19 118/18 128/12 135/23 136/9 138/21 144/11 145/19 153/23 157/6 157/9 158/3 joined [3] 3/5 93/25 118/11 **Jolly [1]** 1/6 judgement [4] 160/9

150/12 157/17 160/7 judgment [2] 104/21 104/22 July [11] 116/5 123/10 136/15 140/19 144/4 144/9 144/24 145/6 146/4 150/14 156/13 jump [2] 98/22 106/3 June [8] 32/11 32/14 116/9 116/12 118/9 125/20 127/5 128/18 June 1999 [4] 32/11 32/14 116/9 125/20 just [54] 11/15 19/11 19/25 22/7 23/1 24/10 27/6 30/8 37/7 40/16 43/23 44/13 46/1 47/21 50/18 57/13 57/14 58/2 59/8 59/23 60/13 64/9 71/12 72/8 74/11 75/4 82/1 91/17 91/18 91/20 93/8 95/11 98/22 105/16 114/16 118/2 118/4 125/8 125/17 125/21 128/16 131/11 132/1 144/8 145/20 145/24 148/21 149/8 150/7 155/22 156/6 156/7 160/20 160/23 justify [1] 73/6

keep [7] 65/17 98/10 98/17 119/20 127/1 129/24 160/15 keeping [2] 5/1 69/11 Keith [3] 6/6 33/22 153/22 Kelsey [2] 110/14 110/24 kept [4] 94/10 102/6 105/15 156/24 key [12] 7/12 25/6 43/5 63/17 68/5 68/6 68/10 68/11 76/16 83/10 137/15 153/22 knew [9] 46/17 110/23 115/5 117/1 118/14 120/21 121/1 148/19 149/6 know [75] 5/17 10/8 19/2 19/2 20/13 24/18 26/22 29/16 29/17 37/13 37/15 37/22 38/2 38/12 39/14 42/17 46/6 48/13 57/13 57/14 60/10 65/9 66/14 66/17 86/19 87/13 91/4

30/9 33/1 35/7 36/16 49/23 50/4 55/22 56/5 56/15 56/21 57/3 57/8 63/5 63/15 64/25 65/3 leave [3] 32/9 61/4 66/17 71/16 79/9 80/1 80/2 82/15 83/8 86/6 91/25 92/1 92/3 107/14 109/25 110/21 111/16 113/17 120/15 120/24 121/15 124/15 125/22 129/22 135/25 136/4 137/22 138/15 151/25 157/13 160/20 left-hand [3] 34/25 145/19 146/21 149/21 **knowing [2]** 30/10 132/24

knowledge [12] 2/21 5/15 18/18 31/22 62/25 63/16 63/17 90/19 93/17 144/22 146/10 150/1 known [11] 4/6 4/13 16/15 19/23 20/17

55/12 61/17 63/12 69/22 82/7 116/2 knows [1] 125/3 **KPRs** [1] 63/2

laborious [1] 95/12 lack [4] 29/2 107/4 107/10 115/13 landed [2] 124/25 125/2

language [2] 120/15

141/18 lap [1] 125/2 large [5] 6/1 37/10 81/1 94/13 109/4 largely [1] 153/10 last [13] 2/17 10/15 39/7 47/5 47/21 84/6 90/25 91/23 111/19 123/3 126/15 150/3 156/13

late [2] 33/9 56/22 later [3] 73/18 77/17 154/23

latest [1] 23/14 **latterly** [1] 7/7 lawyer [3] 101/15 147/25 148/4 lawyers [8] 110/21

147/15 147/16 147/22 17/13 19/7 19/11 148/7 149/17 150/10 150/11 lead [4] 78/22 78/23

82/22 97/5 **Leader [1]** 53/15 leading [1] 118/24 leads [2] 78/24 112/3

learned [3] 32/13 129/9 143/6 learnt [1] 134/13 least [5] 42/15 48/6 66/5 77/22 101/3

84/25 leaving [1] 118/2 led [3] 8/24 59/16 99/5

ledger [1] 95/19 left [10] 34/25 40/17 54/3 58/15 68/12 74/7 109/8 112/2 129/23 144/9

54/3 68/12

legal [3] 148/14 151/17 161/3

legislation [1] 148/25 less [3] 12/17 133/23 160/3

let's [4] 79/1 115/15 136/11 151/1 lets [1] 126/6 letter [20] 39/23 40/12 40/12 40/13 40/15 44/25 46/4 101/9 101/16 101/24 102/15 103/23 105/6 107/18 107/20 109/22 109/23 110/12 152/13

155/15 **letters [3]** 49/8 91/19 94/12

level [22] 18/21 19/12 27/6 38/13 41/13 45/21 63/19

65/1 70/24 78/24 107/5 134/24 139/20 139/25 140/7 144/17 145/6 145/17 146/7 147/10 154/16 156/6 levels [3] 38/24 139/24 160/10 **LFS [2]** 86/18 86/19 liable [2] 81/10 82/22 liberty [1] 92/24 **library [3]** 61/10 61/11 64/22 lies [1] 86/4 life [2] 18/13 55/23 light [5] 54/21 55/14 62/23 69/23 135/1 lighter [1] 32/10 like [27] 3/1 8/9 20/15 25/16 31/7 44/5 49/24 50/7 50/13 58/10 62/19 71/15 79/19 83/12 88/6 101/9 102/15 107/25 116/20 121/22 129/9 132/1 136/19 160/4

likely [3] 31/21 89/18 110/19 Limited [10] 3/5 4/7 41/1 51/11 58/25 59/5 59/13 60/6 86/18

Limited's [2] 41/3 64/8

90/12

limits [2] 36/7 42/24 line [4] 99/18 99/20 100/11 130/25 linen [1] 157/19 lines [1] 118/16 link [2] 63/10 73/16 linked [1] 18/9 links [1] 70/24 list [18] 21/4 22/6 22/12 23/6 25/5 34/21 43/8 54/24 60/12 61/5 61/18 64/11 67/16 71/18 91/22 118/10 118/12 159/11

listed [2] 34/4 35/5 listen [2] 96/16 100/19

listening [1] 126/17 little [9] 1/15 24/25 28/19 53/17 67/15 75/4 79/1 85/5 149/14 live [14] 32/18 32/22 34/11 42/25 43/4 48/6 48/15 52/9 74/22 76/25 77/20 78/14 101/23 129/9 local [1] 137/17 lock [1] 152/20

lock-ups [1] 152/20

locked [1] 37/14

(55) is - locked

may [44] 2/9 5/20 133/18 low [6] 36/24 36/25 136/10 38/2 38/3 39/2 141/3 managed [5] 33/8 20/16 20/23 23/8 meant [3] 97/8 lockup [3] 35/16 **LT1 [1]** 43/5 96/9 140/12 145/4 25/12 29/23 29/24 109/16 121/21 36/15 36/19 **LT2 [1]** 43/3 145/12 30/11 30/12 30/14 measure [1] 42/11 lockup/freezes [1] lunch [3] 90/9 98/5 management [41] 32/5 46/23 50/8 57/25 measured [1] 134/5 35/16 98/6 3/11 3/19 5/22 6/8 59/14 65/12 73/20 measures [2] 42/22 lockups [5] 49/14 8/13 16/24 17/3 18/17 73/24 77/8 77/9 77/18 133/12 Lywood [1] 85/11 49/25 72/6 73/2 34/1 34/9 49/23 68/20 78/1 79/4 80/20 83/22 medical [1] 32/9 156/17 М 69/6 70/12 74/24 75/2 84/4 84/7 85/24 87/21 medium [3] 141/3 logged [1] 61/17 M Bennett [1] 21/6 78/7 79/2 79/8 79/16 90/22 94/3 97/19 141/5 153/14 logical [2] 113/14 made [43] 1/7 7/4 79/17 80/4 80/20 81/3 102/1 106/10 106/10 meet [4] 6/13 37/25 119/8 18/10 24/3 24/18 81/4 82/3 82/8 82/14 111/6 115/24 116/5 100/25 112/11 logistics [1] 86/21 28/12 29/4 38/20 94/18 97/10 98/13 123/10 123/21 125/14 meeting [42] 10/3 long [7] 11/16 23/22 44/15 51/1 51/22 99/18 110/3 116/4 136/13 147/18 10/6 10/12 11/17 26/8 32/3 57/9 83/2 53/15 55/10 56/3 56/8 125/4 132/23 136/24 May 1996 [1] 5/20 33/12 34/1 34/9 39/14 89/3 57/17 58/23 59/2 139/15 139/25 139/25 **May 1998 [1]** 106/10 49/24 84/24 106/4 longer [2] 42/16 65/20 65/22 66/2 106/12 116/10 118/5 152/5 **May 1999 [1]** 80/20 160/13 69/20 72/4 76/20 manager [4] 81/19 May 2000 [2] 73/20 118/9 119/19 122/3 look [23] 6/18 17/9 78/21 79/23 79/24 99/20 99/21 100/15 84/4 122/7 122/21 123/10 23/23 26/20 29/14 81/4 83/16 83/18 123/14 123/17 123/18 managers [13] 23/13 May 2001 [1] 32/5 34/7 40/16 45/12 87/22 89/3 89/23 99/7 123/20 124/9 125/13 40/23 41/9 41/22 McCartney [6] 55/24 59/8 60/13 70/8 99/10 106/1 117/10 47/12 47/23 50/22 123/25 124/5 124/13 127/4 128/8 128/9 84/21 88/12 91/1 119/6 127/20 131/4 90/15 100/11 102/7 125/1 127/17 129/14 128/17 128/18 136/15 106/10 106/24 107/22 133/6 133/7 154/25 124/18 148/13 148/13 McCorkell [3] 4/13 140/17 142/12 142/19 116/9 121/22 130/20 magnified [1] 72/12 110/13 110/23 144/3 144/10 144/24 managing [10] 6/6 137/14 151/21 mail [3] 95/2 116/18 145/2 146/4 147/3 6/7 46/12 94/2 94/7 McDonnell [5] 21/7 looked [9] 26/19 149/4 95/1 96/18 96/24 21/8 25/4 26/1 64/22 156/10 34/16 50/20 57/6 57/6 Mail's [1] 95/3 97/17 98/15 **McKinseys** [1] 117/6 meetings [14] 10/8 64/4 80/23 133/25 **mails [1]** 94/16 Manchester [3] 5/25 McNiven [3] 39/17 12/5 49/8 55/19 73/4 142/11 main [8] 9/25 28/22 152/17 153/23 91/15 92/2 101/4 101/6 101/8 looking [36] 5/25 9/7 29/12 145/2 145/13 many [14] 10/8 12/14 MD [6] 95/5 95/7 105/25 106/21 115/21 12/24 16/14 25/9 146/9 149/17 159/2 27/4 28/6 31/21 53/12 96/11 97/20 106/19 123/9 125/7 142/6 26/18 37/12 38/22 112/12 117/15 117/25 115/4 mainstream [1] meets [1] 16/7 38/25 51/6 55/22 66/19 117/25 120/12 127/15 me [75] 2/10 7/24 member [5] 68/20 64/20 68/10 71/9 maintain [1] 63/11 146/23 153/15 9/15 15/15 17/8 20/14 69/6 70/12 79/19 72/10 74/5 83/10 maintainability [2] MaPEC [1] 106/4 22/6 27/6 29/14 30/24 112/2 89/24 97/18 105/9 52/24 53/10 March [1] 106/13 31/1 33/4 33/9 40/8 members [9] 5/2 109/22 125/6 127/1 maintained [1] 81/25 mark [2] 15/13 16/10 41/15 42/8 43/24 28/1 29/15 79/21 127/4 128/16 134/9 maintenance [7] 46/23 47/4 47/5 48/8 90/18 107/19 128/14 marked [1] 127/6 134/21 138/20 142/10 73/15 78/8 80/5 80/7 marketplace [1] 98/5 48/11 49/10 52/3 52/5 141/11 142/14 157/10 157/11 158/20 80/13 82/11 83/1 marketplaces [1] 55/23 57/9 60/14 62/7 memo [3] 154/22 158/22 158/24 159/3 major [4] 9/10 61/14 117/12 62/9 63/15 63/17 155/20 156/7 159/4 98/10 153/10 64/18 68/11 70/4 marks [1] 78/3 **memories** [1] 7/8 looks [5] 41/18 majority [1] 73/2 **Martin [1]** 26/1 71/15 72/8 72/10 memory [16] 7/9 7/25 107/24 107/25 121/16 make [27] 16/4 24/1 Martyn [5] 17/17 21/6 72/12 78/21 81/7 86/5 27/13 33/1 37/16 160/13 25/19 33/8 38/21 64/21 65/5 79/18 87/18 88/20 89/5 91/6 57/16 83/15 101/7 loop [1] 63/4 44/17 50/3 63/20 massively [1] 98/12 97/23 99/23 105/8 108/15 110/17 111/7 loose [1] 153/15 78/15 80/14 81/1 match [1] 54/6 105/13 114/21 115/1 114/13 124/14 127/4 lose [2] 25/9 98/12 82/25 104/6 117/3 matched [2] 77/4 115/4 115/9 115/13 140/3 157/9 losses [2] 134/18 121/8 124/7 125/2 77/6 126/12 126/19 126/24 memos [1] 49/8 134/19 138/17 139/6 140/12 128/11 131/17 132/23 Mena [1] 127/10 matching [1] 77/21 lost [7] 12/22 72/8 144/12 155/4 157/22 material [12] 130/13 133/1 137/1 137/1 mentioned [4] 46/2 88/5 103/4 103/6 158/3 159/6 160/7 133/15 133/22 133/24 138/21 138/21 139/21 60/25 81/13 82/11 103/11 138/5 160/9 134/8 134/19 135/18 140/2 140/9 144/25 mentioning [1] 23/1 **lot [22]** 9/4 27/1 maker [1] 79/15 135/19 135/21 146/1 149/25 154/19 156/1 **Mentors [3]** 110/15 29/22 34/15 42/1 55/1 makes [3] 25/20 32/7 146/2 158/12 157/10 160/25 110/17 110/25 55/18 57/11 64/25 45/12 materiality [7] 131/3 Meagher [1] 153/23 message [1] 124/9 83/4 83/10 83/11 89/6 making [13] 18/8 133/25 134/4 134/11 mean [13] 6/16 15/24 met [7] 6/23 42/14 95/8 98/12 99/14 30/2 30/12 31/22 134/14 134/24 158/25 27/10 31/11 59/1 60/1 42/15 42/17 105/21 101/6 109/4 114/6 45/24 57/2 81/15 65/25 80/7 82/17 107/4 156/13 matter [5] 60/17 114/10 140/14 146/15 81/23 89/16 129/20 105/11 135/22 149/21 97/23 125/24 133/22 methodology [1] lots [7] 44/9 44/9 129/21 134/15 155/25 160/1 155/23 111/25 44/11 44/11 55/18 man [2] 91/2 136/18 matters [3] 101/1 means [5] 59/17 methods [1] 112/4 105/24 147/20 manage [2] 7/16 104/1 105/22 63/14 74/12 77/11 MICHAEL [3] 1/12

(56) lockup - MICHAEL

М MICHAEL... [2] 1/21 161/11 mid [5] 17/13 18/2 18/13 18/13 18/13 mid-development [1] 18/13 mid-life [1] 18/13 mid-stage [2] 17/13 18/2 **mid-time** [1] 18/13 midday [1] 62/1 middle [3] 32/6 42/10 123/22 midway [1] 123/22 might [31] 1/15 10/9 14/3 15/10 15/19 16/5 23/17 24/22 33/11 45/15 46/21 46/24 47/18 47/25 56/1 57/21 57/23 57/23 60/14 61/9 73/18 79/7 82/5 82/6 84/3 86/21 89/6 89/12 91/15 125/24 134/6 migration [1] 84/24 Mike [5] 79/7 79/9 85/1 85/10 86/12 Mike/Terry [1] 85/10 mildly [1] 34/15 Miller [36] 98/24 99/11 99/13 99/15 100/13 101/10 101/17 102/1 104/14 106/25 107/18 111/2 112/19 114/22 118/21 118/21 118/23 119/5 119/13 119/22 120/8 120/15 122/13 122/22 124/2 136/4 139/19 139/20 140/16 140/19 141/21 141/23 152/10 154/18 154/22 155/21 Miller's [4] 100/1 100/19 104/11 109/20 million [4] 130/7 130/15 134/5 137/25 millions [1] 130/24 Min [1] 33/22 mind [14] 11/18 29/7 46/17 47/3 68/22 89/16 92/24 109/23 134/17 135/9 145/2 145/9 145/23 146/5 minds [1] 145/25 mine [3] 79/11 95/18 105/18 minimum [1] 87/1 Minister [1] 123/25 ministers [3] 115/21 124/10 124/10 minor [1] 12/25 minute [4] 34/7 56/4 13/22 116/3 141/14

58/16 127/25 minutes [24] 1/9 10/12 30/16 30/18 33/11 33/25 34/2 34/8 motivated [1] 114/23 34/18 61/22 118/8 126/6 128/10 133/13 140/18 142/4 142/11 144/2 145/11 151/15 159/25 160/3 160/5 160/14 mirror [1] 27/16 **misjudge** [1] 8/25 missing [2] 75/5 78/20 misstated [1] 134/3 mitigate [1] 87/5 mixture [1] 141/14 MJBC [7] 67/22 70/17 71/20 75/9 75/22 76/24 78/2 Model [6] 12/4 12/5 13/4 13/5 15/21 108/5 modeling [1] 98/9 modern [2] 95/11 98/3 modified [1] 78/14 module [2] 41/21 41/22 Moloney [2] 159/11 159/18 moment [7] 42/6 43/24 88/11 98/22 118/3 144/7 151/18 money [6] 24/3 24/3 121/8 121/10 148/16 148/18 monitor [2] 78/11 136/10 monitored [1] 104/24 monitoring [1] 106/22 month [3] 77/17 101/6 110/10 monthly [2] 94/17 101/3 months [2] 54/2 112/2 more [34] 2/25 9/23 11/9 17/12 18/14 19/18 26/19 27/15 28/15 28/20 33/5 37/23 44/3 44/20 62/24 64/25 73/12 73/13 84/6 89/6 89/9 112/4 117/24 119/8 119/8 119/10 133/5 139/23 141/4 142/24 145/15 145/16 146/24 Mr Butlin [2] 118/23 151/24 morning [6] 1/3 1/14 8/21 50/21 160/14 160/18 most [5] 13/18 13/20

30/24 36/21 39/10 mostly [1] 8/20 motherhood [1] 112/24 mouth [1] 134/23 move [11] 13/2 13/16 31/6 44/24 49/12 115/15 121/19 122/3 151/2 151/4 152/15 moved [2] 79/7 94/21 movement [1] 66/10 movements [1] 20/2 moving [4] 13/1 16/14 131/23 141/20 Mr [119] 1/4 1/7 1/14 3/3 10/20 10/21 11/6 11/7 11/9 12/3 21/14 30/13 30/24 36/21 39/10 46/8 49/12 50/7 58/21 60/3 60/16 61/20 62/9 62/11 64/7 64/23 65/7 65/10 65/18 66/23 67/8 69/11 71/17 71/23 73/18 74/3 75/19 77/25 79/1 79/13 80/18 82/17 84/5 86/5 159/11 159/18 86/19 87/20 89/13 91/25 92/7 92/11 92/21 92/23 92/25 93/4 93/7 93/19 99/13 Mr Roberts [1] 100/1 100/13 100/19 101/10 104/11 104/14 Mr Roberts' [1] 109/20 118/2 118/12 118/23 119/3 119/5 119/13 119/22 120/8 120/15 121/11 122/22 92/21 92/23 92/25 122/25 123/1 123/6 123/15 124/5 126/6 126/13 126/23 127/14 127/17 128/7 128/7 129/14 131/11 131/15 **MS [6]** 1/13 91/1 131/17 131/22 132/5 140/19 142/23 145/14 161/12 151/6 151/11 151/14 159/11 159/11 159/18 91/1 161/12 160/4 160/20 161/15 Mr Austin [2] 64/23 71/23 Mr Baker [3] 118/12 127/14 128/7 Mr Bennett [2] 71/17 79/13 119/3 Mr Chairman [1] 160/4 Mr Coombs [47] 1/7

11/9 21/14 30/13

60/16 61/20 62/9 62/11 64/7 65/7 65/10 **mustn't [1]** 124/10 65/18 66/23 67/8 69/11 73/18 74/3 75/19 77/25 79/1 80/18 82/17 84/5 86/5 87/20 89/13 90/9 90/21 90/25 91/25 92/7 92/11 Mr Crahan [3] 10/21 11/6 12/3 Mr David [1] 122/22 Mr Dicks [1] 46/8 Mr Jenkins [1] 91/4 Mr McCartney [3] 124/5 127/17 129/14 51/10 56/4 57/15 58/7 Mr Miller [12] 99/13 100/13 101/10 104/14 118/21 118/23 119/5 119/13 119/22 120/8 120/15 140/19 Mr Miller's [4] 100/1 100/19 104/11 109/20 Mr Moloney [2] Mr Peberdy [8] 90/9 90/21 90/25 91/4 118/13 118/14 118/17 122/25 123/1 123/6 123/15 128/7 142/23 145/14 118/13 118/14 118/17 Mr Stevens [5] 126/6 118/21 118/22 118/23 126/13 131/17 151/14 named [7] 8/4 10/15 159/11 Mr Sweetman [15] 93/7 93/19 118/2 131/15 131/22 132/5 151/6 151/11 160/20 159/12 159/18 159/25 **MS HODGE [3]** 1/13 Ms Patrick [3] 159/12 159/18 159/25 **MTM [2]** 68/9 68/19 much [21] 1/20 7/11 26/19 30/7 30/20 35/22 41/7 44/15 48/18 49/10 65/2 71/15 73/12 73/13 92/6 92/13 126/5 149/16 Muchow [3] 84/8 1/14 3/3 10/20 11/7 85/4 85/8 must [12] 31/16

31/20 51/5 51/8 53/11 49/12 50/7 51/10 56/4 65/15 65/16 80/25 57/15 58/7 58/21 60/3 85/19 113/9 127/23 130/5 my [71] 1/21 2/7 2/8 2/10 7/25 9/25 11/16 11/18 23/6 26/23 37/21 38/2 41/19 46/16 47/3 47/17 51/5 58/21 60/3 60/16 63/6 71/14 73/12 76/6 78/21 83/15 86/16 94/17 94/22 95/8 97/5 97/5 98/19 99/16 101/3 102/5 105/22 105/25 107/23 107/24 108/7 109/23 111/4 113/2 116/3 116/3 125/2 125/18 131/12 131/22 132/17 134/17 134/25 135/9 138/24 143/2 144/6 144/25 144/25 145/2 145/9 145/10 145/23 146/5 146/10 146/15 148/9 149/15 159/11 160/10 160/14 myself [2] 30/12 79/18 Ν

name [13] 1/20 1/21 10/25 11/25 21/25 33/22 71/17 79/10 93/5 110/24 116/12 118/15 136/21 21/4 22/12 50/21 54/24 67/16 namely [2] 76/20 80/19 121/11 126/23 131/11 names [2] 21/5 64/21 national [4] 10/24 133/7 135/7 135/18 nature [13] 9/5 15/8 24/12 24/15 26/9 26/13 36/1 36/11 86/24 88/14 105/22 132/10 142/24 nature/size [1] 26/9 nay [1] 106/2 near [3] 90/5 114/4 114/5 nebulous [1] 114/12 necessarily [9] 45/5 45/25 49/19 58/3 59/19 60/23 61/12 63/25 65/8 146/24 146/24 146/25 necessary [1] 155/8 necessitating [1] 112/12 need [23] 15/7 15/10

39/9 43/12 43/14 46/5

Ν need... [17] 63/19 66/9 78/9 80/13 81/14 83/4 84/23 85/3 88/13 104/3 106/5 115/19 118/7 134/2 136/19 143/17 148/11 needed [25] 7/17 9/1 9/25 12/10 13/16 14/17 15/13 26/20 27/12 31/15 45/19 76/6 76/20 79/25 102/13 102/14 129/16 131/1 131/2 135/5 140/25 142/17 145/22 146/24 158/10 needing [1] 152/23 needs [5] 44/14 45/23 112/11 113/6 113/15 negative [1] 26/7 negotiation [1] 56/11 negotiations [2] 50/15 115/17 nervous [1] 143/9 network [9] 78/15 85/18 98/7 98/12 117/8 117/9 127/21 129/4 148/13 never [6] 78/23 78/24 86/24 95/21 113/18 149/7 nevertheless [2] 111/12 156/20 Neville [1] 144/11 new [19] 5/14 24/4 24/19 30/5 30/6 63/6 84/17 89/5 96/2 96/3 98/11 116/16 117/2 135/10 137/7 137/15 143/3 143/9 159/8 next [15] 10/18 35/2 42/8 69/3 70/12 76/23 77/8 122/19 125/9 128/23 130/9 138/1 142/12 144/19 146/19 NFSP [9] 116/10 118/24 122/4 125/11 128/2 128/3 128/6 128/19 142/6 NFSP00000191 [1] 116/11 NFSP00000203 [1] 127/2 NFSP00000471 [3] 122/4 127/1 129/24 NFSP00000539 [1] 118/8 NFSP203 [1] 129/23 **nice [1]** 112/25 **nightmare [1]** 88/19

nine [1] 94/23

no [69] 3/17 9/20

11/15 12/25 17/10 22/17 23/6 24/20 28/10 31/14 31/22 32/5 33/1 37/21 38/2 38/3 39/9 42/3 44/17 46/23 47/1 48/11 49/4 49/18 49/22 53/15 57/18 59/9 59/9 60/1 61/8 61/13 63/24 64/14 73/12 75/20 81/13 82/19 86/20 87/4 89/10 89/15 90/17 90/19 90/21 92/1 92/9 95/10 99/17 105/8 110/17 110/18 110/25 118/7 122/23 123/20 130/6 131/18 141/24 147/8 147/12 149/11 149/25 154/6 154/12 154/19 154/20 157/23 160/13 noise [1] 58/15 non [4] 54/16 106/23 141/15 147/21 non-EPOSS [1] 54/16 non-execs [1] 141/15 non-executives [1] 106/23 non-system [1] 147/21 none [4] 84/20 105/25 107/14 109/8 nonetheless [1] 18/21 nonexecutives [1] 136/8 **nor [1]** 31/24 **normal [2]** 19/6 41/3 normally [3] 99/17 124/17 150/12 **north [1]** 122/13 northeast [1] 119/13 nosed [3] 99/21 102/11 124/13 not [156] 3/14 5/16 5/19 7/15 9/13 9/20 15/4 16/10 17/22 17/23 21/3 23/5 29/24 30/10 30/12 31/24 31/25 34/17 36/3 38/4 38/14 41/7 41/8 41/24 44/17 45/5 47/15 47/18 48/11 48/25 50/5 53/16 54/15 55/1 56/3 57/1 57/13 57/23 57/25 58/3 58/16 58/22 59/9 59/19 59/23 60/23 61/12 62/16 62/17 63/25 64/14 65/8 65/14 65/19 66/5 66/11

66/18 71/11 71/13

71/14 71/16 72/4

72/23 73/6 76/10 76/22 79/4 79/4 79/13 nowhere [1] 56/1 81/19 81/19 82/25 83/19 83/21 84/16 86/10 86/23 86/24 87/5 87/13 88/9 88/19 88/23 89/6 89/9 91/18 98/4 98/6 98/13 102/4 103/3 103/12 103/21 104/17 105/12 105/17 106/18 112/4 112/10 113/18 114/4 117/15 118/10 118/14 119/16 numbers [4] 12/9 121/1 121/7 121/11 121/13 121/18 121/18 121/19 121/21 121/22 122/17 122/18 124/2 124/6 124/16 127/18 128/11 128/12 129/21 objectives [3] 97/4 130/11 134/22 135/15 97/6 101/4 135/18 137/11 138/14 obligation [3] 87/6 138/17 138/22 138/23 140/11 140/13 140/3 141/2 141/6 142/3 142/4 142/5 143/7 143/10 146/17 146/22 148/1 149/18 149/19 153/2 153/6 154/1 154/12 154/13 154/14 154/16 156/19 observe [1] 142/1 157/13 157/22 158/21 observed [3] 8/17 note [4] 25/23 138/10 45/9 48/14 157/20 159/7 **noted [4]** 9/9 43/15 118/11 136/16 **notes [1]** 144/10 nothing [5] 11/17 19/3 91/13 139/15 143/23 Nothing's [1] 101/14 noticed [1] 131/11 November [19] 1/1 12/7 67/13 67/20 67/23 68/3 70/22 71/19 71/24 72/3 72/23 73/25 74/9 74/10 74/14 107/17 107/19 154/2 161/10 November 1998 [1] 107/17 now [49] 1/5 2/23 7/9 12/6 15/7 19/3 22/5 25/9 33/5 35/12 40/7 46/25 49/18 50/8 61/21 61/25 72/22 73/7 76/13 87/14 88/5 92/14 93/19 104/11 104/14 104/21 114/2 114/12 116/1 118/8 123/13 125/6 127/23 129/19 131/23 132/23 134/4 136/15 137/19 142/18 151/4 151/6 151/21 152/14 156/6

27/3 27/8 27/11 33/21 34/25 38/3 48/17 54/5 66/8 70/21 76/14 94/21 96/20 100/5 104/5 109/5 115/16 120/19 142/15 150/21 156/11 69/17 101/7 131/4 0 o'clock [2] 160/18 161/6 **Observation [2]** 68/24 69/13 Observation/Recom mendation [1] 69/13 observations [3] 9/8 26/15 74/6 obtain [1] 38/19 obtained [3] 37/22 48/21 53/23 **obviously [4]** 20/11 79/11 115/16 126/17 occasion [1] 6/5 occasionally [1] 37/10 occur [5] 37/14 66/12 80/15 86/23 156/15 occurred [10] 18/10 46/23 47/17 48/11 65/16 66/17 66/17 76/15 80/2 103/9 occurrence [1] 66/1 occurring [3] 87/1 87/24 144/17 occurs [1] 130/16 **October [18]** 12/6 21/20 22/8 23/14 52/3 52/4 52/6 52/22 53/22 54/3 54/9 54/22 55/2 56/23 67/7 96/15 100/19 153/12 October 1998 [1] 54/3 October 1999 [7] 23/14 52/3 52/22 54/9 54/22 56/23 67/7 odd [1] 83/13 odds [2] 82/5 82/6 off [7] 20/4 58/15 156/23 159/23 160/15 63/21 65/3 92/25

160/22

number [28] 7/17

13/24 14/11 14/19

14/24 15/11 22/20

offer [1] 98/11 offering [1] 71/7 office [109] 4/7 4/17 5/3 5/9 10/4 12/4 12/5 13/4 13/5 15/21 18/9 19/15 19/16 20/7 20/10 20/11 33/15 35/3 35/6 35/14 36/22 37/2 40/15 40/23 41/1 41/2 41/9 41/19 41/22 42/13 44/21 46/10 46/12 47/12 47/23 48/2 48/14 50/16 51/7 51/11 56/10 58/13 58/24 59/5 59/12 59/25 60/5 60/6 62/14 62/17 64/8 65/21 80/17 85/16 85/18 86/14 86/16 86/17 90/12 90/15 93/25 94/2 94/6 94/11 95/6 95/24 96/10 96/11 96/13 96/21 97/15 97/16 99/4 100/3 100/10 100/22 101/18 102/6 104/16 107/19 108/5 108/13 114/18 115/24 116/16 118/18 121/7 121/9 124/7 125/3 128/24 129/10 130/11 134/1 134/3 134/9 136/13 136/14 141/15 147/6 148/1 148/5 148/23 150/4 150/22 155/4 156/10 158/17 158/21 offices [15] 4/23 4/25 5/13 11/3 19/5 43/1 48/7 96/4 99/21 117/9 142/9 144/17 144/23 145/7 146/22 officials [1] 129/22 often [1] 37/14 oh [3] 1/5 12/22 125/1 okay [8] 58/6 58/17 69/12 75/20 125/16 126/8 160/16 160/23 old [4] 63/6 109/13 109/15 135/9 old-fashioned [1] 109/15 olden [1] 108/24 on [272] once [1] 96/23 one [90] 2/7 2/9 4/15 5/7 5/24 6/17 7/11 7/24 8/4 8/5 8/17 10/16 12/9 16/9 17/21 18/12 19/9 20/1 25/6 27/10 30/8 31/7 31/9 31/18 31/19 31/19 32/1 32/4 34/4 34/5

118/6 137/25

18/13 20/4 23/8 23/25 127/16 129/5 0 overseeing [1] 17/6 page 9 [1] 74/3 24/5 26/19 28/11 ought [2] 60/4 60/20 overseen [2] 3/19 pages [7] 2/12 2/17 one... [60] 35/18 29/17 29/19 29/24 our [40] 1/7 36/9 3/21 93/8 139/17 139/17 36/10 37/3 37/5 37/17 29/25 30/11 32/10 78/16 86/25 98/5 98/6 **own [8]** 8/10 20/5 139/17 139/21 37/23 39/3 39/13 33/3 35/23 37/7 37/12 98/10 100/5 101/21 85/24 90/19 100/5 paid [1] 114/5 43/25 44/1 48/13 49/4 paper [8] 108/25 37/23 37/23 38/15 102/15 102/17 104/10 147/15 148/6 154/8 50/7 50/22 52/21 39/5 41/8 42/5 45/5 111/12 111/13 112/9 owner [10] 68/7 68/8 136/21 137/5 137/7 57/22 58/7 61/9 64/11 46/22 47/19 48/3 48/3 114/2 114/10 114/11 68/12 68/15 68/19 137/10 138/14 147/22 65/3 66/8 72/12 72/14 49/18 49/21 50/1 52/4 114/24 117/11 117/13 68/21 69/3 69/7 70/9 160/25 76/14 76/18 77/17 53/4 54/6 55/11 56/5 117/13 120/3 121/25 70/13 papers [2] 105/9 80/10 83/2 83/8 88/23 57/2 57/10 57/23 124/17 126/6 137/25 ownership [1] 99/17 139/21 91/1 91/23 92/2 94/9 58/16 58/21 59/16 145/25 147/15 148/6 paperwork [1] 95/8 96/12 96/20 59/20 61/1 61/1 62/17 148/7 148/16 148/24 109/16 97/13 105/23 108/15 **PA** [7] 7/21 8/12 8/18 62/24 63/11 63/21 153/3 153/4 153/22 para [1] 147/13 109/11 110/8 110/23 8/24 9/9 16/16 33/17 65/14 66/10 66/11 155/10 157/17 157/17 paragraph [32] 10/19 114/2 116/3 129/23 PA Consulting [1] 66/18 66/21 68/24 157/18 11/22 12/8 13/3 14/2 133/11 134/10 141/4 9/9 69/22 71/6 71/24 out [50] 5/15 5/23 14/13 25/21 27/22 141/25 143/21 147/24 6/25 8/11 11/18 12/15 page [69] 2/1 10/18 73/14 76/10 76/21 42/22 51/6 51/7 51/19 148/6 148/11 150/1 10/18 11/19 11/20 78/5 79/6 79/13 80/16 15/18 15/20 16/2 52/7 52/16 64/5 69/14 150/3 158/7 159/14 21/9 22/18 25/5 27/19 86/7 101/20 103/17 81/14 81/25 82/14 16/11 18/7 19/14 21/3 159/14 160/1 34/2 40/1 41/16 42/8 83/16 84/6 87/17 26/6 28/5 29/1 32/5 104/9 106/24 108/4 ones [7] 14/3 55/19 42/10 42/21 51/4 51/5 87/22 88/9 89/9 91/9 34/16 35/5 37/21 40/3 111/7 111/8 111/19 72/20 81/1 139/13 51/9 54/8 60/15 64/6 94/23 95/25 98/11 41/9 44/4 48/6 54/25 122/20 123/3 123/22 139/23 144/9 64/18 67/15 67/18 98/20 99/13 104/10 57/4 57/13 63/15 125/9 129/25 130/9 ongoing [6] 23/23 105/7 105/17 106/1 66/25 67/7 79/22 68/5 68/22 69/10 74/2 144/10 78/7 80/4 80/7 83/2 95/13 99/18 104/25 74/3 74/10 74/19 106/2 109/11 110/15 paragraph 1.2.4 [1] 89/19 93/12 101/11 101/16 111/24 112/19 113/18 108/19 109/5 112/15 10/19 only [17] 19/9 20/1 103/16 103/16 106/12 paragraph 1.3 [1] 115/13 115/25 120/10 113/16 116/15 117/20 57/4 78/9 80/12 83/5 106/24 110/12 111/6 121/12 121/18 121/18 130/1 130/6 130/14 111/7 83/8 83/12 95/10 111/15 111/19 116/15 paragraph 2.1 [1] 125/21 128/7 128/25 145/16 146/19 146/22 111/9 121/12 125/18 118/9 118/20 121/3 129/20 130/7 130/18 149/4 152/18 155/22 11/22 128/9 130/12 133/14 121/4 122/4 122/19 132/6 134/18 135/23 160/1 paragraph 2.1.1 [3] 143/10 153/3 122/24 122/24 123/13 12/8 14/2 14/13 137/11 138/11 138/17 outcome [6] 24/7 onto [3] 27/13 40/16 139/24 141/2 141/4 123/21 125/19 127/3 30/9 30/10 30/14 paragraph 2.5 [1] 105/22 127/8 129/25 136/15 146/6 147/13 148/7 59/20 82/2 144/10 open [4] 79/25 80/13 137/5 137/14 138/9 149/4 151/3 151/7 outcoming [1] 57/25 paragraph 3.1 [1] 90/5 105/20 140/3 140/4 140/5 154/14 154/17 154/17 outlet [3] 103/1 42/22 opening [1] 101/20 140/22 142/12 152/9 155/16 155/16 157/13 103/12 108/10 paragraph 4 [1] openness [1] 11/10 154/22 156/11 159/11 159/14 161/3 outlets [3] 12/14 106/24 operate [1] 143/8 page 10 [2] 74/10 12/16 98/9 order [7] 5/4 38/18 paragraph 4.2.1 [1] **operating [1]** 153/2 118/20 38/18 40/14 76/21 outlines [1] 137/7 51/7 operation [1] 11/10 page 11 [4] 93/12 102/23 137/17 outset [1] 8/19 paragraph 7.1.2 [1] operational [8] 32/18 111/6 121/3 140/22 organisation [5] outstanding [7] 64/5 32/22 34/11 48/6 11/24 16/23 81/15 14/11 43/6 43/20 page 12 [1] 116/15 paragraph 7.3 [1] 48/15 107/8 112/16 page 14 [2] 111/15 90/19 110/1 79/21 115/3 136/2 25/21 150/18 111/19 organisations [2] 136/6 paragraphs [6] 53/19 operations [1] 94/12 page 16 [1] 64/6 over [17] 50/16 56/11 5/25 114/4 115/19 147/14 147/21 opinion [8] 30/3 page 17 [2] 25/5 51/4 original [1] 73/5 59/16 59/20 98/8 147/25 150/11 103/25 104/3 104/7 page 19 [1] 51/9 paragraphs 30 [1] originally [1] 31/5 99/13 103/16 118/2 104/10 104/10 157/22 page 2 [7] 10/18 34/2 other [41] 1/9 5/22 122/19 122/24 123/21 115/19 158/3 42/10 101/11 101/16 6/22 21/21 28/23 34/5 136/6 141/21 144/19 parallel [3] 7/20 opinions [1] 81/20 127/3 137/5 36/1 37/3 37/5 37/18 146/19 147/22 152/9 116/23 117/2 opportunities [1] 39/3 45/18 48/13 54/5 overall [7] 17/3 43/2 page 21 [1] 2/1 parcels [1] 94/12 117/8 page 23 [1] 122/4 56/1 60/10 60/18 63/5 82/8 84/1 132/20 part [23] 11/2 16/9 opportunity [1] page 25 [1] 122/24 71/8 73/17 80/10 81/2 142/10 142/10 16/22 18/6 18/8 28/13 123/11 page 28 [1] 129/25 81/2 83/15 83/17 overcome [12] 24/1 30/6 31/17 55/11 63/3 opt [1] 153/24 page 3 [7] 11/19 68/5 84/14 92/7 95/2 99/12 105/1 119/16 120/4 69/22 79/13 84/18 optimistic [1] 39/2 103/16 106/24 118/9 101/5 107/19 111/11 131/2 132/14 135/4 99/3 109/9 113/16 option [4] 55/24 89/5 127/8 156/11 113/3 130/22 131/15 139/3 139/7 139/10 113/25 124/25 125/24 90/1 130/12 page 4 [1] 68/22 134/14 134/20 139/12 157/25 158/14 143/20 147/9 152/5 options [1] 55/23 page 5 [2] 110/12 140/5 141/16 158/15 overhead [1] 94/24 152/25 or [136] 3/15 5/2 7/9 138/9 others [3] 3/20 3/21 overheads [1] partial [1] 79/8 13/4 13/13 13/14 page 7 [2] 27/19 74/2 13/1 117/21 partially [1] 109/12 13/15 15/2 18/6 18/13 page 8 [1] 69/10 otherwise [3] 58/15 oversaw [1] 95/22 participated [1] 7/20

77/21 82/14 82/15 **PDR [1]** 53/4 **played [2]** 79/13 156/9 **PDR-CSR [1]** 53/4 **PFI [5]** 7/13 7/14 117/12 POL00028310 [1] particular [11] 16/12 **Peberdy [9]** 118/13 35/23 113/7 114/3 players [1] 153/22 10/10 21/25 23/16 32/2 118/14 118/17 122/25 phase [4] 4/21 4/22 playing [2] 130/21 POL00028365 [1] 53/10 70/9 100/6 123/1 123/6 123/15 5/5 5/6 130/22 39/22 105/18 111/20 112/18 128/7 128/12 phrases [1] 112/25 please [73] 1/11 1/20 POL00028462 [1] 121/4 **Peberdy's [1]** 118/18 2/1 2/9 6/15 10/18 physical [1] 128/25 154/21 particularly [3] 41/21 11/19 21/10 21/19 penultimate [1] pick [6] 42/3 42/4 POL00028465 [1] 74/15 85/13 63/15 120/3 135/10 22/18 22/25 24/23 70/20 152/9 parties [5] 6/23 35/22 people [34] 5/7 16/14 25/21 27/18 33/12 143/25 POL00028479 [1] 37/7 116/6 134/16 29/12 29/16 29/17 picked [2] 49/19 34/3 39/22 40/1 42/21 144/2 partly [3] 26/9 26/10 29/25 49/8 59/22 99/13 51/4 51/5 53/17 54/8 POL00028491 [1] 91/9 55/6 58/19 62/20 64/6 136/12 63/13 71/8 79/19 picking [1] 155/24 partners [1] 102/7 81/24 83/10 83/17 64/12 64/19 67/7 picture [5] 134/11 POL00028672 [1] parts [4] 26/4 61/22 84/3 88/3 89/1 91/22 134/17 134/21 158/21 67/18 68/5 68/22 107/17 112/18 155/6 97/12 100/9 109/6 158/24 69/10 70/19 74/2 POL00038829 [1] party [2] 123/4 114/10 114/23 117/7 74/10 74/12 84/4 pie [1] 112/25 110/11 123/19 84/24 85/5 85/11 93/5 POL00043681 [1] 128/21 129/10 132/21 piece [1] 16/8 pass [4] 28/23 108/6 140/5 143/5 143/7 pigs [1] 129/8 101/11 103/16 106/12 33/13 108/22 109/20 143/8 143/20 150/9 piloted [1] 35/20 106/24 110/12 111/15 POL00069096 [1] passed [6] 7/24 111/19 116/15 118/7 154/7 pin [1] 117/25 106/11 59/15 103/13 104/18 per [8] 7/6 20/3 28/20 PinICL [19] 20/18 121/3 122/3 122/5 POL00090839 [1] 122/13 159/23 99/9 127/15 130/3 20/21 22/21 23/1 122/19 123/14 123/21 101/10 passes [2] 78/13 130/7 141/10 23/12 24/24 25/12 127/8 129/25 130/9 police [1] 149/1 108/8 perfect [2] 25/20 26/8 27/2 27/3 28/6 136/11 137/14 140/22 polings [1] 103/1 passing [2] 36/4 71/6 28/11 28/25 31/5 144/7 152/9 152/10 133/23 polling [3] 102/24 past [1] 148/16 31/10 52/25 61/17 152/15 153/20 154/22 103/5 103/7 **perfectly [1]** 14/10 Pat [2] 85/11 110/14 64/3 69/17 156/9 160/21 160/24 **perform [3]** 41/3 **PONU's [1]** 85/17 patch [1] 153/11 42/19 111/10 PinICLs [29] 12/9 Plus [3] 22/2 50/14 poor [5] 26/5 53/12 Pathway [56] 4/20 12/18 13/11 14/20 84/19 55/14 62/23 69/24 performance [8] 5/13 5/19 5/23 6/6 83/21 85/14 85/20 14/24 16/15 27/11 pm [11] 62/4 62/6 **population** [1] 15/21 8/14 8/19 8/25 9/10 86/1 86/3 87/11 87/17 27/12 28/20 29/8 84/7 92/14 92/18 posed [1] 65/19 9/18 12/15 17/19 154/3 31/15 31/21 52/25 92/20 126/9 126/11 position [11] 30/11 23/13 29/10 34/4 35/3 53/2 53/6 53/22 54/1 performed [4] 20/7 151/10 159/8 161/8 37/7 37/7 46/13 46/16 36/8 36/23 37/3 38/17 49/1 101/22 112/7 54/5 54/16 54/21 PO [2] 87/4 87/5 46/25 63/22 76/19 39/1 39/17 40/15 perhaps [3] 22/6 62/25 63/2 69/18 POCL [10] 63/12 80/24 91/6 91/9 42/19 44/22 46/9 76/10 76/21 79/21 40/14 151/9 63/12 66/16 101/23 positions [1] 94/9 50/16 56/11 60/4 period [10] 4/2 9/14 79/21 79/22 83/5 102/25 107/5 111/22 possibility [4] 45/2 64/14 66/25 82/10 32/9 42/18 44/7 54/15 121/6 124/3 130/14 71/6 80/15 87/1 **pitch [1]** 128/13 91/13 98/20 100/7 109/9 116/5 151/3 PJ [3] 75/24 77/4 **POCL's [2]** 63/8 possible [5] 75/4 102/11 102/13 102/18 154/2 78/15 156/13 81/16 87/3 119/9 103/11 103/21 106/8 periods [1] 116/3 place [18] 5/7 11/11 **POCL/ICL [1]** 124/3 126/20 107/2 111/22 112/2 16/24 17/13 18/11 point [41] 8/21 11/5 permitted [1] 159/14 **possibly [2]** 50/2 113/9 113/24 114/17 15/11 19/1 21/13 30/2 51/8 person [5] 17/14 90/13 104/22 115/9 115/25 132/9 133/18 29/23 75/1 91/24 124/5 132/25 133/8 34/18 37/9 37/9 38/24 post [105] 4/7 4/17 144/13 147/5 148/2 4/23 4/25 5/3 5/7 5/9 138/25 139/9 144/20 44/17 44/25 45/11 118/24 152/19 154/3 155/1 47/3 51/14 68/5 81/23 personal [6] 3/15 147/1 152/8 156/3 5/10 5/13 10/3 11/3 Pathway's [7] 4/15 3/17 30/1 97/4 114/17 157/16 101/18 107/10 107/12 19/5 19/15 19/16 20/7 6/8 16/23 20/5 38/8 140/10 placed [1] 38/8 113/12 115/15 120/9 20/10 20/11 33/15 44/24 111/14 120/21 121/20 124/21 35/3 35/6 35/14 36/22 personally [2] 86/9 places [1] 57/22 Patrick [3] 159/12 146/21 plan [11] 68/6 68/6 125/15 129/14 129/15 37/2 40/15 41/1 41/2 159/18 159/25 personnel [1] 99/4 68/10 68/11 68/14 129/20 129/21 131/6 41/19 42/13 44/21 Paul [2] 110/13 111/24 115/3 127/12 132/17 137/16 141/7 46/10 46/12 48/2 persons [2] 8/4 8/5 110/24 132/13 132/14 153/14 145/14 151/10 153/21 48/14 50/16 51/7 perspective [6] pause [3] 58/19 28/16 51/20 134/23 154/23 158/1 159/8 planned [7] 51/22 51/11 56/10 58/13 69/10 125/15 135/22 146/2 146/3 104/23 110/1 127/15 point 1 [1] 154/23 58/24 59/5 59/12 pay [2] 44/4 147/23 130/2 132/19 156/15 59/25 60/5 60/6 62/14 perspectives [1] point 5 [1] 11/5 paying [1] 11/2 159/5 planning [1] 28/18 pointed [2] 12/15 62/17 64/8 65/21 payment [2] 38/8 persuade [1] 140/9 71/14 80/16 85/16 plans [7] 104/21 21/3 111/17 Pete [4] 79/19 80/23 132/24 142/20 155/6 85/18 86/14 86/16 **points [3]** 24/18 payments [3] 19/21 155/17 156/2 157/11 82/3 89/7 123/23 128/1 86/17 90/12 93/25 123/6 137/17 Peter [10] 10/21 platform [2] 116/20 POL00000352 [1] 94/2 94/6 94/11 95/6 payroll [1] 95/17 10/23 33/16 75/25 95/24 96/4 96/10 121/25 140/18 **PDA [1]** 11/22 76/24 77/6 77/12 **play [1]** 18/6 POL00000353 [1] 96/11 96/13 96/21

101/6 111/14 112/23 113/14 28/16 101/20 103/19 118/8 P primarily [1] 158/20 120/2 120/6 120/14 programmes [1] **providing [3]** 76/24 post... [38] 97/14 primary [1] 68/17 132/23 133/8 136/24 99/25 82/24 117/22 97/16 99/4 99/21 prime [1] 123/11 140/6 143/18 148/21 programming [3] proving [2] 37/9 100/3 100/10 100/22 principally [5] 47/19 150/20 152/5 26/2 26/6 53/13 114/24 101/18 102/6 104/15 94/14 111/22 137/23 processed [3] 48/16 progress [9] 13/8 provision [1] 108/10 107/19 108/12 114/18 138/3 53/1 109/2 14/18 18/14 38/12 **proviso [1]** 104/19 115/24 116/16 117/9 78/12 100/16 106/22 print [1] 73/4 processes [8] 61/1 **pull [4]** 10/10 11/18 121/7 121/9 124/6 prior [1] 94/6 86/25 95/4 95/12 152/12 154/25 113/16 130/14 125/3 130/11 134/1 pulled [3] 50/19 91/1 **priority [1]** 156/16 135/8 135/15 139/15 **progressed** [2] 32/17 134/3 134/9 136/13 privy [1] 63/25 143/11 142/17 95/13 136/14 141/15 142/9 processing [6] 19/14 probably [25] 36/2 progressing [2] 12/3 purchasing [2] 19/15 147/6 148/1 148/4 39/1 46/24 49/7 55/25 103/14 108/9 108/11 68/18 95/18 148/22 150/4 150/22 59/7 65/4 65/11 project [37] 3/1 3/10 purpose [20] 12/13 108/12 112/16 155/4 156/10 158/17 102/12 105/13 125/18 procurement [1] 4/3 3/18 4/11 5/19 5/22 14/14 15/14 15/16 158/21 produce [7] 40/24 134/5 139/8 139/20 6/19 7/13 8/13 9/3 9/5 15/18 15/20 15/22 post-programme [1] 139/24 143/2 145/2 41/10 45/4 46/20 11/1 16/18 18/16 95/8 15/24 16/1 16/1 16/9 71/14 18/23 18/25 34/8 145/9 148/9 151/15 94/17 94/19 114/7 95/15 96/1 97/11 postmasters [1] 157/9 157/10 157/13 produced [13] 8/6 110/15 110/17 110/25 59/25 106/16 109/11 146/16 112/3 114/11 115/17 158/8 159/24 21/12 24/24 25/14 136/4 137/5 137/22 postponement [1] 25/25 31/5 52/3 52/19 115/22 117/2 130/10 purposes [1] 109/11 problem [27] 11/15 130/6 13/12 26/24 30/9 47/2 54/10 55/9 73/24 130/13 131/8 132/8 pursued [1] 149/22 posts [1] 94/21 55/21 61/17 80/19 80/23 104/18 132/11 133/15 134/12 put [23] 7/2 15/18 potential [3] 53/11 81/21 82/24 86/4 **producing [5]** 19/23 136/3 138/24 142/24 17/12 24/1 27/15 71/9 147/22 105/3 110/4 119/14 47/13 81/21 134/1 148/9 34/15 60/12 71/15 potentially [2] 112/17 120/10 120/11 132/12 150/8 projects [5] 3/22 91/17 94/24 114/3 133/3 134/6 134/8 135/3 128/13 129/9 130/24 product [35] 24/15 6/20 37/10 95/25 pounds [1] 117/17 135/3 135/16 153/9 133/21 134/22 135/13 25/7 28/3 28/9 28/17 121/21 **pour [1]** 29/3 157/24 157/25 158/16 31/16 45/16 46/22 promised [1] 101/5 142/18 144/1 147/25 powers [1] 148/25 158/16 51/2 51/19 51/21 148/3 150/25 158/9 **prompting [1]** 78/25 practice [2] 66/24 52/12 53/7 54/22 problems [72] 13/23 pronunciation [1] putting [7] 15/20 80/21 15/6 15/17 23/20 55/14 63/21 66/10 84/9 15/21 19/18 35/21 pragmatist [1] 82/16 23/24 24/11 24/13 66/11 69/24 76/18 proper [4] 75/12 96/3 96/5 109/23 **preceding [2]** 13/3 24/16 25/18 26/14 78/9 78/12 79/25 76/22 108/5 112/6 40/4 Q 26/17 27/1 29/10 80/13 80/22 81/4 properly [2] 99/8 **Precisely [3]** 68/19 qualified [5] 3/25 29/21 32/1 43/17 45/1 82/23 83/1 83/3 88/9 113/1 70/8 72/21 93/22 96/3 104/10 45/3 45/13 45/15 88/21 89/5 89/23 90/2 proposal [2] 72/18 predominantly [2] 105/1 46/17 46/19 47/7 49/4 114/8 117/13 3/10 45/6 52/9 54/14 54/17 qualify [2] 157/24 products [3] 19/15 proposals [2] 98/1 prefer [4] 82/13 61/15 61/16 73/3 81/2 158/11 61/1 81/1 106/5 151/7 151/12 160/8 qualitative [2] 42/21 86/9 87/15 90/4 professional [4] 3/2 propose [5] 22/4 preliminary [1] 67/22 43/25 100/23 105/2 105/24 93/21 102/5 146/10 36/20 40/20 58/8 premature [1] 89/10 108/8 110/2 115/5 61/21 quality [27] 14/21 professionalism [3] prepare [1] 41/22 119/3 119/12 119/16 15/1 17/3 17/7 17/10 26/10 113/23 113/24 **proposed [2]** 97/1 prepared [6] 10/1 professionally [1] 17/15 17/25 25/7 120/5 120/22 121/2 159/21 35/20 67/6 127/18 26/10 27/3 28/2 28/6 127/21 129/3 129/12 113/9 proposing [1] 5/9 146/7 147/11 31/12 43/16 45/6 51/2 129/15 129/17 131/6 profit [1] 94/25 prosecuting [1] present [8] 103/1 54/17 55/15 62/23 132/6 132/12 132/16 programme [50] 4/8 90/18 104/4 108/7 109/23 69/24 78/12 80/19 132/18 132/24 137/19 6/2 6/8 7/13 7/18 7/21 prosecution [2] 125/12 127/6 128/5 81/11 108/18 114/11 139/4 139/10 143/4 10/1 10/4 10/22 11/22 148/25 149/1 132/2 114/25 156/18 143/4 143/13 143/21 13/8 13/12 16/18 prosecutions [9] presentation [1] quantified [1] 104/6 148/14 152/6 157/1 16/22 17/2 17/20 18/5 147/7 148/3 148/17 116/12 157/3 157/4 158/2 18/9 18/16 20/25 148/22 149/5 149/9 quantify [2] 107/6 presented [2] 140/18 146/9 158/9 158/14 21/17 22/10 25/15 149/22 149/24 150/5 158/4 question [29] 10/9 **proceed [5]** 7/18 26/23 32/15 36/11 prove [2] 5/17 28/25 preserved [1] 106/1 14/13 15/13 16/10 68/22 130/2 131/24 39/18 44/2 49/9 71/13 proven [1] 89/8 pressure [1] 121/11 22/25 31/7 39/7 39/10 71/14 79/12 81/18 141/2 **provide [6]** 4/5 presumably [3] 41/7 41/19 47/5 47/17 proceeded [1] 34/17 82/9 90/11 98/24 101/21 107/3 117/14 18/21 78/4 105/3 **proceeding [1]** 13/13 47/22 49/10 50/4 99/23 100/15 100/16 147/6 148/3 pretty [2] 99/21 117/9 52/23 58/21 60/3 114/18 124/2 126/4 provided [10] 12/2 proceedings [1] preventing [1] 60/16 65/19 76/13 138/15 138/22 139/14 33/6 41/8 75/24 77/1 90/14 150/22 83/6 83/17 83/24 process [22] 29/3 139/14 151/1 156/14 77/2 77/22 106/25 previous [6] 4/12 111/14 121/15 130/6 63/9 79/6 99/7 109/10 157/15 158/22 118/21 136/14 40/8 82/6 87/16 97/20 159/14 160/23 109/12 110/3 110/6 Programme's [1] provides [4] 70/22

| _ | | | | |
|----------------------------|-----------------------|---------------------------|-----------------------|--------------------------|
| Q | reached [3] 8/12 8/18 | | 20/10 20/12 25/17 | 76/23 86/19 122/12 |
| questioned [7] 1/13 | 46/7 | received [8] 8/5 | 48/23 62/13 64/19 | 123/23 152/16 |
| 90/24 93/4 157/14 | reaching [1] 130/3 | 22/15 78/2 100/15 | 68/23 70/9 72/5 78/17 | reflect [3] 56/4 |
| 161/12 161/13 161/15 | react [2] 155/20 | 108/1 109/19 155/13 | 80/3 87/22 89/16 | 115/20 121/14 |
| 1 | 156/7 | 155/15 | 90/13 120/8 129/17 | reflects [3] 27/22 |
| questions [16] 2/25 | reacted [1] 110/9 | receiving [6] 45/7 | recording [4] 19/13 | 70/2 78/4 |
| 3/2 16/12 20/15 37/15 | read [16] 14/2 14/12 | 107/20 109/22 110/16 | | |
| 49/11 90/21 92/7 | 15/5 26/25 29/9 46/1 | 152/13 152/14 | records [15] 11/5 | refreshment [1] 7/11 |
| 93/21 149/9 151/14 | 72/12 00/16 101/25 | | | |
| 151/16 159/10 159/12 | | recently [3] 79/6 87/2 | | refuse [1] 71/12 |
| 159/21 159/25 | 128/10 130/1 147/12 | 111/10 | 55/7 74/20 75/21 | regarded [1] 114/22 |
| queuing [1] 153/4 | 153/19 159/1 160/4 | recipients [2] 33/21 | 77/10 78/1 94/11 | regarding [2] 85/25 |
| quite [21] 15/9 21/3 | 160/5 | 91/2 | 105/14 105/24 105/25 | |
| 23/22 24/6 26/13 39/6 | readiness [1] 5/4 | recognise [5] 34/18 | 108/13 123/15 | Regards [1] 85/22 |
| 45/24 73/16 73/17 | reading [7] 55/19 | 34/23 55/20 75/1 | | region [1] 99/19 |
| 76/13 95/8 96/6 96/8 | 71/4 74/11 87/25 | 158/18 | recovery [1] 148/18 | regional [1] 148/12 |
| 99/22 102/6 124/13 | 110/15 125/8 144/25 | recognised [1] | recruit [1] 100/5 | register [1] 61/17 |
| 124/14 128/20 130/23 | reads [9] 51/19 52/7 | 151/17 | recruited [1] 4/10 | Rego [1] 127/10 |
| 136/18 157/19 | 53/20 67/20 69/15 | recognising [1] 55/1 | rectification [4] | regress [1] 87/16 |
| | 72/24 84/21 85/9 | recollect [2] 49/5 | 153/14 155/6 155/17 | regression [12] |
| quotation [1] 78/3 | 85/24 | 124/8 | 157/11 | 85/15 86/1 86/23 |
| quote [1] 139/13 | ready [1] 155/9 | recollecting [2] | rectified [5] 45/20 | 87/11 87/12 87/15 |
| quoted [1] 136/4 | real [4] 88/17 113/22 | 25/18 74/15 | 45/21 157/8 157/23 | 87/24 88/2 88/18 |
| quoting [1] 140/2 | 129/10 129/10 | recollection [21] | 158/5 | 88/24 89/11 89/12 |
| R | realise [1] 116/21 | 10/5 10/7 11/13 32/6 | rectifying [1] 81/21 | regular [4] 101/1 |
| | | 32/20 34/12 48/18 | | 106/21 115/10 115/12 |
| RAD [3] 112/3 112/5 | Realistically [1] | | red [5] 135/2 135/3 | |
| 112/23 | 158/6 | 49/3 55/17 55/18 59/4 | | rehearsal [2] 12/4 |
| radical [1] 96/6 | really [16] 9/13 37/8 | 59/9 60/1 73/10 76/4 | redesign [10] 55/11 | 13/4 |
| Radka [2] 153/24 | 41/19 44/9 49/24 | 76/5 105/9 130/18 | 56/24 57/1 58/11 66/2 | reiterate [1] 150/7 |
| 154/1 | 52/16 60/16 88/22 | 141/24 149/11 154/4 | 69/21 72/18 87/23 | relate [4] 46/11 47/1 |
| raise [6] 1/15 16/10 | 102/13 109/8 110/21 | recollections [1] | 88/9 89/18 | 106/22 108/10 |
| 16/12 31/7 45/2 50/7 | 110/22 113/2 114/9 | 27/16 | redesigned [2] 59/4 | related [9] 13/25 25/6 |
| raised [30] 7/16 13/4 | 117/7 155/23 | recommend [2] | 62/23 | 45/8 48/15 48/22 |
| 14/24 25/6 27/17 | reason [4] 4/10 22/17 | 58/22 138/14 | redesigning [4] 56/7 | 49/14 53/6 54/1 81/8 |
| 28/21 34/11 45/11 | 37/9 37/11 | recommendation | 56/19 75/12 90/2 | relates [3] 4/16 39/24 |
| 48/8 49/19 49/23 | reasonable [4] 77/22 | [19] 56/7 56/16 | redevelop [1] 63/11 | 68/8 |
| 52/17 52/23 53/2 | 121/16 124/22 130/20 | | redevelopment [1] | relating [3] 51/18 |
| 53/22 54/22 69/18 | reasonably [5] 1/14 | 59/3 62/22 66/2 68/25 | 31/19 | 72/6 84/17 |
| | 14/20 14/25 56/24 | 69/13 71/24 72/18 | reds [1] 139/4 | relation [9] 11/14 |
| 69/19 81/12 86/11 | 141/18 | 74/17 75/11 75/13 | reduce [1] 86/25 | 26/16 39/13 41/6 |
| 105/6 105/17 119/22 | reasons [4] 6/11 66/8 | | reduced [1] 76/15 | 41/11 45/6 73/1 73/9 |
| 125/10 128/3 138/16 | 80/1 84/1 | 87/22 | reengineered [1] | 74/16 |
| 146/6 150/22 152/3 | reassured [1] 156/1 | recommendations | 28/4 | relationship [2] |
| 160/1 | | [14] 53/21 54/19 | | 102/17 105/21 |
| ran [3] 94/13 100/10 | reboots [1] 152/21 | | Rees [1] 33/16 | |
| 105/21 | recall [61] 4/16 4/19 | 55/10 55/15 58/11 | refer [6] 2/9 7/7 | relatively [2] 28/19 |
| range [2] 12/25 13/21 | 7/4 7/9 10/22 13/7 | 58/23 59/11 60/5 | 62/21 64/2 137/19 | 111/21 |
| Rapid [1] 111/24 | 17/16 17/18 19/24 | 60/20 62/13 69/21 | 145/11 | release [31] 12/3 |
| rate [3] 4/25 28/25 | 20/24 21/24 23/19 | 69/24 74/6 78/17 | reference [20] 10/20 | 12/6 12/13 12/15 |
| 69/18 | 24/20 27/8 29/7 37/19 | | 11/4 22/21 29/4 43/4 | 12/16 13/5 13/17 |
| rather [17] 3/11 8/5 | 39/14 49/15 50/3 | 54/20 | 45/1 51/6 53/25 64/7 | 13/17 14/12 14/14 |
| 9/23 20/3 32/7 45/16 | 50/25 54/20 58/10 | reconciled [1] | 67/19 70/10 70/25 | 14/17 14/21 15/1 15/2 |
| 47/19 73/15 78/8 80/5 | 58/12 58/22 62/17 | 108/19 | 71/3 74/24 80/12 | 15/2 15/3 21/25 22/2 |
| 80/18 81/17 82/1 | 81/11 84/13 99/12 | reconciliation [3] | 101/10 110/11 116/10 | 24/19 24/19 50/14 |
| 82/23 142/25 148/4 | 101/24 101/25 102/3 | 12/12 14/1 87/2 | 122/4 125/21 | 52/10 53/4 59/20 |
| 149/15 | 105/6 107/14 107/20 | reconsider [3] 56/23 | referenced [2] 22/20 | 74/24 75/2 82/3 82/14 |
| | 109/18 110/15 111/4 | 72/18 88/8 | 99/25 | 84/17 84/19 87/16 |
| rating [2] 36/24 37/2 | 112/18 119/19 120/21 | reconsidered [2] | referred [17] 6/14 | released [1] 90/23 |
| ratings [2] 34/21 | 123/18 123/20 128/6 | 55/15 69/25 | 21/7 21/13 23/9 25/4 | releases [2] 16/12 |
| 35/2 | 100/0 100/00 100/01 | reconsidering [1] | 29/6 39/19 40/13 | 18/2 |
| re [4] 28/22 56/7 66/3 | 130/20 135/24 141/23 | | 43/22 44/6 106/3 | relevant [1] 71/1 |
| 81/25 | 142/21 145/8 150/16 | reconstructing [1] | 106/6 107/11 119/3 | reliable [2] 28/25 |
| re-run [1] 28/22 | 150/21 152/1 152/4 | 102/25 | 145/12 151/23 152/22 | |
| re-write [1] 66/3 | | record [5] 74/3 85/18 | | reliance [2] 28/16 |
| re-writing [1] 56/7 | 154/6 155/15 155/19 | 103/3 103/19 128/10 | 62/24 64/9 85/3 123/4 | |
| re-written [1] 81/25 | recalled [1] 62/12 | recorded [17] 20/4 | refers [6] 52/17 | relied [1] 117/13 |
| | Tecaneu [1] UZ/1Z | 16601464 [1/] 20/4 | | reneu [1] 11/10 |
| 1 | İ | | | |

R relies [1] 82/12 **relieve [1]** 109/16 relieved [1] 149/2 reluctantly [1] 153/24 rely [1] 64/7 **remain [1]** 5/19 remained [6] 22/10 43/20 104/2 142/16 156/18 158/2 remaining [2] 46/10 144/16 remedial [9] 104/23 109/25 110/5 132/19 132/19 132/22 133/12 135/5 142/20 remember [76] 9/20 10/25 11/24 14/7 17/6 17/21 17/25 18/11 19/10 23/16 23/18 24/6 24/7 24/8 26/21 26/22 27/5 30/4 30/7 30/8 31/15 31/25 33/2 33/4 33/5 34/19 35/17 36/8 36/18 38/4 42/4 44/5 46/25 48/9 48/10 49/7 49/20 49/22 51/3 55/23 58/2 60/14 63/10 67/3 75/18 76/7 80/14 83/2 98/21 99/14 105/16 105/18 105/20 105/23 106/16 109/22 110/24 111/5 113/19 113/22 114/3 114/10 114/14 114/16 114/20 118/16 118/19 125/7 140/15 147/4 147/8 147/25 150/14 152/13 152/14 156/5 remembered [1] 7/12 remembers [1] 145/20 remind [1] 70/4 **Reminder [1]** 77/10 remit [1] 71/14 remitted [1] 136/9 remove [1] 129/23 removed [1] 150/2 render [2] 130/13 133/15 renowned [1] 147/18 reoccur [1] 87/15 **reopen [1]** 78/10 reorganise [1] 123/5 repeat [3] 14/22 27/25 39/7 repeatedly [1] 87/10 replace [2] 109/17 117/21 replaced [1] 23/24 replan [1] 125/24 report [83] 8/6 8/16

17/8 20/15 20/20 resilience [2] 52/24 20/21 20/24 21/11 53/10 resolution [4] 34/1 21/19 21/21 21/22 22/5 22/7 22/16 22/21 34/9 49/23 50/16 22/22 23/2 23/7 23/8 resolve [2] 152/2 23/9 23/12 23/16 23/17 24/23 24/24 25/1 25/6 25/17 26/12 27/18 28/14 30/3 31/5 31/9 32/4 50/19 50/22 51/1 51/1 51/18 52/18 52/19 52/23 53/12 54/10 54/12 55/8 56/6 resolving [2] 68/18 58/9 58/23 59/2 62/14 64/3 64/5 68/24 69/7 69/13 69/20 70/14 76/11 76/17 81/7 82/20 85/11 96/19 105/11 106/25 110/15 resonates [1] 56/13 110/18 110/25 111/5 114/14 118/8 123/14 127/9 128/2 136/12 136/20 137/19 138/2 140/11 140/13 140/17 reported [10] 12/3 17/14 47/22 58/12 81/9 100/13 104/15 104/19 131/6 135/25 reporting [3] 115/12 142/8 157/18 reports [12] 56/5 68/21 74/6 75/24 77/4 77/6 77/21 101/3 108/18 139/12 139/15 responses [1] 42/23 139/18 representatives [3] 34/4 66/16 151/17 request [1] 46/10 requested [6] 42/13 74/22 77/2 87/2 87/7 102/2 required [11] 9/2 11/10 13/15 18/17 42/19 89/9 97/13 112/14 114/19 138/25 restructuring [1] 147/5 requirement [4] 6/24 36/10 66/22 148/4 requirements [16] 6/23 7/2 16/7 17/4 34/6 59/16 59/17 59/18 63/18 66/16 80/16 90/4 112/6 112/9 113/4 114/24 requirements' [1]

63/20

75/8

127/11

requires [2] 70/23

requiring [1] 152/21

reserves [1] 137/25

research [1] 43/6

reservations [1]

reset [1] 63/20

161/4 resolved [14] 12/10 14/17 15/16 31/15 36/13 44/14 86/11 129/16 139/17 140/1 152/24 152/6 resonate [10] 20/8 20/14 26/15 26/20 29/9 38/1 38/4 41/11 41/13 73/9 resource [2] 44/10 52/8 resources [2] 9/2 100/11 resourcing [3] 8/13 9/8 42/2 respect [4] 18/12 90/20 101/21 119/6 respected [1] 99/20 responds [1] 119/13 response [9] 40/13 40/16 43/22 44/24 85/23 responsibility [7] 17/3 49/5 68/17 94/17 98/16 120/3 137/4 responsible [13] 4/6 17/10 17/15 19/13 19/20 29/25 95/3 95/20 96/22 97/10 136/23 148/20 148/22 rest [6] 29/15 49/6 65/6 81/3 84/2 142/4 16/23 result [6] 45/15 56/21 112/13 115/8 123/5 141/5 resulted [4] 29/3 37/24 42/7 156/21 resulting [1] 40/25 results [3] 103/4 112/17 114/6 retail [1] 148/13 retain [1] 38/18 retrospect [1] 138/19 128/20 return [6] 21/20 24/23 32/13 38/19 61/22 84/25 returned [2] 5/22 32/10 returns [1] 108/25 **Revenue** [1] 4/11

review [22] 6/8 6/12 7/5 7/20 8/2 8/6 8/10 8/18 9/9 9/17 9/21 9/22 11/7 11/8 16/16 16/25 33/18 42/18 49/20 49/21 66/14 152/12 reviewed [2] 53/14 139/19 105/15 115/23 127/23 reviewing [2] 34/8 65/1 reviews [6] 17/12 18/7 29/2 66/14 66/15 **robust [2]** 136/5 78/16 revised [1] 127/13 rewarded [1] 114/7 rework [2] 13/15 112/13 rewrite [12] 55/11 56/24 57/1 58/11 69/21 72/19 78/8 80/5 81/1 87/23 88/9 89/19 **Rewrites** [1] 78/8 rewriting [4] 56/19 73/7 75/13 124/1 rewritten [2] 59/4 62/23 Rich [1] 110/14 **Richard [2]** 97/19 160/2 **rid [1]** 87/16 46/2 71/17 77/14 78/2 right [79] 1/10 2/18 3/14 3/18 4/3 4/8 4/17 5/11 5/20 6/3 6/9 7/5 8/7 16/19 16/21 17/5 18/7 18/19 18/23 19/21 20/25 21/17 22/13 23/4 23/5 23/20 131/21 27/9 30/3 32/11 32/18 root [1] 15/9 32/25 33/1 35/21 38/8 roughly [1] 28/20 56/20 58/4 58/5 63/17 128/23 66/3 67/2 67/12 73/21 routes [1] 60/11 74/8 74/17 75/4 75/5 75/16 76/11 80/18 82/20 83/8 83/16 85/7 **Royal [1]** 95/2 93/23 98/25 110/6 111/18 116/20 118/16 118/25 121/18 127/15 128/19 133/10 141/9 143/6 143/12 150/3 150/13 151/2 160/6 right-hand [4] 22/13 67/12 73/21 75/5 rightly [2] 9/16 ring [2] 84/19 124/8 rings [1] 76/13 rise [1] 122/15 risk [15] 4/23 7/14 7/16 17/3 17/7 17/10 17/15 31/13 83/19 85/20 87/5 88/2 90/1

risked [1] 31/10 risks [2] 31/9 85/13 **RM [4]** 74/23 74/24 75/23 76/25 **Roberts [12]** 96/13 96/15 97/5 97/21 105/7 105/17 106/19 135/23 136/9 138/21 142/23 144/12 Roberts' [3] 145/14 157/6 158/3 141/22 robustness [5] 9/11 9/19 107/4 107/11 147/10 role [16] 3/24 10/22 11/1 17/2 17/6 18/16 21/16 29/17 94/22 97/24 98/19 99/3 99/3 99/11 117/21 124/11 roles [5] 3/19 94/6 95/9 100/6 100/6 roll [2] 112/15 130/2 rolled [3] 16/11 48/6 146/22 rollout [27] 4/16 4/20 10/2 16/13 32/24 42/1 45/22 60/8 118/22 119/17 124/1 126/2 127/11 127/12 127/15 127/17 128/21 128/23 131/1 131/9 131/10 133/5 133/7 140/24 141/2 151/1 152/1 room [2] 131/20 39/22 40/6 55/5 55/16 round [3] 45/20 71/8 routines [1] 109/4 row [1] 68/24 89/8 91/14 91/17 92/5 rule [2] 99/9 159/20 run [11] 2/12 28/22 35/20 72/8 94/23 99/16 99/25 100/8 109/14 133/18 151/5 running [11] 5/11 5/12 57/9 93/8 97/9 98/17 99/20 122/11 124/12 124/12 150/2 rural [1] 134/9 Ruth [4] 152/17 153/8 153/13 153/22

114/6 127/16

saga [1] 83/2 said [46] 1/9 16/5 18/5 29/21 33/4 40/9 47/21 55/21 56/2

111/8 111/20 119/2 35/13 36/21 37/11 153/15 S 22/22 25/14 29/11 121/17 122/5 122/8 38/24 39/24 40/2 31/6 50/14 52/20 55/9 sheets [1] 122/12 said... [37] 74/14 56/8 56/16 57/1 93/11 shop [1] 19/6 122/20 122/25 123/22 41/16 44/25 45/14 89/11 92/1 96/18 123/24 125/9 127/10 45/22 51/10 51/25 151/25 152/11 153/17 short [15] 30/15 96/21 99/2 100/25 128/2 129/14 129/15 52/1 52/5 54/2 54/3 153/25 154/23 155/5 30/22 35/1 43/10 44/1 102/1 104/14 109/24 133/13 137/6 137/14 54/13 59/22 61/4 62/7 156/11 156/22 158/6 50/9 61/21 62/5 64/9 119/14 120/6 124/16 138/9 140/23 141/20 62/9 64/6 64/17 65/6 74/5 92/19 126/10 **September 1997 [1]** 125/1 127/5 127/14 153/6 153/21 154/24 129/12 151/7 151/9 65/8 66/11 66/19 67/9 16/17 127/17 128/11 129/17 shortcomings [3] 156/12 67/11 67/16 67/19 September 1998 [3] 132/6 136/4 138/22 68/5 68/7 68/12 68/24 29/11 31/6 52/20 55/12 69/23 123/12 scale [1] 95/25 141/23 142/1 142/20 scanned [2] 33/8 69/1 69/14 70/21 **September 1999 [3]** shortly [8] 21/20 34/7 142/22 142/23 145/2 71/19 71/22 72/1 72/5 50/14 56/8 56/16 36/20 39/14 85/24 55/5 145/6 145/9 147/24 schedule [10] 58/8 74/4 74/19 76/6 77/8 **sequential** [1] 113/14 90/10 106/7 118/11 150/7 151/1 157/16 67/1 67/5 67/9 67/21 78/18 80/3 83/14 should [43] 1/22 2/12 series [4] 26/12 157/23 158/1 159/22 83/14 84/5 85/7 85/11 68/2 70/5 72/14 81/8 132/12 132/16 152/1 24/4 28/10 28/12 Sale [4] 19/1 51/14 89/17 85/23 88/5 88/19 serious [14] 13/10 28/16 49/9 51/10 52/5 107/12 137/16 13/18 13/20 13/22 55/1 55/15 57/17 59/3 scheduled [2] 123/10 88/22 91/22 92/23 same [11] 5/8 70/1 54/17 111/13 119/3 140/24 102/20 105/10 111/6 59/12 60/9 60/18 73/24 74/4 77/15 schedules [1] 51/22 118/11 118/14 123/15 119/16 124/20 130/4 60/24 61/2 61/13 77/16 92/3 144/1 130/16 130/25 131/5 126/12 126/23 127/9 61/15 69/24 70/14 scoring [1] 37/10 148/6 159/5 160/11 scrapped [1] 115/24 131/3 131/11 131/13 153/5 74/4 75/14 78/6 81/24 sample [2] 42/23 scrapping [1] 123/23 131/13 131/15 131/15 seriously [2] 8/25 93/7 99/2 101/13 43/1 scratch [1] 90/2 131/16 131/17 131/21 120/7 104/8 104/15 104/19 **Sandison [1]** 110/13 screen [15] 1/8 131/22 131/25 132/15 seriousness [2] 108/22 122/7 125/22 **sat [1]** 155/21 101/12 120/25 125/19 136/19 138/6 146/25 13/21 29/10 126/23 127/22 129/18 satisfactorily [1] 151/19 152/14 153/13 serve [1] 59/24 126/14 127/2 129/24 136/7 144/19 151/8 112/10 131/16 131/20 144/1 seeing [5] 23/16 42/8 served [1] 82/10 151/9 153/7 satisfactory [2] 144/6 152/15 152/20 59/8 101/24 114/14 service [7] 19/1 **show [4]** 33/13 39/22 155/8 155/18 155/3 156/18 seek [2] 116/6 154/1 51/15 85/20 86/21 67/8 87/20 satisfied [4] 39/9 scroll [15] 22/5 22/18 seeking [2] 44/21 121/23 141/22 153/3 **showed [1]** 98/9 42/20 139/2 139/8 **showing [3]** 75/6 24/25 34/20 40/1 77/14 services [9] 19/16 satisfy [2] 139/11 41/15 42/20 55/4 64/6 seeks [1] 137/8 70/25 71/1 71/7 98/4 88/20 103/2 155/17 74/2 85/3 85/23 91/20 seem [4] 75/16 76/12 98/11 103/14 117/14 **shown [7]** 20/16 save [1] 73/25 113/22 114/2 102/20 142/11 117/22 20/19 20/24 21/1 56/6 saw [8] 7/23 41/17 scrolling [1] 54/11 seemed [1] 132/20 session [1] 126/15 101/9 131/18 70/2 89/16 113/18 se [1] 20/3 seems [1] 32/2 **sessions [2]** 43/18 shows [1] 40/8 141/25 147/13 147/24 **search [3]** 53/3 53/5 seen [25] 8/15 24/2 45/10 **shrink [1]** 98/12 say [52] 16/6 19/19 54/1 31/25 34/23 45/24 set [12] 17/23 29/13 shut [1] 58/15 26/3 26/23 29/15 46/6 55/20 56/2 59/19 45/17 95/12 96/23 second [19] 19/25 sic [1] 110/24 29/25 33/2 37/12 21/9 22/18 40/1 42/15 63/8 63/13 65/15 71/9 103/3 114/1 114/21 side [4] 75/5 131/20 37/17 38/15 41/24 43/12 52/7 60/3 67/18 73/21 78/23 96/17 117/2 123/4 135/9 149/4 149/4 47/21 53/9 55/13 70/17 74/8 103/16 99/15 100/20 110/20 145/16 sides [1] 127/12 62/16 65/4 80/24 106/11 107/16 108/4 132/8 133/2 139/12 sign [3] 98/20 140/21 **sets [1]** 116/15 83/14 84/3 88/10 125/17 129/14 152/20 140/8 141/25 149/17 setting [1] 96/22 144/12 88/12 89/2 92/14 94/5 signature [5] 2/4 2/6 154/21 selection [1] 53/24 seven [1] 122/12 96/11 98/15 100/13 several [3] 72/14 secretariat [1] 161/3 selling [1] 19/6 2/8 2/10 93/14 103/8 106/2 112/8 senior [9] 23/13 28/1 **secretary [2]** 118/12 86/10 96/8 signed [3] 106/7 112/24 114/16 115/10 122/21 29/15 50/22 79/19 **severe [1]** 122/9 130/17 150/13 120/4 120/8 120/13 section [3] 25/25 99/3 99/6 136/18 **severely [1]** 85/21 significant [22] 12/9 122/7 124/10 124/19 13/24 26/5 42/24 27/19 29/5 141/14 severity [18] 13/10 124/21 124/22 126/1 13/24 14/11 14/20 section 7.3 [1] 29/5 sense [6] 1/8 16/4 43/17 45/1 45/13 133/12 137/10 145/5 **sections [1]** 26/5 25/19 25/20 27/10 14/24 15/12 29/10 45/15 45/24 47/12 145/8 147/20 149/1 34/21 35/6 36/24 37/2 53/16 78/10 80/14 **secure [1]** 38/17 44/15 151/9 151/16 158/3 security [5] 11/7 11/8 sent [8] 6/25 7/7 33/9 37/23 38/18 41/2 97/14 99/6 104/12 158/22 11/14 12/11 13/25 46/4 77/10 84/7 48/13 49/13 50/17 108/7 112/13 119/23 saying [13] 23/2 47/1 see [115] 1/3 1/5 2/4 108/25 161/1 135/2 135/4 137/10 158/18 60/9 80/4 81/14 10/11 10/16 11/20 sentence [1] 121/16 **shall [2]** 2/24 92/14 significantly [1] 102/16 112/24 113/2 shame [1] 106/1 12/18 15/24 20/5 85/19 sentiments [3] 113/15 134/22 136/5 112/21 113/17 114/15 share [2] 85/25 91/21 20/20 21/4 21/11 signing [4] 137/8 145/8 156/6 21/14 21/15 22/12 138/14 147/13 150/17 separation [1] shareholder [2] says [37] 44/12 63/9 22/20 24/22 25/1 25/5 134/16 117/5 124/17 silly [1] 133/21 75/3 75/7 78/5 102/4 similar [3] 4/11 25/21 27/22 31/1 31/2 **September [28]** 1/23 shareholders [1] 102/21 102/22 104/11 33/22 33/23 34/2 2/18 2/19 10/5 10/13 124/18 111/10 119/12 107/1 108/4 110/4 34/22 35/7 35/12 12/13 16/17 21/12 **she [2]** 127/10 Simpkins [1] 33/14

120/12 120/13 120/15 82/17 88/5 89/14 121/25 138/3 S **standards** [2] 42/2 120/19 120/22 125/11 107/15 111/5 111/16 53/14 strategically [1] **simple [1]** 76/13 127/22 128/4 128/25 111/18 118/2 118/6 stands [1] 93/19 117/1 simply [7] 9/16 41/7 129/15 129/18 139/1 118/6 126/3 131/11 **Stares [2]** 79/7 79/9 strategies [1] 97/2 54/7 82/25 89/17 start [4] 90/1 93/20 143/4 132/5 138/4 148/2 **strategy [5]** 96/22 126/19 150/4 sold [1] 20/4 sort [20] 11/17 13/13 108/5 130/15 96/23 97/14 106/21 since [8] 28/6 53/1 sole [1] 79/14 15/5 19/9 36/12 63/17 started [7] 6/18 6/20 117/23 53/22 69/18 80/2 83/7 87/14 88/10 95/1 99/9 6/21 9/7 81/13 111/10 stream [2] 43/13 solely [1] 145/20 83/13 112/5 solicitor [1] 148/24 105/19 114/3 124/11 43/14 112/1 sinks [1] 33/9 131/3 135/24 141/17 **solicitor's [1]** 148/7 **starting [6]** 15/11 streams [1] 28/23 sir [29] 1/11 30/17 **solicitors [2]** 147/19 154/9 155/20 155/22 24/10 38/24 54/2 **strengths** [3] 99/15 30/24 58/7 61/24 62/7 158/23 149/5 106/11 130/2 117/11 117/11 90/24 92/9 92/16 **solution [2]** 82/24 sorted [1] 13/16 **starts** [1] 113/4 **Strictest [1]** 107/23 92/22 92/23 92/24 state [6] 28/14 28/17 124/25 **sorts [1]** 128/18 **striving [1]** 12/15 126/7 126/12 126/16 **solutions [4]** 55/8 sought [1] 119/7 93/5 97/13 97/13 **strong [3]** 38/16 57/3 126/21 132/3 138/6 sound [1] 118/25 69/20 120/5 132/13 121/5 57/21 138/8 144/8 151/4 **solve [1]** 129/5 sounds [1] 108/24 **statement [32]** 1/23 structure [3] 11/2 159/7 159/14 159/15 solved [2] 13/1 129/3 source [1] 129/11 2/2 2/5 2/7 2/12 2/17 17/18 96/10 159/20 160/1 160/17 2/20 2/23 3/9 6/14 7/3 structured [2] 9/24 some [55] 2/24 4/12 **South [2]** 99/19 160/19 161/13 7/7 7/8 8/11 12/25 119/4 18/15 20/23 23/19 26/2 sit [2] 113/3 159/2 13/13 15/9 17/8 17/12 southwest [1] 118/25 27/7 32/8 39/20 45/13 **STUART [5]** 93/3 site [3] 5/3 5/15 5/18 18/6 20/15 27/10 spade [2] 99/22 46/3 46/7 50/4 62/16 93/6 123/17 144/15 sits [1] 110/4 30/11 33/7 34/7 34/19 99/22 64/2 65/21 82/6 93/7 161/14 sitting [2] 46/24 stuff [2] 4/25 30/7 35/24 39/1 39/15 speak [2] 71/20 93/12 93/16 93/19 88/11 39/19 42/12 42/18 94/5 115/20 160/5 sub [1] 103/14 132/2 situation [10] 28/10 42/24 44/7 46/18 subheading [2] **spec [1]** 141/10 states [3] 12/1 35/18 35/19 35/19 52/25 55/24 58/14 118/22 130/1 special [1] 36/5 25/22 51/14 41/25 71/8 82/25 83/1 specialists [1] 100/5 66/10 68/1 73/16 **statistics** [3] 53/21 subject [5] 53/11 83/5 119/15 73/25 74/19 76/9 79/6 specific [8] 7/4 10/9 74/22 75/23 75/15 84/10 125/10 six [1] 153/22 84/3 90/22 96/17 97/1 55/10 60/25 66/2 128/3 **status [2]** 34/10 size [5] 26/9 42/23 100/20 105/4 108/7 69/20 81/11 123/20 34/20 subjective [1] 81/17 131/4 134/2 134/11 specifically [9] 4/15 112/1 116/21 121/1 **statutory [1]** 155/14 submission [2] 147/7 sized [1] 108/25 10/7 54/20 60/25 61/2 stay [2] 125/13 122/15 122/17 126/14 159/21 **SLAs [1]** 85/21 61/14 62/22 67/3 130/4 134/12 143/14 143/25 suboffice [1] 109/1 Slaughter [1] 147/18 143/14 148/24 151/17 78/15 stayed [1] 20/13 subpostmaster [7] Slaughter's [1] 148/8 **specifics [1]** 114/13 **steal [1]** 148/16 118/24 134/7 135/19 somebody [5] 44/12 Slaughters [1] 48/8 57/24 82/14 specified [2] 36/6 steer [1] 66/9 153/3 158/15 158/19 101/15 **Steering [1]** 106/13 89/11 159/3 36/6 slicker [1] 146/24 **speculate [1]** 155/19 someone [3] 128/6 **step [1]** 90/18 subpostmasters [21] **slightly [3]** 91/20 47/11 90/15 119/9 131/23 161/2 **speed [1]** 79/9 **Stephen [4]** 84/8 98/23 123/21 something [22] spend [1] 24/3 85/4 85/8 85/22 119/10 119/21 119/23 slippage [2] 124/6 13/16 18/1 31/24 38/4 sponsor [4] 95/8 sterling [1] 153/8 119/25 122/10 122/15 127/19 44/13 45/19 56/13 95/15 95/18 136/17 Steve [4] 84/22 85/25 131/7 132/7 134/13 slow [1] 128/12 60/17 74/11 79/15 134/18 135/7 137/20 88/16 91/21 sponsored [1] slowed [1] 151/2 87/17 88/25 104/15 **STEVENS** [7] 93/4 142/6 143/16 143/24 110/22 small [8] 42/23 99/5 111/1 122/17 125/22 148/15 153/1 158/23 sponsoring [1] 57/24 126/6 126/13 131/17 134/8 144/7 157/7 130/16 135/6 141/9 151/14 159/11 161/15 subpostmasters' [1] **sponsors** [2] 90/6 158/5 158/7 158/8 141/9 159/1 160/4 114/9 still [24] 24/14 25/15 146/2 smiling [1] 131/13 **sometimes** [5] 81/14 spread [1] 26/8 43/10 44/1 47/3 54/17 subsequently [1] **Smith [5]** 26/1 86/13 88/18 88/19 135/12 54/21 71/5 102/15 **spring [4]** 6/3 8/11 150/13 86/14 153/23 154/1 160/11 9/17 32/9 105/14 113/20 115/2 **substance** [1] 52/16 so [169] square [1] 25/23 116/21 130/4 136/2 **substantial** [1] 38/19 somewhat [2] 27/14 **software [54]** 3/16 153/24 squeezing [1] 152/18 144/18 145/3 145/4 substantially [1] 3/19 3/21 5/8 6/13 145/7 145/11 145/17 **somewhere [6]** 63/9 **stability [2]** 155/3 73/24 6/15 12/10 12/18 13/5 63/13 63/14 63/14 156/17 153/15 155/2 160/20 substantive [1] 14/21 14/24 15/1 15/2 78/23 90/6 staff [3] 87/8 112/2 stop [6] 1/5 131/7 136/20 15/2 15/3 15/14 15/23 132/8 138/4 160/12 soon [2] 122/18 128/25 success [1] 42/11 16/8 16/11 16/13 126/20 stage [17] 9/20 10/22 160/15 successful [2] 51/21 17/13 18/3 22/1 23/24 sorry [34] 14/22 16/4 13/8 13/25 17/13 18/2 stopped [2] 32/4 89/1 43/17 45/2 45/8 45/14 25/11 39/7 44/15 51/5 48/9 77/22 79/10 151/3 successfully [2] 5/12 48/2 50/1 51/21 80/21 54/11 56/4 58/14 95/10 98/2 102/10 **stopping [2]** 118/23 26/22 81/9 82/21 82/22 111/22 132/7 133/11 such [12] 14/5 14/11 58/20 59/2 62/8 64/13 141/7 83/20 84/17 89/19 64/23 65/7 69/11 44/13 44/13 47/11 138/1 150/24 strategic [6] 95/3 119/4 119/15 120/9 70/19 74/13 75/19 **standard** [1] 28/5 97/6 115/21 117/3 76/10 96/24 97/11

92/16 93/19 122/25 93/7 93/19 118/2 113/11 S taken [10] 12/12 121/11 123/17 126/23 56/25 60/24 120/7 telescope [3] 134/10 126/7 126/22 138/8 such... [4] 111/12 131/11 131/15 131/22 120/17 122/1 127/25 134/20 158/15 159/17 160/17 160/19 112/12 115/23 137/19 132/5 144/15 151/6 151/22 152/8 157/21 tell [7] 17/22 27/4 161/5 **sufficient [8]** 81/5 151/11 160/20 161/14 takes [2] 54/9 57/11 84/14 87/18 91/6 thanked [1] 123/1 88/14 89/23 92/15 taking [9] 6/19 7/18 **swerve [1]** 63/21 124/18 150/4 **Thanks [1]** 126/5 105/1 131/7 132/8 18/11 42/8 90/18 telling [4] 92/25 that [886] sworn [1] 1/11 140/9 that's [62] 6/1 8/20 92/11 98/19 125/25 115/1 144/25 149/25 system [94] 5/10 sufficiently [5] 76/16 5/12 5/14 6/18 12/21 138/1 ten [1] 140/5 11/1 11/1 11/24 20/9 81/5 111/13 153/16 13/19 18/19 19/4 19/7 20/10 21/25 23/5 25/3 talk [1] 59/7 ten-page [1] 140/5 158/14 19/12 22/2 23/25 27/9 talked [3] 135/25 tends [1] 23/11 43/23 45/10 45/11 suggest [4] 23/11 28/13 28/22 32/17 137/1 146/1 59/1 60/17 64/6 64/23 tentative [1] 117/24 41/6 68/1 103/20 32/21 34/12 36/2 talking [10] 24/14 term [5] 57/9 68/7 65/12 68/14 69/12 **suggested [1]** 102/9 32/23 48/3 48/4 63/19 68/9 68/14 87/12 37/20 37/24 38/9 70/1 70/11 72/14 75/5 **suggesting [1]** 54/17 38/20 50/13 52/10 76/7 76/8 113/6 131/3 terminals [2] 4/17 77/17 81/13 87/18 **suggestion** [1] 112/3 54/18 60/7 63/1 63/3 133/24 4/20 92/5 93/2 101/14 suit [1] 50/10 talks [1] 29/16 80/9 84/19 95/12 107/23 110/8 113/2 terminate [1] 131/8 suitability [1] 16/11 terminating [1] 95/16 95/17 98/4 tame [1] 110/21 114/12 115/4 117/23 suitable [3] 16/13 100/23 103/11 103/18 tangent [1] 118/6 138/11 124/11 125/4 125/19 45/21 147/6 103/21 104/17 107/3 tangled [1] 66/12 termination [2] 129/19 132/2 134/3 suitably [1] 3/24 107/7 107/12 108/13 134/8 139/7 139/8 Target [1] 53/4 130/10 138/13 **summarise** [1] 58/2 108/21 109/13 109/17 task [26] 20/18 20/21 terms [24] 5/13 9/5 140/15 140/16 142/22 summarised [1] 111/9 111/12 111/16 21/13 22/21 23/1 13/10 19/9 29/9 32/3 143/19 143/21 145/13 140/6 111/17 111/21 111/25 23/12 24/24 25/12 34/15 39/2 44/6 54/1 146/25 147/1 147/21 summarising [1] 112/10 112/15 114/20 26/10 27/18 28/1 54/19 56/14 63/4 63/6 147/23 147/24 156/4 136/25 115/24 116/2 117/18 28/18 28/22 28/24 68/7 84/1 87/10 87/17 156/24 157/20 158/21 **summary [5]** 20/6 120/10 120/13 120/18 29/13 29/15 31/5 88/20 97/23 109/18 160/1 161/6 42/11 46/13 136/16 122/11 123/12 128/3 31/20 52/18 52/23 113/19 116/6 122/23 their [43] 5/4 8/18 9/9 153/20 128/24 128/25 129/6 54/15 64/3 65/4 69/18 **Terry [22]** 21/6 64/21 13/10 15/11 18/23 summer [3] 7/22 133/23 134/19 135/1 81/20 150/8 64/23 65/5 65/17 26/1 29/17 35/19 33/18 37/20 40/14 41/9 45/4 46/20 70/10 70/11 73/10 135/10 135/10 135/14 **TC [1]** 78/16 supplier [1] 114/5 137/18 140/24 141/6 team [34] 4/6 5/2 73/12 73/13 74/16 47/13 47/24 59/22 support [7] 40/25 141/22 142/10 142/25 26/11 51/23 53/15 75/8 75/11 76/5 76/24 60/21 61/11 69/19 53/21 86/18 90/13 77/11 79/18 84/8 85/8 143/8 143/23 145/18 68/20 69/6 70/12 78/7 90/19 99/7 102/7 147/7 149/10 149/24 145/21 146/8 146/13 79/2 79/8 79/16 79/17 85/10 85/23 88/16 102/8 102/8 102/13 supported [3] 24/16 147/10 147/21 152/20 80/4 80/20 94/19 96/7 test [8] 28/22 28/23 117/21 122/16 123/1 67/1 106/20 78/16 102/23 103/2 153/2 154/7 155/3 96/7 97/5 97/21 99/5 123/8 124/11 128/13 supporting [2] 156/14 156/17 109/6 113/22 113/24 108/5 112/12 131/10 128/13 128/24 128/25 103/21 109/1 114/11 129/2 133/9 testing [12] 12/5 13/5 129/1 134/14 141/16 system's [1] 18/22 suppose [3] 112/21 142/24 144/25 145/10 14/25 15/22 16/2 16/6 149/14 149/18 150/12 systems [28] 8/20 138/19 146/11 17/4 20/12 29/25 147/1 148/8 148/9 28/19 29/1 49/6 78/13 153/4 154/8 157/4 sure [21] 18/9 18/10 38/23 45/17 48/3 161/3 109/4 150/18 them [44] 7/7 12/25 19/8 31/20 33/9 36/3 56/12 59/21 64/24 teams [2] 97/11 tests [2] 101/22 12/25 15/16 19/6 38/21 51/3 56/20 57/6 81/6 95/11 95/20 24/18 34/19 38/22 154/10 108/17 61/16 63/20 65/15 95/22 95/23 95/25 tease [1] 155/22 text [1] 55/7 40/14 50/3 62/18 73/13 78/15 87/5 99/7 96/6 99/16 100/10 81/16 81/22 97/7 tech [1] 17/13 than [26] 3/11 9/23 105/12 124/16 125/2 109/7 114/7 114/22 108/15 112/9 113/3 techie [1] 95/21 20/3 26/19 28/20 139/6 115/4 121/8 123/11 125/10 130/5 135/8 techies [3] 99/16 45/16 49/10 59/25 surprise [2] 105/8 137/17 143/3 146/23 99/25 110/23 64/25 73/15 78/8 80/5 128/20 129/5 130/23 128/11 80/18 81/17 82/1 132/13 132/14 132/25 technical [25] 3/11 surprised [4] 9/6 9/11 9/13 9/19 9/21 82/24 83/15 133/23 134/20 135/11 139/13 102/4 149/12 149/13 T Austin [1] 21/5 18/18 26/5 26/13 138/12 141/4 142/25 139/22 139/23 143/10 surprises [2] 154/19 table [8] 2/15 2/16 43/17 45/1 45/8 45/13 148/4 149/15 157/10 147/16 147/23 148/15 154/20 53/19 54/2 54/13 81/19 100/2 114/10 160/3 160/13 152/4 152/6 152/6 surrounding [1] 68/23 74/5 124/15 152/7 158/10 159/23 136/1 136/7 139/10 thank [41] 1/11 1/18 160/25 take [26] 11/11 22/4 142/13 142/15 142/18 1/20 2/17 2/23 7/20 160/15 161/4 161/4 survive [2] 98/4 98/7 30/15 40/14 40/20 144/18 145/3 145/17 10/11 25/21 30/20 theme [1] 143/25 **suspected [1]** 90/15 45/18 50/8 57/11 58/8 145/21 30/24 31/3 35/13 themselves [5] 15/8 sustainability [1] 61/21 63/21 68/16 technicalities [1] 39/11 41/16 42/10 31/20 121/10 143/7 84/1 89/4 92/25 97/5 97/24 50/12 58/6 58/7 58/21 148/10 36/18 sustainable [2] 80/24 101/9 106/5 109/8 then [82] 4/6 6/5 6/6 technique [1] 53/13 61/20 62/3 62/11 82/5 120/4 120/16 124/4 techniques [1] 66/23 69/9 70/19 6/25 12/23 15/16 28/6 Sweetman [20] 92/21 144/20 151/8 155/7 72/23 77/25 86/8 29/4 34/18 35/2 35/13 143/10 92/23 92/25 93/3 93/6 160/5 technology [2] 98/5 90/21 92/5 92/12 39/18 43/8 44/13 47/1

18/10 18/12 23/8 24/18 27/14 31/20 then... [67] 48/11 37/6 38/14 38/22 45/7 53/1 53/3 53/24 54/5 57/5 59/14 59/15 61/1 55/12 56/22 56/25 61/2 63/3 67/25 71/12 66/11 66/16 69/9 71/14 71/15 71/16 69/22 72/3 77/7 78/17 71/16 80/9 81/15 79/20 83/13 90/5 92/5 81/22 87/7 90/16 92/10 92/17 94/11 90/17 94/7 96/2 97/3 94/20 94/21 95/1 95/5 99/7 99/17 100/11 96/10 97/3 97/3 97/5 101/18 102/13 102/14 97/25 101/6 103/23 104/23 104/24 105/4 104/21 106/3 107/16 106/22 112/22 112/24 108/19 109/4 109/6 113/6 113/15 114/5 110/3 111/15 115/9 114/7 114/7 115/1 116/9 118/20 118/22 115/5 115/6 117/7 119/13 121/9 121/19 117/10 117/19 119/24 122/12 122/24 124/25 120/2 120/14 121/9 127/22 129/18 131/8 123/8 124/11 124/12 132/14 133/2 136/9 128/10 128/13 128/16 138/23 143/5 146/18 128/20 128/24 130/12 150/1 150/10 151/10 130/20 131/1 131/2 151/16 155/10 157/4 131/7 133/14 134/20 157/5 135/1 136/1 136/9 theory [2] 114/6 138/22 138/23 139/13 140/3 139/23 141/16 142/8 there [223] 143/11 144/6 144/7 there's [7] 10/7 39/9 146/13 146/14 146/15 79/17 79/18 79/18 147/16 147/20 147/22 82/2 150/15 148/6 148/6 148/7 thereafter [1] 106/7 149/2 149/6 149/12 therefore [7] 6/21 149/17 152/4 154/7 25/14 78/4 103/12 156/20 157/22 157/23 121/11 143/8 143/17 157/24 158/2 158/10 these [66] 9/18 10/12 158/12 158/13 159/22 11/13 12/10 13/3 159/22 13/23 23/22 24/12 they'd [1] 115/1 26/7 29/8 34/8 36/22 thing [26] 6/17 17/25 38/17 42/12 43/19 20/1 27/13 45/18 57/4 third [4] 52/16 68/25 43/25 47/18 52/10 57/12 63/5 63/18 65/3 53/25 55/15 56/5 73/15 80/10 82/12 58/12 60/4 69/24 83/2 83/10 95/1 43/15 70/21 72/17 72/20 105/19 124/11 124/22 this [291] 73/16 81/15 84/24 132/17 133/11 133/21 **Thornton [1]** 33/15 86/9 86/11 88/4 88/8 135/2 135/24 141/17 98/16 103/20 103/24 159/5 104/1 104/20 104/22 things [27] 6/24 7/24 108/9 115/2 116/21 20/2 20/3 39/2 49/7 120/5 125/7 125/8 61/1 61/10 82/16 83/3 127/22 129/7 129/8 95/2 115/2 115/13 129/18 134/21 135/10 120/16 120/18 120/19 140/18 143/20 144/2 121/25 124/19 134/11 145/3 145/24 146/11 142/8 143/9 147/19 147/19 148/11 156/20 151/2 151/3 154/17 157/6 157/10 157/23 157/10 157/23 158/4 158/20 think [131] 4/10 5/22 they [133] 5/8 5/12 8/15 8/17 9/22 13/23 10/24 12/15 12/21 16/5 18/4 20/3 21/3 12/24 13/12 13/15 22/2 23/17 24/22 13/18 13/20 13/20 27/12 27/16 28/9 13/21 13/22 13/24 28/12 29/12 30/2 13/24 14/12 14/16 34/21 35/21 36/12 15/7 16/13 17/23 37/1 37/8 38/3 38/10 17/23 18/9 18/10 39/9 39/13 40/12

41/13 41/17 41/17 77/24 89/25 91/11 43/22 44/3 44/15 92/2 113/8 121/20 44/17 45/10 46/2 thoughts [1] 109/18 48/18 49/17 49/24 threaten [1] 158/17 51/8 55/25 59/7 60/3 threatening [2] 60/19 61/4 61/12 134/12 146/11 61/18 63/16 64/7 72/1 three [11] 14/4 15/6 73/18 74/14 74/25 19/11 35/5 35/17 82/12 85/2 85/18 97/22 118/16 123/9 139/24 140/25 156/16 timetable [4] 126/1 86/15 86/21 89/10 90/10 92/10 94/23 95/10 96/4 96/7 98/8 15/6 98/18 99/18 100/2 threshold [3] 37/25 100/8 100/24 102/9 140/13 141/1 102/10 102/12 102/18 thresholds [1] 37/19 104/22 105/9 108/24 **through [34]** 11/3 110/19 113/7 113/20 12/4 22/4 32/1 38/25 114/13 114/17 120/24 39/5 40/20 42/8 54/9 121/16 125/24 126/16 59/21 60/12 64/25 129/19 131/9 131/22 66/9 72/8 78/13 82/1 83/4 89/8 94/18 101/4 today [4] 1/4 89/4 132/1 132/10 133/4 134/25 138/2 139/12 105/21 108/8 115/15 141/11 141/18 142/19 117/10 120/25 121/1 142/20 142/21 143/14 124/23 129/4 137/1 143/19 145/1 145/11 145/15 145/19 145/22 139/16 139/22 146/12 146/13 146/22 throughout [2] 95/24 147/16 148/2 148/24 115/16 149/5 150/1 150/24 thrown [2] 108/18 150/25 151/2 151/5 109/5 151/8 152/22 156/24 thumped [1] 124/15 157/18 158/6 159/12 **Thursday [2]** 11/11 160/8 160/12 160/15 144/3 **Tim [3]** 136/17 thinking [10] 11/15 136/18 136/25 19/25 24/14 59/7 63/7 91/13 91/15 97/18 time [96] 4/24 5/23 147/9 150/4 7/6 8/12 9/2 9/12 9/14 9/17 11/16 14/19 thinks [1] 134/4 14/23 16/16 18/13 18/14 18/24 18/25 74/7 117/16 Thirdly [2] 35/14 19/2 20/25 21/16 22/10 22/16 23/22 24/12 25/14 25/19 26/16 26/23 30/15 thorough [1] 113/15 31/13 33/3 33/3 33/16 34/15 34/23 38/6 those [56] 9/8 12/22 12/23 14/4 14/6 15/17 38/16 41/12 41/17 26/14 33/7 34/2 34/13 42/5 46/3 47/18 48/5 36/20 37/15 45/14 49/9 49/16 49/18 50/8 tortuous [1] 73/17 54/13 55/20 61/9 50/15 51/24 56/10 67/24 68/21 76/15 57/7 57/11 57/11 58/1 totally [6] 29/23 81/20 81/25 83/8 85/2 86/2 95/23 95/25 97/1 61/24 61/25 64/9 97/6 97/22 99/22 65/12 73/11 74/5 100/6 110/8 112/18 74/16 79/4 79/5 79/6 112/19 112/25 115/7 79/16 83/18 86/15 117/11 119/23 121/25 87/13 89/3 90/11 128/17 128/21 129/2 92/11 92/15 96/5 129/3 129/12 133/6 97/19 100/4 101/24 134/19 135/14 139/6 104/23 105/4 108/2 139/19 139/21 142/8 110/16 112/14 114/16 traffic [1] 135/1 147/24 152/7 154/6 115/16 121/14 125/6 159/4 161/1 thought [7] 26/6 130/19 134/5 134/25

timed [1] 85/7 timeframes [1] 15/7 timeline [1] 115/15 times [1] 27/2 timescale [4] 25/10 119/17 124/5 132/20 timescales [2] 6/13 139/18 three-dimensional [1] 127/24 129/16 157/12 timing [1] 56/15 timings [2] 56/14 145/25 **TIP [8]** 103/13 108/9 108/11 108/23 109/9 109/21 121/1 155/3 title [5] 20/20 39/24 51/17 64/17 67/9 titled [1] 136/12 151/12 155/1 Todd [1] 6/6 together [7] 97/12 138/21 138/21 138/21 102/14 102/16 109/1 136/25 145/23 154/20 told [8] 57/25 65/1 124/7 128/1 129/22 131/18 156/25 157/1 Tom [2] 97/22 106/4 tomorrow [6] 123/10 151/5 160/14 160/18 160/22 161/6 too [8] 43/10 44/1 57/3 114/4 144/18 144/22 145/7 153/15 took [12] 16/24 30/1 32/8 89/3 90/7 92/24 98/8 98/16 105/10 109/6 113/10 135/12 top [17] 20/20 22/7 22/12 25/23 51/11 52/5 55/4 64/12 67/12 67/18 68/24 68/25 73/21 107/23 110/23 114/25 144/25 topic [5] 31/6 32/2 50/7 50/9 159/15 total [2] 2/13 102/25 58/13 58/25 59/6 60/6 124/22 130/13 133/15 133/17 134/14 towards [2] 43/2 153/25 TPA [4] 70/10 71/20 73/5 75/8 track [2] 10/1 85/18 Trade [1] 123/25 traditional [1] 112/4 tragedy [1] 122/17 125/14 126/14 126/18 train [2] 44/8 143/20 trained [2] 87/8

144/2 150/3

102/18 Т 60/14 65/5 88/16 uncomfortable [1] unqualified [4] 104/3 110/3 115/25 116/6 142/1 104/7 157/22 158/3 user [5] 47/19 49/1 trained... [1] 143/16 unresolved [3] 104/2 126/20 uncontrolled [1] 114/4 119/8 120/10 trainer [1] 43/16 trying [22] 11/24 129/6 142/16 156/19 users [3] 45/3 46/19 trainers [1] 143/18 19/19 23/17 27/10 uncorrected [1] unstable [2] 28/9 47/11 training [57] 35/13 39/4 41/13 41/25 45/4 135/17 69/17 users' [1] 112/11 35/18 35/19 35/22 46/19 49/4 49/6 49/11 until [14] 89/6 92/14 using [8] 5/8 30/5 undeniably [1] 27/1 35/24 35/25 36/2 36/5 49/17 65/18 66/6 107/7 109/7 135/5 under [26] 10/15 53/2 59/23 90/17 37/4 39/3 39/4 39/12 75/17 76/7 89/25 21/10 22/19 25/21 139/16 151/9 153/11 146/10 147/18 149/23 39/25 40/8 40/10 41/7 114/23 117/25 124/23 27/19 34/3 35/23 154/2 155/7 155/9 usual [1] 97/9 41/8 41/12 41/20 134/22 42/21 44/3 51/7 51/17 155/10 156/21 161/9 41/25 42/1 43/14 **Tuesday [1]** 1/1 63/23 67/18 69/13 **up [71]** 5/11 8/16 9/6 43/18 44/6 44/8 44/9 vague [1] 101/7 turn [32] 2/1 10/18 70/12 70/20 72/20 10/10 17/23 18/10 44/10 44/11 44/20 Vaguely [1] 119/20 21/19 33/11 39/12 99/7 104/4 113/7 21/19 24/5 29/13 45/7 45/9 45/14 45/16 valid [1] 82/12 46/6 50/13 51/4 84/5 114/22 135/9 138/9 33/11 37/14 41/15 45/17 46/9 47/19 48/3 validity [1] 42/24 93/11 101/11 103/16 140/9 140/10 148/24 42/3 42/4 44/5 45/17 85/16 87/4 120/20 106/24 107/16 110/10 underestimate [1] 46/6 49/19 50/19 value [2] 20/3 20/4 127/22 129/15 129/18 variation [1] 43/15 110/12 111/6 111/15 60/12 65/2 65/17 9/2 130/5 141/21 142/25 various [7] 28/23 116/9 116/15 118/4 66/13 75/5 79/9 84/5 underlying [2] 24/16 143/6 143/9 143/18 94/5 98/1 100/9 118/20 121/3 127/3 85/23 88/6 89/22 91/1 80/19 145/15 145/20 145/21 108/17 123/23 152/2 127/8 129/24 131/22 91/14 91/18 92/2 92/3 underneath [3] 68/9 145/22 146/25 152/16 versa [1] 61/12 136/11 136/19 140/17 68/19 94/9 97/24 98/11 98/18 152/18 156/17 version [18] 5/12 140/22 156/11 understand [41] 3/14 98/19 101/12 101/14 transaction [5] 103/4 20/22 20/22 21/13 turned [5] 97/4 4/5 6/11 9/16 11/4 110/12 114/1 114/21 103/13 108/9 108/12 104/25 135/5 139/5 14/9 15/9 16/21 18/25 117/2 117/12 118/7 25/11 54/25 55/3 55/4 108/13 67/12 67/20 73/14 139/5 19/3 19/13 24/11 27/7 118/16 120/3 120/5 transactional [1] 73/19 73/19 73/22 123/5 125/14 127/2 31/11 37/18 42/6 Turning [2] 96/10 103/10 73/25 140/4 140/4 42/13 48/5 53/25 56/3 127/23 129/19 132/13 144/14 transactions [9] 140/5 **TV [1]** 131/23 65/5 65/25 66/24 135/9 135/10 135/25 19/14 20/7 48/23 49/1 68/16 81/14 81/16 136/12 140/6 140/17 version 0-point [1] two [27] 2/17 31/18 102/25 103/3 103/6 33/4 33/17 34/4 35/22 142/18 143/22 143/25 21/13 84/16 85/2 87/6 87/12 103/20 108/14 version 0.1 [1] 67/20 36/2 37/18 42/15 87/14 88/13 88/16 148/10 152/9 153/4 transfer [2] 7/14 53/19 54/5 55/22 88/22 92/4 107/10 154/21 155/7 155/24 Version 1 [1] 55/3 114/6 120/10 125/19 132/10 156/9 version 1.0 [3] 20/22 58/16 70/14 91/19 transferred [2] 7/16 25/11 55/4 94/9 127/25 140/3 152/4 160/8 update [1] 12/2 16/17 understanding [10] version 2.0 [1] 73/22 142/8 142/16 144/9 **Updates [1]** 11/20 trauma [2] 122/14 144/15 145/23 154/23 upon [7] 3/5 16/24 versions [1] 139/21 18/22 19/17 37/6 124/23 versus [3] 24/19 30/5 155/6 159/4 159/6 37/16 83/7 89/7 97/16 18/5 32/13 41/21 trial [12] 32/18 32/22 141/7 141/13 153/9 63/6 two days [3] 33/4 90/13 100/12 34/11 42/25 43/4 48/6 very [53] 1/20 7/11 144/9 154/23 understood [13] 18/4 ups [1] 152/20 48/15 101/23 120/1 19/12 23/14 30/20 two-page [1] 140/3 19/2 24/10 25/18 **upwards** [1] 157/18 144/17 144/22 145/6 38/12 44/7 65/2 65/11 tying [1] 6/22 26/16 38/22 41/12 us [25] 30/17 39/5 Trial 1 [1] 42/25 65/19 68/4 74/9 82/15 type [6] 66/9 71/8 49/15 49/25 87/13 54/9 61/11 66/9 76/17 trial 2 [1] 43/4 91/21 113/7 135/2 102/18 104/7 112/3 86/23 87/21 90/10 136/8 139/22 141/11 tried [1] 119/20 92/6 92/11 92/13 98/2 114/9 114/24 117/8 156/7 **undertake [2]** 5/3 trigger [2] 10/9 36/17 98/2 98/18 99/19 117/11 125/25 130/22 types [1] 13/18 40/23 triggered [3] 7/8 7/25 101/15 102/10 102/11 130/24 138/6 143/15 **typo [2]** 125/18 undertaken [3] 7/21 38/13 104/11 105/20 109/14 147/17 147/19 149/2 125/21 15/11 15/13 triggers [1] 42/9 109/15 109/24 113/14 unfamiliar [1] 34/17 150/4 153/16 157/24 Triggs [2] 101/15 113/14 114/12 114/22 unfortunately [6] 159/23 148/8 UK [3] 5/13 117/17 118/14 120/7 126/5 52/8 134/12 134/17 usable [1] 81/6 trouble [3] 92/12 130/4 130/16 130/16 146/23 148/15 151/5 156/16 usage [4] 15/19 102/17 160/11 ultimately [4] 89/20 15/25 78/14 127/20 130/25 131/4 133/19 unique [1] 117/9 troubled [1] 146/16 99/10 133/6 161/1 133/19 143/8 146/9 Unit [1] 85/18 use [10] 111/24 true [12] 2/20 3/13 146/16 148/15 149/16 unacceptable [2] unless [17] 48/8 112/3 113/23 119/9 17/1 93/16 102/5 149/16 154/25 158/18 13/14 112/16 49/19 59/19 71/17 120/14 129/7 148/3 104/18 105/2 113/18 uncertain [2] 78/21 75/23 79/25 80/13 149/10 154/2 158/8 vi [1] 141/20 128/10 135/16 158/13 122/23 via [7] 59/18 61/17 86/11 98/3 98/6 113/3 used [16] 30/8 48/2 158/17 130/16 131/21 136/19 53/5 53/24 54/1 68/14 61/17 66/21 66/21 uncertainties [1] trust [2] 81/19 104/5 108/11 109/21 143/6 143/12 143/20 87/10 105/12 112/4 150/11 viability [1] 146/12 uncertainty [2] 104/9 120/16 135/1 146/12 unlikely [3] 104/7 trusted [2] 81/22 105/4 viable [2] 121/13 133/19 158/2 146/14 149/24 150/5 102/8 unclear [3] 15/8 61/8 121/21 unpredictable [1] 154/9 try [9] 17/9 34/16 82/8 useful [3] 61/19 90/7 vice [1] 61/11 112/17

150/8 155/15 156/13 102/2 109/6 110/1 28/12 37/5 37/16 127/23 140/15 149/19 154/10 154/20 155/20 158/18 114/23 117/6 118/21 66/10 78/25 83/12 view [29] 29/23 29/24 156/7 where [58] 5/10 5/13 122/10 124/13 128/21 85/17 50/5 50/6 65/2 73/5 ways [1] 113/9 6/1 11/1 11/5 15/7 132/21 133/9 134/18 witness [6] 1/4 1/11 76/6 79/20 80/24 we [393] 15/22 15/22 17/9 148/20 148/22 149/5 1/22 93/7 94/5 115/20 81/17 82/2 82/8 83/23 we're [1] 46/24 20/11 27/14 28/10 150/4 150/9 153/4 won't [2] 113/1 155/9 84/2 88/11 104/19 we've [1] 146/12 33/3 35/19 36/10 42/1 154/7 159/10 wonder [3] 1/15 105/2 111/13 113/12 **Wednesday [1]** 161/9 46/25 52/25 59/9 63/6 whoever [2] 38/22 10/10 21/19 113/21 114/17 121/14 week [7] 28/20 52/25 63/15 64/18 78/23 123/7 word [6] 57/21 124/21 132/17 135/16 84/25 127/16 130/3 86/2 86/4 86/6 87/2 105/12 113/23 129/7 whole [14] 7/13 138/24 155/4 158/13 130/8 146/22 87/15 88/11 88/19 12/24 34/14 55/11 146/14 158/8 158/17 weekly [7] 20/6 46/20 89/22 90/3 94/14 69/22 94/11 95/17 words [4] 26/25 views [7] 29/18 39/1 86/12 102/24 102/25 94/22 94/24 97/11 103/4 103/6 111/14 120/12 125/8 134/22 81/24 81/25 101/21 100/3 101/4 102/10 120/16 129/4 150/19 103/14 109/7 work [41] 4/12 5/22 130/19 154/8 weeks [5] 40/4 86/10 9/1 9/23 9/24 10/24 103/10 106/4 112/9 158/21 virtually [1] 33/1 97/24 109/8 135/12 117/1 121/17 122/5 whom [8] 5/2 21/7 17/9 21/2 23/21 23/23 visible [4] 57/7 57/12 122/25 132/4 134/14 25/4 50/22 68/20 69/6 24/6 27/11 28/5 32/9 welcome [2] 154/9 63/3 66/20 32/13 34/16 45/23 154/9 137/24 139/15 140/13 70/13 91/22 vision [1] 116/16 well [38] 1/15 4/14 148/2 148/14 149/21 whose [1] 104/5 72/5 72/25 81/23 82/2 visited [2] 5/7 118/18 150/24 151/19 158/16 why [9] 29/13 37/17 6/17 6/24 9/1 15/8 83/11 86/12 89/6 89/9 visits [3] 5/3 5/15 89/24 97/25 105/1 16/1 17/4 26/4 31/1 159/2 56/3 88/22 99/13 5/18 36/16 36/19 37/4 whereas [2] 36/21 137/21 139/8 147/23 107/2 107/7 108/21 vital [1] 54/18 45/25 57/10 59/14 134/12 149/13 111/10 113/1 113/17 voice [2] 1/15 159/16 63/2 63/18 79/19 whether [68] 12/13 wide [1] 106/17 114/12 116/24 121/23 volume [6] 9/23 29/8 82/15 87/13 96/2 14/13 15/18 15/23 125/4 142/10 152/18 wider [2] 15/20 54/21 76/10 76/15 97/18 99/20 102/4 15/25 17/18 20/12 127/20 153/8 76/20 will [57] 8/17 21/20 102/9 118/14 119/24 20/13 23/23 23/25 work' [1] 124/7 **voluminous** [1] 14/8 120/20 122/16 123/11 25/16 29/22 41/8 42/5 24/22 26/7 27/25 28/8 worked [9] 5/3 5/24 W 143/16 143/21 143/23 42/5 47/17 47/22 28/25 30/13 49/11 19/5 64/24 133/8 150/12 151/8 151/15 49/25 57/16 58/3 51/23 58/15 58/16 140/15 140/16 140/16 waited [1] 133/5 59/7 77/7 77/24 78/9 151/18 58/10 58/12 58/21 156/8 waiting [2] 69/11 went [12] 5/7 5/24 58/22 59/15 59/16 78/11 83/1 85/21 working [19] 3/22 6/1 92/23 10/8 23/25 90/5 94/18 60/3 60/16 60/18 86/13 86/23 86/24 32/5 33/15 44/4 65/1 walls [1] 117/25 101/4 108/20 117/10 61/19 62/17 63/16 88/12 92/14 92/15 81/22 90/11 97/21 want [16] 38/12 135/17 136/3 138/14 63/24 66/18 76/10 98/22 101/12 101/12 112/23 113/10 123/4 46/15 93/20 98/22 76/21 77/5 79/13 80/1 102/22 105/13 112/12 123/18 127/5 128/7 were [284] 99/10 106/10 113/10 133/9 141/10 147/1 weren't [12] 9/16 80/24 81/24 83/16 113/5 118/10 124/7 116/9 116/9 123/8 14/4 18/17 75/6 79/14 88/17 89/7 104/3 124/16 125/13 127/9 154/20 133/11 143/19 143/25 105/12 105/17 111/4 101/18 104/25 122/7 130/1 130/14 130/15 workload [1] 6/21 146/17 149/2 151/21 131/7 149/16 156/2 112/6 113/17 119/5 130/17 133/18 139/3 workmanship [1] wanted [13] 71/17 157/23 120/21 122/2 124/15 143/7 150/3 151/19 29/3 95/22 102/12 102/15 West [2] 99/19 119/4 128/24 137/3 137/11 153/16 155/7 155/9 works [1] 16/3 111/22 113/25 115/4 what [220] 138/17 140/21 141/2 159/20 159/25 160/5 workshop [1] 11/11 116/25 116/25 117/20 141/23 144/12 153/16 160/13 160/14 160/15 workshops [3] 152/2 what's [8] 52/1 55/22 122/2 146/21 146/25 61/25 83/7 116/15 154/14 154/17 157/12 161/3 161/3 152/7 155/1 wants [1] 159/10 158/13 160/7 122/8 146/2 160/9 **WILLIAMS [2]** 90/24 worried [2] 114/11 warned [1] 151/6 whatever [4] 20/4 which [174] 161/13 156/3 was [535] while [5] 28/23 53/14 WINT04600104 [1] 57/25 147/13 154/18 worry [1] 161/2 washing [1] 157/18 when [56] 5/19 5/24 73/5 77/24 138/12 73/20 worrying [1] 28/15 wasn't [19] 9/6 17/10 6/17 9/7 17/19 21/16 whilst [6] 7/14 62/16 wish [1] 50/11 worse [1] 82/25 31/14 41/14 60/2 22/10 25/15 38/13 107/3 113/19 116/19 withdrawal [1] 123/6 worst [1] 87/14 65/12 75/12 75/17 40/9 45/3 46/19 50/15 156/19 withdrawn [2] 32/14 worth [1] 42/7 105/3 112/23 126/18 50/20 54/10 54/25 whim [1] 121/12 116/19 would [300] 132/2 132/8 140/10 54/25 56/10 60/6 within [27] 9/18 14/4 wouldn't [10] 9/14 Whittam [1] 160/2 141/9 141/9 145/20 62/21 65/1 80/9 81/13 **who [53]** 5/7 8/4 8/5 17/19 19/14 20/7 36/16 49/18 57/12 153/1 158/22 83/9 83/18 90/1 90/4 17/14 17/15 33/15 26/11 31/20 46/12 63/15 105/8 132/1 watch [1] 110/6 95/7 97/17 97/19 98/8 33/17 34/5 39/18 44/4 54/16 70/23 96/2 138/1 149/17 158/11 watching [1] 124/24 44/4 44/20 49/9 64/11 98/15 105/10 108/19 96/12 99/4 107/5 write [3] 66/3 113/12 way [25] 9/22 11/12 109/19 110/2 112/2 64/25 65/3 68/16 112/21 113/18 124/5 137/25 19/18 35/21 39/3 113/4 116/5 122/1 70/12 72/4 79/19 124/25 128/24 129/16 writing [5] 56/7 41/24 42/3 46/1 54/9 124/18 131/9 134/1 81/14 81/20 81/24 139/13 141/4 141/5 107/23 107/24 108/1 60/11 61/19 83/24 146/15 148/19 148/22 135/25 136/3 137/11 82/13 82/16 86/13 133/21 83/25 98/14 108/8 142/23 145/10 145/25 89/1 91/8 91/25 95/22 154/10 written [5] 12/2 26/4 112/22 119/10 123/9 147/9 149/2 150/7 97/20 100/9 101/15 without [8] 15/16 81/25 113/5 147/15

| W | 160/21 | | |
|---|----------------------|--|-----------------------|
| wrong [5] 83/16 84/3 | yourself [7] 8/21 | | |
| 91/15 99/17 113/5 | 81/18 96/24 107/18 | | |
| WYN [2] 90/24 | 139/11 154/23 155/17 | | |
| 161/13 | | | |
| X | | | |
| xii [1] 142/12 | | | |
| Y | | | |
| yay [1] 106/2 | | | |
| yeah [5] 2/19 36/19 | | | |
| 96/8 101/14 110/24 | | | |
| year [7] 1/23 2/18 | | | |
| 2/19 28/3 104/2 105/3 | | | |
| 158/11 years [3] 49/7 83/13 | | | |
| 88/11 | | | |
| yellow [1] 68/11 | | | |
| yes [205] | | | |
| yesterday [3] 7/23 33/6 33/10 | | | |
| yet [3] 27/2 28/20 | | | |
| 101/14 | | | |
| you [627] | | | |
| you've [1] 105/24 Young [9] 101/16 | | | |
| 101/17 102/2 102/7 | | | |
| 151/22 155/13 157/21 | | | |
| 158/1 158/11 | | | |
| your [110] 1/15 1/20 1/22 2/1 2/4 2/4 2/21 | | | |
| 2/23 2/25 3/2 3/9 3/9 | | | |
| 3/18 4/2 4/10 5/15 | | | |
| 6/14 7/3 7/5 7/9 8/10 | | | |
| 9/17 14/10 16/21 16/24 17/2 18/4 18/15 | | | |
| 18/16 19/17 20/23 | | | |
| 20/25 23/19 27/7 | | | |
| 27/16 32/8 32/13 | | | |
| 32/20 33/22 39/19 | | | |
| 46/2 46/7 46/13 47/5 47/6 47/10 49/3 52/19 | | | |
| 59/4 60/12 60/19 | | | |
| 61/23 62/16 64/2 | | | |
| 65/20 67/24 70/17 | | | |
| 71/19 73/1 73/10 73/10 75/15 75/21 | | | |
| 83/6 84/23 85/24 | | | |
| 85/25 87/23 90/11 | | | |
| 91/21 92/10 93/5 | | | |
| 93/14 93/17 93/19 93/21 94/5 94/6 97/16 | | | |
| 102/16 105/16 107/25 | | | |
| 109/18 111/7 113/21 | | | |
| 114/17 115/19 116/12 | | | |
| 121/14 127/3 130/19 | | | |
| 134/23 134/23 135/22 136/20 141/7 143/18 | | | |
| 144/23 145/5 146/1 | | | |
| 147/9 148/1 151/13 | | | |
| 152/22 154/13 155/14 | | | |
| 157/15 159/4 159/16 | | | |
| | | | |
| | | | (70) wrong - yourself |